Derivatives Service Bureau (UPI)

CHANGE REQUEST FORM

Version	State	Author	Date	Description
1	Draft	S. Wiltshire	11 Jan 2021	Initial Document
2	Draft	S. Wiltshire	24 Feb 2021	Updated Terms of Reference and Layout Tables.
3	Draft	S. Wiltshire	03 Mar 2021	Updated Short Name format and derivation.
4	Draft	S. Wiltshire	01 Apr 2021	Updated in response to Dev. change requests.
5	Draft	M. Surop	26 July 2021	Added Attribute Data Dictionary; Amended References section with standard text; Removed Short Name comment in the Comment section; Updated ISO 4914 Equivalence.

Title	RATES SWAP Fixed Float Template Definition		
Background	The following CRF presents a specification for the generation and retrieval of a Unique Product Identifier for the following product: • **Rates : Swap : Fixed_Float**	**DSB-ID**	**UPI-0006**
		Type	New Template
		Owner	S. Wiltshire
		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 4194 (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). • The product definition will support the entry of and/or access to all CFI attributes and names for the product.		
Dependencies	• This specification is dependent on final sign-off of the ISO 4194 (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 4194 (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 4194 (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 4194 (UPI) specification for attributes that are not included in the current OTC ISIN product definition.		

Request Template Layout

Section	Attribute	Format	Cat	Example Value	Validation / Derivation	Enum Source	Origin
Header Section	Asset Class	Set	M	Rates			ISIN
	Instrument Type	Set	M	Swap			ISIN
	Product	Set	M	Fixed_Float			ISIN
	Level	Set	M	UPI			NEW
Attribute Section	Underlier ID	Enum	M	EUR-EuroSTR-COMPOUND	FpmlRatesReferenceRate.json	FpML Coding Scheme 5.98	NEW
	Underlier ID Source	Enum	M	FPML	[FPML]	Internal	NEW
	Reference Rate Term Value	Integer	M	3	-999 to 999 (excluding 0)		ISIN
	Reference Rate Term Unit	Enum	M	MNTH	[DAYS, WEEK, MNTH, YEAR]	ISO 20022	ISIN
	Notional Currency	Enum	M	USD	ISOCurrencyCode.json	ISO 4217 (3-Char CCY)	ISIN
	Notional Schedule	Enum	M	Constant	[Constant, Accreting, Amortizing, Custom]	CFI:2015 Char#4 (SR****)	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			ISIN
	Instrument Type	Set	M	Swap			ISIN
	Product	Set	M	Fixed_Float			ISIN
	Level	Set	M	UPI			NEW
	Template Version	Integer	D	1			ISIN
Attribute Section	Reference Rate	Enum	D	EUR-EuroSTR-COMPOUND	FpmlRatesReferenceRate.json	FpML Coding Scheme 5.98	ISIN
	Reference Rate Term Value	Integer	M	3	-999 to 999 (excluding 0)		ISIN
	Reference Rate Term Unit	Enum	M	MNTH	[DAYS, WEEK, MNTH, YEAR]	ISO 20022	ISIN
	Notional Currency	Enum	M	USD	ISOCurrencyCode.json	ISO 4217 (3-Char CCY)	ISIN
	Notional Schedule	Enum	M	Constant	[Constant, Accreting, Amortizing, Custom]	CFI:2015 Char#4 (SR****)	ISIN
	Delivery Type	Enum	M	PHYS	[CASH, PHYS]	ISO 20022	ISIN
Identification Section	Identifier	String	D	QZ2093849381	UPI		NEW
	Status	String	D	New			ISIN
	Status Reason	String	D	<null>	Not applicable to a New record		ISIN
	Last Update Date Time	DtTm	D	2020-11-30T00:00:13	YYYY-MM-DDThh:mm:ss		ISIN
Derived Section	Classification Type	String	D	SRCCAP	See CRF (Derivations)		ISIN
	Short Name	String	D	NA/Swap Fxd Flt EUR	See CRF (Derivations)	ISO 18874	NEW
	Underlying Asset type	String	D	Fixed - Floating	Fixed value	CFI:2015 Char#3 (SR****)	ISIN
	Single or Multi currency	String	D	Single Currency	Fixed value	CFI:2015 Char#5 (SR****)	ISIN
	CFI Delivery Type	String	D	[Cash, Physical]	See CRF (Derivations)	CFI:2015 Char#6 (SR****)	NEW

Product Definition	
Attributes	See Template Layout (above).
Validation	See Template Layout (above).
Normalization	**1. Reference Rate Term Value and Reference Rate Term Unit** • If Reference Rate Term Unit = "DAYS" and Reference Rate Term Value is divisible by 7, record it in weeks: Reference Rate Term Value 7 / Reference Rate Term Unit DAYS → Reference Rate Term Value 1 / Reference Rate Term Unit WEEK • If Reference Rate Term Unit = "MNTH" and Reference Rate Term Value is divisible by 12, record it in years: Reference Rate Term Value 12 / Reference Rate Term Unit MNTH → Reference Rate Term Value 1 / Reference Rate Term Unit YEAR
Attribute Data Dictionary	This section provides the exact reference or source of the attribute.

Full Name	Source	Type
Delivery Type	ISO 20022 FinancialInstrumentReportingReferenceDataReportV01	Enums *[CASH, PHYS]*
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}

	Notional Schedule	ISO 10962 Classification of financial instruments (CFI code)	Enums *[Constant, Accreting, Amortizing, Custom]*
	Reference Rate	FpML Coding Scheme	Max350Text (based on string) minLength: 1 maxLength: 350
	Reference Rate Term Unit	ISO 20022 FinancialInstrumentReportingReferenceDataReportV01	Enums *[DAYS, WEEK, MNTH, YEAR]*
	Reference Rate Term Value	Integer – Positive or negative but not 0	Max3Number (based on decimal) fractionDigits: 0 totalDigits: 3

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: "S" • Asset Class: "R" • Underlying Asset Type: "C" • Notional Schedule: from Request.Notional Schedule… - *Constant →* *C* - *Accreting →* *I* - *Amortizing →* *D* - *Custom →* *Y* • Single or Multi-Currency: "S" • Delivery Type: from Request.Delivery Type… - *CASH →* *C* - *PHYS →* *P* E.g.: "SRCCSP"
	Short Name	Concatenation of the following attributes/values: • Issuer "NA/" • Instrument Type "Swap" • Underlying Asset "Fxd Flt" • Currency e.g.: EUR E.g.: "NA/Swap Fxd Flt EUR".
	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.
	CFI Delivery Type	CFI Delivery Type • *Cash* • *Physical*	The Delivery Type as defined by CFI code: ISO 10962 • *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.

<table>
<tr><td rowspan="13">ISO 4914 Equivalence</td><th colspan="2">ISO 4914</th><th>Request Attribute</th><th>Record Attribute</th></tr>
<tr><td>Asset Class</td><td>M</td><td>Asset Class</td><td>Asset Class</td></tr>
<tr><td>Instrument Type</td><td>M</td><td>Instrument Type</td><td>Instrument Type</td></tr>
<tr><td>Currency associated with an underlying reference rate</td><td>M</td><td>Notional Currency</td><td>Notional Currency</td></tr>
<tr><td rowspan="2">Delivery Type</td><td rowspan="2">M</td><td rowspan="2">Delivery Type</td><td>Delivery Type</td></tr>
<tr><td>CFI Delivery Type</td></tr>
<tr><td>Notional Schedule</td><td>M</td><td>Notional Schedule</td><td>Notional Schedule</td></tr>
<tr><td>Single or Multiple Currency</td><td>M</td><td>Not Required</td><td>Single or Multi Currency</td></tr>
<tr><td>Underlier ID</td><td>C</td><td>Underlier ID</td><td>Reference Rate</td></tr>
<tr><td>Underlier ID source</td><td>C</td><td>Underlier ID Source</td><td>Not Required</td></tr>
<tr><td>Underlier Type</td><td>M</td><td>Not Required</td><td>Underlying Asset Type</td></tr>
<tr><td>Underlying rate index tenor period</td><td>C</td><td>Reference Rate Term Unit</td><td>Reference Rate Term Unit</td></tr>
<tr><td>Underlying rate index tenor period multiplier</td><td>C</td><td>Reference Rate Term Value</td><td>Reference Rate Term Value</td></tr>
</table>