

DERIVATIVES SERVICE BUREAU (DSB) LTD

Foreign_Exchange : Forward : Non_Standard

ISIN Product Definition

Version I

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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 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.

I.I 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 | |
| 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 | Other Documents section |
| 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 | Forward | |
| | Asset Class (Group) | F | Foreign Exchange | |
| Attr #I | Underlying Assets | т | Spot | An option on an FX transaction in which two parties agree to buy one currency against selling another currency at an agreed price for settlement on the spot date |
| | | R | Forward | Forward |
| | | 0 | Options | Options |
| | | F | Futures | Contracts, listed on an exchange or regulated market, which obligate the buyer to receive and the seller to deliver in the future, the assets specified at an agreed price. This includes forwards on regulated markets. |
| Attr #2 | Not applicable/undefined | X | Not applicable/undefined | Not applicable/undefined |
| Attr #3 | | | Contract for difference | A cash settled total return swap or forward where the parties agree to exchange on the maturity of the contract the difference between the opening price and closing price of the underlying |
| | | 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 |
| | | F | Forward price of underlying instrument | Forward price of underlying instrument |
| Attr #4 | Delivery Type | С | Cash | The discharge of an obligation by payment or receipt of a net cash amount instead of payment or delivery by both parties |
| | | Ρ | 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 | DSB Product Definition Name |
|------------------|--------------|-----------------|-----------------------------|
| Foreign Exchange | Exotic | Various entries | Non_Standard_Forward |

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 Foreign Exchange spreadsheet that contains the layout of all templates. This can be found in the Foreign Exchange 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.Foreign_Exchange.Forward.Non_Standard.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 <u>Section 1.1</u>).
- For enumerations, please refer to the associated ISIN Product Definition Enumeration document for the impacted attributes (See <u>Section 1.1</u>).

| Attribute | Validation Type | Validation | Error Message |
|--|------------------------|--|---|
| Notional Currency / Other Notional Currency | Unique Validation | Input currencies have the same currency. | Error: Notional Currency and Other Notional Currency cannot be identical |
| | Currency Validation | Input currencies are both CNY and no Place of Settlement attribute. | Error: Notional Currency and Other Notional Currency cannot be identical |
| | | Input currencies are both CNY and Place of Settlement is not "Hong Kong". | Error: Place of Settlement must be Hong Kong for CNY/CNY request |

3.1.1 Notional Currency and Other Notional Currency

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 Foreign Exchange spreadsheet that contains the layout of all templates. This can be found in the Foreign Exchange 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 |
|---------|--|------------------|
| VI | $\label{eq:constraint} Foreign_Exchange.Forward.Non_Standard.InstRefDataReporting.VI.json$ | Initial version |
| VIMI | $\label{eq:constraint} Foreign_Exchange.Forward.Non_Standard.InstRefDataReporting.VIMI.json$ | Added Parent UPI |

4.1 Normalization Rules

For non-specific product normalization rules, please refer to the Product Definition Validations and Normalizations (See <u>Section 1.1</u>).

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 + Notional Currency + Other Notional Currency + Expiry Date | | |
| Example | Foreign_Exchange Forward Non_Standard | CNY HKD 20230810 | |
| Source | RTS23/Field2 - Instrument Full Name | | |
| Source Attribute | Source Value | Derivation Method | Result |
| Asset Class | Foreign_Exchange | Fixed Value | Foreign_Exchange |
| Instrument Type | Forward | Fixed Value | Forward |
| Product | Non_Standard | Fixed Value | Non_Standard |
| Notional Currency | Notional Currency | Mapped Enumeration | e.g., USD, EUR, GBP |
| Other Notional Currency | Other Notional Currency | Mapped Enumeration | e.g., USD, EUR, GBP |

| Expiry Date | Expiry Date | Date Format (YYYYMMDD) | 20230810 |
|-------------|-------------|---------------------------|----------|
|-------------|-------------|---------------------------|----------|

4.2.2 Classification Type

| Attribute | Classification Type | | | |
|-------------------------------|--|-------------------|--------|--|
| Structure | Instrument Type + Asset Class + Underlying Asset Type + NA + Return or Payout Trigger + Delivery Type | | | |
| Example | JFTXFP | | | |
| Source | ISO 10962 (CFI) – Third edition 2015-07-1 | 5 | | |
| Source Attribute | Source Value | Derivation Method | Result | |
| Instrument Type | Forward | Fixed Mapping | J | |
| Asset Class | Foreign Exchange | Fixed Mapping | F | |
| Underlying Asset Type | Spot | Mapped to => | Т | |
| | Forward | Mapped to => | R | |
| | Options | Mapped to => | 0 | |
| | Futures | Mapped to => | F | |
| Not Applicable / Undefined | Not applicable / undefined | Fixed Mapping | X | |
| Return or Payout Trigger | Spreadbets | Mapped to => | S | |
| | Contract for Difference (CFD) | Mapped to => | С | |
| | Forward price of underlying instrument | Mapped to => | F | |
| Delivery Type | CASH | Mapped to => | С | |
| | PHYS | Mapped to => | P | |

4.2.3 Short Name

| Attribute | Short Name | | | | |
|----------------------------|--|--|---------------------|--|--|
| Structure | "NA" + "/" + Asset Class + Instrument Typ Notional Currency + Expiry Date | "NA" + "/" + Asset Class + Instrument Type + Product Type + Notional Currency + Other Notional Currency + Expiry Date | | | |
| Example | NA/FX Fwd Nstd CNY HKD 20230810 | | | | |
| Source | ISO 18774 (Financial Instrument Short Nam | ne) - First edition 2015-11 | | | |
| Source Attribute | Source Value | Derivation Method | Result | | |
| Issuer Name | None | Fixed Value | NA/ | | |
| Asset Class | Foreign Exchange | Fixed Abbreviation | FX | | |
| Instrument Type | Forward | Fixed Abbreviation | Fwd | | |
| Product Type | Non-Standard | Fixed Abbreviation | Nstd | | |
| Notional Currency | Notional Currency | Mapped Enumeration | e.g., USD, EUR, GBP | | |
| Other Notional Currency | Other Notional Currency | Mapped Enumeration | e.g., USD, EUR, GBP | | |
| Expiry Date | Expiry Date | Date Format (YYYYMMDD) | 20230810 | | |

4.2.4 FX Type

| Attribute | FX Туре | | |
|--|-----------------------|---------------------|--------|
| Source Attribute | Criteria | FX Тур е | Result |
| Notional Currency / Other Notional Currency | All others | FX Cross Rates | FXCR |
| | Non-G8 currency pairs | FX Emerging Markets | FXEM |
| | G8 currency pairs | FX Majors | FXMJ |

4.2.5 ISO Place of Settlement

| Attribute | ISO Place of Settlement | | | |
|---------------------|--------------------------|--------------------|----------|--|
| Source | ISO 3166 (Country Codes) | | | |
| Source Attribute | Source Value | Derivation Method | Result | |
| Place of Settlement | e.g., Hong Kong | Extracted value => | e.g., HK | |

5. Supplementary Information

5.1 Best Practice Guidelines

The DSB supports the creation of OTC ISINs for several types of FX Forwards:

Non-Standard Forward:

- Where the FX Forward does not adhere to the standard instrument structure or
- Where the FX Forward is based on an Offshore variation of a non-deliverable currency (such as the Chinese Yuan/Renminbi). In this situation the Offshore variation of the currency requires a Place of Settlement to

provide a complete definition since the currency is not included in the ISO 4217 currency list.

Please refer to Best Practice Guidelines and FAQs (See Section 1.1).

5.2 Additional Comments

The attribute Place of Settlement is applicable to NDS and Non-Standard products.

6. Appendix I - 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 Values | Comments |
|--------------------------|---------------|---------------------------|--|----------|
| Asset Class | Direct Map | Asset Class | Foreign_Exchange | |
| Instrument Type | Direct Map | Instrument Type | Forward | |
| Use Case | Direct Map | Product | Non_Standard | |
| Level | Set to "UPI" | Level | UPI | |
| Notional Currency | Мар То | Underlier ID | CNY | |
| | Set to "CCY" | Underlier ID Source | ССҮ | |
| Other Notional Currency | Мар То | Other Underlier ID | CNY | |
| | Set to "CCY" | Other Underlier ID Source | ССҮ | |
| Expiry Date | No Mapping | | | |
| Price Multiplier | No Mapping | | | |
| Underlying Asset Type | Direct Map | Underlying Asset Type | Spot | |
| Return or Payout Trigger | Direct Map | Return or Payout Trigger | Forward price of underlying instrument | |
| Delivery Type | Direct Map | Delivery Type | PHYS | |
| Settlement Currency | Direct Map | Settlement Currency | CNY | |
| Place of Settlement | Direct Map | Place of Settlement | Hong Kong | |