

**Derivatives Service Bureau (UPI)**  
**CHANGE REQUEST FORM**

Version	State	Author	Date	Description
1	Draft	M.A. Gariplan	23 April 2021	Initial Document
2	Draft	M.A. Gariplan	10 May 2021	Updated Record template
3	Draft	M.A. Gariplan	24 May 2021	Updated Attribute data dictionary and Derivation (Classification Type)
4	Draft	M.A. Gariplan	19 Jul 2021	Removed active hyperlinks in Data Dictionary; Amended References section with standard text; Removed Short Name comment in the Comment section

Title	Rates Option CapFloor Template Definition			
<b>Background</b>	The following CRF presents a specification for the generation and retrieval of a Unique Product Identifier for the following product:		<b>DSB-ID</b>	<b>UPI-0211</b>
	<ul style="list-style-type: none"> <li><b>Rates : Option : CapFloor</b></li> </ul>		<b>Type</b>	New Template
			<b>Owner</b>	M.A. Gariplan
			<b>Version</b>	4
			<b>State</b>	Draft
<b>Terms of Reference</b>				
<b>Scope</b>	<ul style="list-style-type: none"> <li>This CRF specifies the product definition required for the generation / retrieval of a UPI only.</li> <li>This CRF covers both the input (Request) and output (Record) templates.</li> <li>Support for local jurisdiction / alternate underlier identifier input is currently out of scope.</li> <li>Support for CFI 2019 values is currently out of scope.</li> </ul>			
<b>Requirements</b>	<ul style="list-style-type: none"> <li>The product definition will conform to ISO 4914 (UPI).</li> <li>Where possible, the product definition is to be based on the attributes, values and behaviour of the equivalent OTC ISIN.</li> <li>The product definition will return a product short name (FISN).</li> <li>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.</li> </ul>			
<b>Dependencies</b>	<ul style="list-style-type: none"> <li>This specification is dependent on final sign-off of the ISO 4914 (UPI) specification.</li> <li>This specification is dependent on PC approval for the use of the OTC ISIN definitions as a basis for the UPI.</li> <li>This specification is dependent on PC approval for the inclusion of ISO 4914 (UPI) conditional attributes.</li> <li>This specification is dependent on TAC Approval for the DSB approach to ISO 10962 (CFI:2019) migration.</li> <li>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.</li> <li>The format of the Short Name is dependent upon the outcome of the ISO 18774 (FISN) systematic review.</li> </ul>			
<b>Assumptions</b>	<ul style="list-style-type: none"> <li>This specification assumes that, unless stated, all values and behaviours are based on those of the equivalent OTC ISIN product definition.</li> <li>This specification assumes that no input values are to be defaulted by the system.</li> <li>This specification is based on the current ISO 4914 (UPI) specification (CD) – including attributes that are not currently supported by the equivalent OTC ISIN.</li> <li>This specification is based on the DSB's current equivalent OTC ISIN product definition.</li> <li>This specification is based on the attributes and values defined in ISO 10962 (CFI:2015).</li> <li>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.</li> <li>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.</li> <li>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".</li> </ul>			

- The specification for UPI does not include expiry date as part of the attributes, hence "expired" status does not apply.

**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 (HR****)	ISIN
	Instrument Type	Set	M	Option		CFI:2015 Char#1 (HR****)	ISIN
	Product	Set	M	CapFloor			ISIN
	Level	Set	M	UPI			NEW
Attribute Section	Underlier ID	Enum	M	EUR-EURIBOR-Reuters	FpmlRatesReferenceRate.json	FpML Coding Scheme 5.98	NEW
	Underlier ID Source	String	M	FPML	[FPML]	Internal	NEW
	Underlying Instrument Index Term Value	Integer	M	1	-999 to 999 (excluding 0)		ISIN
	Underlying Instrument Index Term Unit	Enum	M	YEAR	[DAYS, WEEK, MNTH, YEAR]	ISO 20022	ISIN
	Notional Currency	Enum	M	EUR	ISOCurrencyCode.json	ISO 4217 (3-Char CCY)	ISIN
	Option Type	Enum	M	CALL	[CALL, PUTO, OPTL]	ISO 20022	ISIN
	Delivery Type	Enum	M	CASH	[CASH, PHYS, OPTL]	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 (HR****)	ISIN
	Instrument Type	Set	M	Option		CFI:2015 Char#1 (HR****)	ISIN
	Product	Set	M	CapFloor			ISIN
	Level	Set	M	UPI			NEW
	Template Version	Integer	D	1			ISIN
Attribute Section	Underlying Instrument Index	Enum	M	EUR-EURIBOR-Reuters	FpmlRatesReferenceRate.json	FpML Coding Scheme 5.98	NEW
	Underlying Instrument Index Term Value	Integer	M	1	-999 to 999 (excluding 0)		ISIN
	Underlying Instrument Index Term Unit	Enum	M	YEAR	[DAYS, WEEK, MNTH, YEAR]	ISO 20022	ISIN
	Notional Currency	Enum	M	EUR	ISOCurrencyCode.json	ISO 4217 (3-Char CCY)	ISIN
	Option Type	Enum	M	CALL	[CALL, PUTO, OPTL]	ISO 20022	ISIN
	Delivery Type	Enum	M	CASH	[CASH, PHYS, OPTL]	ISO 20022	ISIN
Identifier Section	UPI	String	D	QZD1V8PXF2RG	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	2021-04-22T10:32:51	YYYY-MM-DDThh:mm:ss		ISIN
Derived Section	Classification Type	String	D	HRMAMC	See CRF (Derivations)	ISO 10962:2015	ISIN
	Short Name	String	D	NA/O Call Epn EUR	See CRF (Derivations)	ISO 18774	NEW
	Underlying Asset Type	String	D	Other	Fixed value	CFI:2015 Char#3 (HRM****)	ISIN
	Option Exercise Style	String	D	EURO	Fixed value	ISO 20022	ISIN
	Valuation Method or Trigger	String	D	Other	Fixed value	CFI:2015 Char#5 (HR****)	ISIN
	CFI Option Style and Type	String	D	European-Call	See CRF (Derivations)	CFI:2015 Char#4 (HR****)	NEW
	CFI Delivery Type	String	D	Cash	See CRF (Derivations)	CFI:2015 Char#6 (HR****)	NEW

Product Definition			
Attributes	See Template Layout (above).		
Validation	See Template Layout (above).		
Attribute Data Dictionary	This section provides the exact reference or source of the attribute.		
	Full Name	Source	Type
	Underlying Instrument Index	FpML Coding Scheme	Max350Text (based on string) minLength: 1 maxLength: 350
	Underlying Instrument Index Term Value	Integer – Positive or negative but not 0	Max3Number (based on decimal) fractionDigits: 0 totalDigits: 3
	Underlying Instrument Index Term Unit	ISO 20022 FinancialInstrumentReportingReferenceDataReportV01	Max35Text (based on string) minLength: 1 maxLength: 35
	Notional Currency	ISO 4217 Currency Codes	Pattern: [A-Z]{3,3}
	Option Type	ISO 20022 FinancialInstrumentReportingReferenceDataReportV01	Enums [CALL; PUTO; OPTL]

	Delivery Type	ISO 20022 FinancialInstrumentReportingReferenceDataReportV01	Enums [CASH; PHYS; OPTL]																		
	CFI Delivery Type	ISO 10962 Classification of financial instruments (CFI code)	Enums [Cash; Physical; Elect at Exercise]																		
<b>Normalization</b>	<p><b>1. Underlying Instrument Index Term Value and Underlying Instrument Index Term Unit</b></p> <ul style="list-style-type: none"> <li>If Underlying Instrument Index Term Unit = "DAYS" and Underlying Instrument Index Term Value is divisible by 7, record it in weeks                     <table border="1" data-bbox="371 434 1275 495"> <tr> <td>Underlying Instrument Index Term Value</td> <td>7</td> <td rowspan="2">→</td> <td>Underlying Instrument Index Term Value</td> <td>1</td> </tr> <tr> <td>Underlying Instrument Index Term Unit</td> <td>DAYS</td> <td>Underlying Instrument Index Term Unit</td> <td>WEEK</td> </tr> </table> </li> <li>If Underlying Instrument Index Term Unit = "MNTH" and Underlying Instrument Index Term Value is divisible by 12, record it in years                     <table border="1" data-bbox="371 560 1284 620"> <tr> <td>Underlying Instrument Index Term Value</td> <td>12</td> <td rowspan="2">→</td> <td>Underlying Instrument Index Term Value</td> <td>1</td> </tr> <tr> <td>Underlying Instrument Index Term Unit</td> <td>MNTH</td> <td>Underlying Instrument Index Term Unit</td> <td>YEAR</td> </tr> </table> </li> </ul>			Underlying Instrument Index Term Value	7	→	Underlying Instrument Index Term Value	1	Underlying Instrument Index Term Unit	DAYS	Underlying Instrument Index Term Unit	WEEK	Underlying Instrument Index Term Value	12	→	Underlying Instrument Index Term Value	1	Underlying Instrument Index Term Unit	MNTH	Underlying Instrument Index Term Unit	YEAR
Underlying Instrument Index Term Value	7	→	Underlying Instrument Index Term Value	1																	
Underlying Instrument Index Term Unit	DAYS		Underlying Instrument Index Term Unit	WEEK																	
Underlying Instrument Index Term Value	12	→	Underlying Instrument Index Term Value	1																	
Underlying Instrument Index Term Unit	MNTH		Underlying Instrument Index Term Unit	YEAR																	
<b>Derivation</b>	This section provides additional details to the derivation logic specified in the Template Layout sections (above).																				
	<b>Classification Type</b>	Concatenation of the following attributes/values: <ul style="list-style-type: none"> <li>Instrument Type: "H"</li> <li>Asset Class: "R"</li> <li>Underlying Asset Type: "M"</li> <li>Option Style and Type: from Request.OptionType and Record.OptionExerciseStyle...                         <ul style="list-style-type: none"> <li>- PUTO/EURO → D</li> <li>- CALL/EURO → A</li> <li>- OPTL/EURO → G</li> </ul> </li> <li>Valuation Method or Trigger: "M"</li> <li>Delivery Type: from Request.DeliveryType...                         <ul style="list-style-type: none"> <li>- CASH → C</li> <li>- PHYS → P</li> <li>- OPTL → E</li> </ul> </li> </ul> E.g.: "HRMAMC"																			
	<b>Short Name</b>	Concatenation of the following attributes/values: <ul style="list-style-type: none"> <li>Issuer: "NA/"</li> <li>Instrument Type: "O" (fixed value)</li> <li>Option Type: from Request.OptionType...                         <ul style="list-style-type: none"> <li>- CALL → Call</li> <li>- PUTO → P</li> <li>- OPTL → Opt</li> </ul> </li> <li>Option Exercise Style "Epn" (fixed value)</li> <li>Notional Currency: e.g., EUR – from request.NotionalCurrency...</li> </ul> E.g.: "NA/O Call Epn EUR" Note: The Short Name is based on the OTC ISIN that excludes the following field: <ul style="list-style-type: none"> <li>- Expiry Date</li> </ul>																			
	<b>CFI Option Style and Type</b>	Derived from the Underlying Request.OptionType and Record.OptionExerciseStyle <ul style="list-style-type: none"> <li>PUTO/EURO → "European-Put"</li> <li>CALL/EURO → "European-Call"</li> <li>OPTL/EURO → "European-Chooser"</li> </ul>																			
	<b>CFI Delivery Type</b>	Derived from the input Delivery Type... <ul style="list-style-type: none"> <li>CASH → "Cash"</li> <li>PHYS → "Physical"</li> <li>OPTL → "Elect at Exercise"</li> </ul>																			
<b>GUI Details</b>	The following section provides display information for any attributes (and values) that are not included in the related OTC ISIN definition.																				
	<b>Attribute</b>	<b>Display Name</b>	<b>Tool Tip (and • value elaboration)</b>																		

	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 • <i>As defined by CFI Code: ISO 10962</i>	
	CFI Option Style and Type	CFI Option Style and Type	The Option Style and Type as defined by CFI code: ISO 10962 • <i>As defined by CFI Code: ISO 10962</i>	
<b>Additional Information</b>				
<b>Reference</b>	References to external documents can be found on the DSB website at this address <a href="https://www.anna-dsb.com/upi-external-reference-documents/">https://www.anna-dsb.com/upi-external-reference-documents/</a> .			
<b>Comments</b>	<ul style="list-style-type: none"> <li>The shortname abbreviation for option type – Put is “P” for rates option while in equity option, shortname abbreviation for the option type – Put is “Put”.</li> <li>The Option Type enumerated values of UPI will be based on current DSB OTC ISIN values [CALL; PUTO; OPTL] rather than the ISO 20022 values [CALL; PUTO; OTHR].</li> </ul>			
<b>ISO 4914 Equivalence</b>	<b>ISO 4914</b>		<b>Request Attribute</b>	<b>Record Attribute</b>
	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
	Option Style	M	Not Required	Option Exercise Style
	Option Type	M	Option Type	Option Type
	Return, pricing method or payout trigger	M	Not Required	Valuation Method or Trigger
	Underlier ID	C	Underlier ID	Underlying Instrument Index
	Underlier ID source	C	Underlier ID Source	Not Required
	Underlier Type	M	Not Required	Underlying Asset Type
	Underlying Rate Index Tenor Period	C	Underlying Instrument Index Term Unit	Underlying Instrument Index Term Unit
	Underlying Rate Index Tenor Period Multiplier	C	Underlying Instrument Index Term Value	Underlying Instrument Index Term Value
	Underlying Contract Tenor Period	C	Not Applicable*	
Underlying Contract Tenor Period Multiplier	C	Not Applicable*		

\* Underlying Contract Tenor Period / Multiplier applies only to a derivative contract underlying another derivative. For this product, the underlying is Reference Rates and so these attributes are not required.