Derivatives Service Bureau (UPI) CHANGE REQUEST FORM

Version	State	Author	Date	Description
1	Draft	M.A. Gariplan	27 April 2021	Initial Document
2	Draft	M.A. Gariplan	05 May 2021	-Updated statement and error message in Validation: Underlier ID [UPI] -Removed Underlying Contract Tenor Term Value/Unit attributes
3	Draft	M.A. Gariplan	09 Jun 2021	Added an error message in Validation section
4	Draft	M.A. Gariplan	21 Jun 2021 Amendments on Derivation (Underlying Issuer Type)	
5	Draft	M.A. Gariplan	29 Jun 2021	Revised an error message in Validation (Underlier ID [UPI])
6	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	Credit Option Single Name Swaption Template Definition					
Background	The following CRF presents a specification for the generation and retrieval of a	DSB-ID	UPI-0222			
	Unique Product Identifier for the following product:	Туре	New Template			
	Credit : Option : Single_Name_Swaption	Owner	M.A. Gariplan			
	*This product is based on an underlying UPI Swap and will derive data elements from the provided UPI.	Version	6			
		State	Draft			
Terms of Referen	ce	-				
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 conform to the eventually agreed FISN format for the UPI. This specification assumes that the Short Name 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 attribute not included in the current OTC ISIN product definition. The display information in the GUI for the existing attributes (and values) are taken from the OTC IS 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 apply. The specification for underlying debt issuance tenor period/underlying debt issuance tenor period m subject for review and approval by CDIDE as part of ISO 4914 standard. 	is defined as that are N. If such does not
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Request Template Layout

Section	Attribute	Format	Cat	Example Value	Validation / Derivation	Enum Source	Origin
	Asset Class	Set	Μ	Credit		CFI:2015 Char#2 (HC****)	ISIN
Header Section	Instrument Type	Set	М	Option		CFI:2015 Char#1 (HC****)	ISIN
neauer section	Product	Set	М	Single_Name_Swaption			ISIN
	Level	Set	М	UPI			NEW
	Underlier ID	Enum	Μ	QZD1V8PXF2RG	See CRF (Validation)	UPI RDL	NEW
	Underlier ID Source	String	Μ	UPI	[UPI]	Internal	NEW
Attribute Section	Option Type	Enum	М	CALL	[CALL, PUTO, OPTL]	ISO 20022	ISIN
Attribute Section	Option Exercise Style	Enum	М	EURO	[AMER, BERM, EURO]	ISO 20022	ISIN
	Valuation Method or Trigger	Enum	М	Vanilla	[Vanilla, Asian, Barrier, etc.]	CFI:2015 Char#5 (HC****)	ISIN
	Delivery Type	Enum	М	PHYS	[CASH, PHYS, OPTL]	ISO 20022	ISIN

Record Template Layout

Section	Attribute	Format	Cat	Example Value	Validation / Derivation	Enum Source	Origin
	Asset Class	Set	М	Credit		CFI:2015 Char#2 (HC****)	ISIN
	Instrument Type	Set	М	Option		CFI:2015 Char#1 (HC****)	ISIN
Header Section	Product	Set	М	Single_Name_Swaption			ISIN
	Level	Set	М	UPI			NEW
	Template Version	Integer	D	1			ISIN
	Underlying Instrument UPI	Enum	М	QZD1V8PXF2RG	See CRF (Validation)	UPI RDL	NEW
	Option Type	Enum	М	CALL	[CALL, PUTO, OPTL]	ISO 20022	ISIN
Attribute Section	Option Exercise Style	Enum	М	EURO	[AMER, BERM, EURO]	ISO 20022	ISIN
	Valuation Method or Trigger	Enum	М	Vanilla	[Vanilla, Asian, Barrier, etc.]	CFI:2015 Char#5 (HC****)	ISIN
	Delivery Type	Enum	М	PHYS	[CASH, PHYS, OPTL]	ISO 20022	ISIN
	UPI	String	D	QZHNPYP8QBB5	UPI	ISO 4914	NEW
Identifier Section	Status	String	D	New			ISIN
identifier Section	Status Reason	String	D	<null></null>	Not applicable to a New record		ISIN
	Last Update Date Time	DtTm	D	2021-04-27T05:03:13	YYYY-MM-DDThh:mm:ss		ISIN
	Classification Type	String	D	HCUAVP	See CRF (Derivations)	ISO 10962:2015	ISIN
	Short Name	String	D	NA/CDS SN Swt	See CRF (Derivations)	ISO 18774	NEW
Derived Section	Underlying Asset Type	String	D	CDS on Single Name	Fixed value	CFI:2015 Char#3 (HCU***)	ISIN
Derived Section	Underlying Issuer Type	String	D	Corporate	See CRF (Derivations)	UPI RDL	NEW
	CFI Option Style and Type	String	D	European-Call	See CRF (Derivations)	CFI:2015 Char#4 (HC****)	NEW
	CFI Delivery Type	String	D	Physical	See CRF (Derivations)	CFI:2015 Char#6 (HC****)	NEW

Product Defin	ition
Attributes	See Template Layout (above).
Validation	See Template Layout (above).
	 Underlier ID [UPI] The following validation will be applied to the Underlier ID and must be a valid UPI RDL record. UPI 12 characters (Prefix "QZ", 9 Alphanumeric, 1 Alphanumeric check character) UPI code structure based on ISO 4914 (UPI) specification b. If input UPI has more than 12 characters or does not have prefix "QZ", an error message will apply before it proceeds to create "Value must match the pattern ^QZ([0-9BCDFGHJ-NPQ-TVWXZ]){10}\$".
	 2. Underlying Instrument UPI in the record a. User inputs underlier ID and must be a valid UPI RDL record with status not "Deleted". b. If input underlier ID does not exist in UPI RDL, an error message will apply: "Error: Underlier ID [UPI] not found".
	 3. Underlying Instrument UPI a. The following validation will be applied to Underlying Instrument UPI record returned from the UPI RDL. • Asset Class "Credit"

 Instrument Type "Swap" Product "Corporate" or "Municipal" or "Sovereign" or "ABS" or "Non_Standard" Underlying Asset Type "Single Name" or "Other" Status not = "Deleted" b. If the above validation rules are not satisfied, an error message will apply: "I valid and existing Credit Swap". 								
Normalization	Not Required							
Attribute Data Dictionary	This section provides the exact reference or source of the attribute.							
Dictionary	Full Name		Source		Туре			
	Underlying Instrument UPI Option Type		UPI RDL		Max of 12 text (pattern) [A-Z] – first 2 characters [A-Z], [0-9] – Next 9 characters [A-Z], [0-9] – Last value is based on UPI calculation			
			ISO 20022 FinancialInstrumentRe	Enums [CALL; PUTO; OPTL]				
	Option Exercise Style		ISO 20022 FinancialInstrumentRep	Enums [AMER; BERM; EURO]				
	Valuation Method or Trigger Delivery Type		ISO 10962 Classification code)	n of financial instruments (CFI	Enums [Vanilla; Asian; Digital (Binary); Barrier; Digital Barrier; Lookback; Other Path Dependent; Other]			
			ISO 20022 FinancialInstrumentRe	portingReferenceDataReportV01	Enums [CASH, PHYS, OPTL]			
	CFI Delivery Type		ISO 10962 Classification code)	Enums [Cash; Physical; Elect at Exercise]				
Derivation	This section provides additional details to the derivation logic specified in the Template Layout sections (above).							
	Classification Type	 In As U O - -	ion of the following attril strument Type: sset Class: nderlying Asset Type: ption Type/Style: PUTO/AMER → PUTO/EURO → CALL/AMER → CALL/BERM → CALL/BERM → CALL/EURO → OPTL/AMER → OPTL/BERM → OPTL/BERM → OPTL/EURO → aluation Method or Trigg Vanilla → Asian → Digital (Binary) → Barrier → Digital Barrier → Lookback → Other Path Depender	"H" "C" "U" from Request.OptionType and E F D B C A H I G G ter: from Request.ValuationMetho V A D B G L	Request.OptionExerciseStyle			

	Short Name	- C, - Pl - O E.g.: "HCUAVP" Concatenation o Issuer: Underl Produc E.g.: "NA/CDS SN Note: The Short I - I	lying Product: ct: I Swt″	from Request.DeliveryType C P E putes/values: "NA/" "CDS" (fixed value) "SN Swt" (fixed value) e OTC ISIN that excludes the following field:				
	Underlying Issuer Type	 Based on the Underlying Instrument UPI selected, the following derivations will apply: a. If the Underlying Instrument UPI selected is [ABS, Loan or Non_Standard], Then derive the Underlying Issuer Type from Attributes.UnderlyingIssue the Underlying Instrument UPI): Corporate → "Corporate" Sovereign → "Sovereign" Local → "Local" b. If the Underlying Instrument UPI selected is [Corporate or Total_Return_Swap], Then set the Underlying Issuer Type to "Corporate". c. If the Underlying Instrument UPI selected is [Sovereign], Then set the Underlying Issuer Type to "Sovereign". 						
		 d. If the Underlying Instrument UPI selected is [Municipal], Then set the Underlying Issuer Type to "Local". 						
	CFI Option Style and Type	 PUTO/ CALL/E OPTL/E PUTO/ CALL/A OPTL/E PUTO/ CALL/E 	e Request.OptionTyp EURO → EURO → EURO → AMER → AMER → AMER → BERM → BERM → BERM →	e and Record.OptionExerciseStyle "European-Put" "European-Call" "European-Chooser" "American-Put" "American-Call" "American-Chooser" "Bermudan-Put" "Bermudan-Call" "Bermudan-Chooser"				
	CFI Delivery Type	Derived from the CASH - PHYS - OPTL -	→	2 "Cash" "Physical" "Elect at Exercise"				
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 publish	er, of the associated underlier ID.				
	UPI	Identification	Unique Product Iden					
	CFI Delivery Type	CFI Delivery Type	The Delivery Type as defined by CFI code: ISO 10962 • As defined by CFI Code: ISO 10962					

	CFI Option Style and TypeCFI Option Style and TypeThe Option Style and Type as defined by CFI code: ISO 10962• As defined by CFI Code: ISO 10962									
Additional Info	rmation									
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	 The Contract Specification only applies to Credit.Swap.Corporate; Credit.Swap.Municipal; Credit.Swap.Sovereign & Credit.Swap.Non_Standard and does not apply to Credit.Swap.Loan; Credit.Swap.ABS; Credit.Swap.Index; Credit.Swap.Index_Tranche; & Credit.Swap.Total_Return_Swap. 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]. 									
ISO 4914	ISO 4914				Request Attribute	Record Attribute				
Equivalence	Asset Class			М	Asset Class	Asset Class				
	Instrument ty	ре		М	Instrument Type	Instrument Type				
					Delivery Type	Delivery Type				
	Delivery type			М		CFI Delivery Type				
	Option Style			М	Option Exercise Style	Option Exercise Style				
	Option Type			М	Option Type	Option Type				
	Return, pricin	g method or payout t	trigger	М	Valuation Method or Trigger	Valuation Method or Trigger				
	Seniority*			М	Not Required					
	Standard Cont	tract Specification**		С	Not Required					
	Underlier ID			С	Underlier ID	Underlying Instrument UPI				
	Underlier ID s	ource		С	Underlier ID Source	Not Required				
	Underlier type	2		М	Not Required	Underlying Asset Type				
	Underlier sub-	-type (first level)		М	Not Required	Underlying Issuer Type				
	Underlying cre	edit index series***		С	Not Required					
	Underlying cre	edit index version***	:	С	Not Required					
	Underlying co	ntract tenor period*	***	С	Not Required					
	Underlying co multiplier***	ntract tenor period *		С	Not Required					
	Underlying de	bt issuance tenor pe	riod*****	С	Not Required					
	Underlying de multiplier***	bt issuance tenor per **	riod	С	Not	Required				

* Seniority applies only for underlying Legal Entity Identifier or Debt Instrument. For this product, the underlying is another derivative contract in the UPI record, so this attribute does not apply.

** Standard Contract Specification does not apply for this product, refer to comments section above.

*** Underlying Credit Index Series/Version applies only to an underlying Credit Index. For this product, the underlying is another derivative contract in the UPI record, so these attributes are not required.

**** The PC agreed that Underlying Contract Tenor Period/Multiplier attributes are not required for Swaption underlying another derivative contract.

***** Dependent on ISO review and approval for the inclusion of Underlying Debt Issuance Tenor Period/Multiplier as ISO 4914 (UPI) Conditional attributes.