Derivatives Service Bureau (UPI)

CHANGE REQUEST FORM

Version	State	Author	Date	Description
1	Draft	M. Surop	27 April 2021	Initial Document
2	Draft	M. Surop	24 May 2021	Updated Validation
3	Draft	M. Surop	14 June 2021	Updated error message for ISIN validation.
4	Draft	M. Surop	19 July 2021	Removed active hyperlinks in Data Dictionary; Amended References section with standard text; Removed Short Name comment in the Comment section.
5	Draft	M. Surop	24 Sept 2021	Updated error message for ISIN validation.

Title	RATES FORWARD FRA Other Template Definition		
Background	The following CRF presents a specification for the generation and retrieval of a Unique Product Identifier for the following product: • **Rates : Forward : FRA_Other**	**DSB-ID**	**UPI-0225**
		Type	New Template
		Owner	M. Surop
		Version	5
		State	Draft
Terms of Reference			
Scope	• This CRF specifies the product definition required for the generation / retrieval of a UPI only. • This CRF covers both the input (Request) and output (Record) templates. • Support for local jurisdiction / alternate underlier identifier input is currently out of scope. • Support for CFI 2019 values is currently out of scope.		
Requirements	• The product definition will conform to ISO 4914 (UPI). • Where possible, the product definition is to be based on the attributes, values and behaviour of the equivalent OTC ISIN. • The product definition will return a product short name (FISN). • All UPI records stored on the DSB RDL will include the ISO 10962 (CFI) code associated with the UPI along with an equivalent text value for all attributes that are included in the definition of the CFI.		
Dependencies	• This specification is dependent on final sign-off of the ISO 4914 (UPI) specification. • This specification is dependent on PC approval for the use of the OTC ISIN definitions as a basis for the UPI. • This specification is dependent on PC approval for the inclusion of ISO 4914 (UPI) conditional attributes. • This specification is dependent on TAC Approval for the DSB approach to ISO 10962 (CFI:2019) migration. • This specification is dependent on the provision of a human-readable alias for the primary underlier for inclusion in the Short Name (FISN) and a human-readable alias for the Contract Specification. • The format of the Short Name is dependent upon the outcome of the ISO 18774 (FISN) systematic review.		
Assumptions	• This specification assumes that, unless stated, all values and behaviours are based on those of the equivalent OTC ISIN product definition. • This specification assumes that no input values are to be defaulted by the system. • This specification is based on the current ISO 4914 (UPI) specification (CD) – including attributes that are not currently supported by the equivalent OTC ISIN. • This specification is based on the DSB's current equivalent OTC ISIN product definition. • This specification is based on the attributes and values defined in ISO 10962 (CFI:2015). • In order to provide an example Short Name, this specification defines a format for this attribute that may not conform to the eventually agreed FISN format for the UPI. This specification assumes that the Short Name is defined using the same attributes (where available) as the OTC ISIN Short Name. • Where possible, this specification derives GUI details from the ISO 4914 (UPI) specification for attributes that are not included in the current OTC ISIN product definition.		

<table>
<tr><td></td><td>

The display information in the GUI for the existing attributes (and values) are taken from the OTC ISIN. If such information contains an "ISIN" in the description, replace the value into "UPI".
The specification for UPI does not include expiry date as part of the attributes, hence "expired" status does not apply.
The specification for Single Or Interpolated Reference Rate Tenor is subject for review and approval by CDIDE as part of ISO 4914 standard.

</td></tr>
</table>

Request Template Layout

Section	Attribute	Format	Cat	Example Value	Validation / Derivation	Enum Source	Origin
Header Section	Asset Class	Set	M	Rates		CFI:2015 Char#2 (JR****)	ISIN
	Instrument Type	Set	M	Forward		CFI:2015 Char#1 (JR****)	ISIN
	Product	Set	M	FRA_Other			ISIN
	Level	Set	M	UPI			NEW
Attribute Section	Underlier ID	Enum	M	DE000A2GSCY9	See CRF (Validation)		NEW
	Underlier ID Source	String	M	ISIN	[ISIN]	Internal	NEW
	Underlying Asset Type	Enum	M	Other	[Options; Other]	CFI:2015 Char#3 (JR****)	ISIN
	Notional Currency	Enum	M	GBP	ISOCurrencyCode.json	ISO 4217 (3-Char CCY)	ISIN
	Delivery Type	Enum	M	PHYS	[CASH, PHYS]	ISO 20022	ISIN

Record Template Layout

Section	Attribute	Format	Cat	Example Value	Validation / Derivation	Enum Source	Origin
Header Section	Asset Class	Set	M	Rates		CFI:2015 Char#2 (JR****)	ISIN
	Instrument Type	Set	M	Forward		CFI:2015 Char#1 (JR****)	ISIN
	Product	Set	M	FRA_Other			ISIN
	Level	Set	M	UPI			NEW
	Template Version	Integer	D	1			ISIN
Attribute Section	Underlying Instrument ISIN	String	M	DE000A2GSCY9	See CRF (Validation)		ISIN
	Notional Currency	Enum	M	GBP	ISOCurrencyCode.json	ISO 4217 (3-Char CCY)	ISIN
	Underlying Asset Type	Enum	M	Other	[Options; Other]	CFI:2015 Char#3 (JR****)	ISIN
	Delivery Type	Enum	M	PHYS	[CASH, PHYS]	ISO 20022	ISIN
Identifier Section	UPI	String	D	QZNZVNMQT7G9	UPI	ISO 4914	NEW
	Status	String	D	New			ISIN
	Status Reason	String	D	<null>	Not applicable to a New record		ISIN
	Last Update Date Time	DtTm	D	2021-04-27T09:10:38	YYYY-MM-DDThh:mm:ss		ISIN
Derived Section	Classification Type	String	D	JRMXFP	See CRF (Derivations)	ISO 10962:2015	ISIN
	Short Name	String	D	NA/Fwd Pr Oth GBP	See CRF (Derivations)	ISO 18774	NEW
	Return or Payout Trigger	String	D	Forward price of underlying instrument	Fixed value	CFI:2015 Char#5 (JR**F*)	ISIN
	CFI Delivery Type	String	D	Physical	See CRF (Derivations)	CFI:2015 Char#6 (JR****)	NEW

<table>
<tr><th colspan="2">Product Definition</th></tr>
<tr><td>Attributes</td><td>See Template Layout (above).</td></tr>
<tr><td>Validation</td><td>
1. Underlier ID
The following validation will apply for Underlying Instrument ISIN:

The input text by user must be in 12 characters (2 alpha, 9 alphanumeric, 1 numeric).
The input text must not have a prefix of “QZ” or “EZ”.
A syntactic validation is being performed to confirm an ISIN when hitting create.
If the input ISIN is not aligned with the above pattern before hitting create, an error message will apply “Value must match the pattern ^(?!(EZ|QZ))[A-Z]{2}[A-Z0-9]{9}[0-9]$.”
If the input ISIN is less or more than 12 characters after hitting create and is not aligned with the above pattern, an error message will apply "Error: /Attributes/UnderlierID: ECMA 262 regex "^(?!(EZ|QZ))[A-Z]{2}[A-Z0-9]{9}[0-9]$" does not match input string "[user input]".
If the input ISIN is aligned with the pattern criteria but ISIN value does not conformed with syntactic validation, an error message will apply “Error: ISIN/s must be valid”.

</td></tr>
<tr><td>Normalization</td><td>Not Required.</td></tr>
<tr><td>Attribute Data Dictionary</td><td>
This section provides the exact reference or source of the attribute.
<table>
<tr><th>Full Name</th><th>Source</th><th>Type</th></tr>
<tr><td>Delivery Type</td><td>ISO 20022 FinancialInstrumentReportingReferenceDataReportV01</td><td>Enums [CASH, PHYS]</td></tr>
</table>
</td></tr>
</table>

CFI Delivery Type	ISO 10962 Classification of financial instruments (CFI code)	Enums *[Cash, Physical]*
Notional Currency	ISO 4217 Currency Codes	Pattern: [A-Z]{3,3}
Underlying Instrument ISIN	Not Available	Max of 12 text (pattern) [A-Z] – firsts 2 characters [A-Z], [0-9] – Next 9 characters [0-9] – Last value is based on ISIN calculation
Underlying Asset Type	ISO 10962 Classification of financial instruments (CFI code)	Enums *[Options; Other]*

Derivation

This section provides additional details to the derivation logic specified in the Template Layout sections (above).

Classification Type	Concatenation of the following attributes/values: • Instrument Type: “J” • Asset Class: “R” • Underlying Asset Type: from Request.Underlying Asset Type… - *Options →* *O* - *Other →* *M* • Not applicable/undefined: “X” • Return or Payout Trigger: “F” • Delivery Type: from Request.Delivery Type… • *CASH →* *C* • *PHYS →* *P* E.g.: “JRMXFP”
Short Name	Concatenation of the following attributes/values: • Issuer: “NA/” • Return or Payout Trigger: “Fwd Pr” (fixed value) • Underlying Asset Type: from Request.Underlying Asset Type… - *Options →* *“O”* - *Other →* *“Oth”* • Notional Currency: e.g.: GBP – from ISO 4217 input value E.g.: “NA/Fwd Pr Oth GBP” *Note: The Short Name is based on the OTC ISIN that excludes the following field:* - *Expiry Date*
CFI Delivery Type	Derived from the input Delivery Type… • CASH → “Cash” • PHYS → “Physical”

GUI Details

The following section provides display information for any attributes (and values) that are not included in the related OTC ISIN definition.

Attribute	Display Name	Tool Tip (and • *value elaboration*)
Underlier ID	Underlier ID	An identifier that can be used to determine the asset(s), index (indices) or benchmark underlying a contract or, in the case of a foreign exchange derivative, identification of the currency pair or index.
Underlier ID Source	Underlier ID Source	The origin, or publisher, of the associated underlier ID.
UPI	Identification	Unique Product Identifier (ISO 4914).
CFI Delivery Type	CFI Delivery Type	The Delivery Type as defined by CFI code: ISO 10962. • *As defined by CFI Code: ISO 10962*

Additional Information

Reference	References to external documents can be found on the DSB website at this address [https://www.anna-dsb.com/upi-external-reference-documents/].
Comments	• Currently the system does not hold reference data to support the validation of the LEI or ISIN. This means that it is not possible to validate the existence or classification of the Underlier ID. In addition, this means that human-readable alias is not currently supported for inclusion in the Short Name attribute.

ISO 4914 Equivalence

ISO 4914		**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	Not Required	Return or Payout Trigger
Single or interpolated reference rate tenor*	C	Not Required	
Underlier ID	C	Underlier ID	Underlying Instrument ISIN
Underlier ID source	C	Underlier ID Source	Not Required
Underlier type	M	Underlying Asset Type	Underlying Asset Type
Underlying rate index tenor period**	C	Not Required	
Underlying rate index tenor period multiplier**	C	Not Required	
Underlying contract tenor period***	C	Not Required	
Underlying contract tenor period multiplier***	C	Not Required	

* Subject for review and approval by CDIDE as part of ISO 4914 standard.

**Underlying Rate Index Tenor Period/Multiplier applies only if underlying is Reference Rate (Index). For this product, the underlying is assumed to be a Debt Instrument (ISIN) and so these attributes are not required.

*** Underlying Contract Tenor Period/Multiplier applies only to a derivative contract underlying another derivative. For this product, the underlying is assumed to be a Debt Instrument (ISIN) and so these attributes are not required.