

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

Version	State	Author	Date	Description
1	Draft	S. Wiltshire	02 Feb 2021	Initial Document
2	Draft	S. Wiltshire	03 Mar 2021	Updated Short Name format and derivation.
3	Draft	S. Wiltshire	21 Jun 2021	Added Contract Specification enumerated values, removed Debt Issuance Tenor Period, amended CFI derivation logic.
4	Draft	M. Surop	14 July 2021	Updated template layout with Underlier input method, Attributes section, GUI Details, Reference & Comment sections. Removed hyperlinks in Attribute Data Dictionary & Reference Section.

Title	CREDIT SWAP Corporate CDS 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-0010</b>
	<ul style="list-style-type: none"> <li><b>Credit : Swap : Corporate</b></li> </ul>		<b>Type</b>	New Template
			<b>Owner</b>	S. Wiltshire
			<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 4194 (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>The product definition will support the entry of and/or access to all CFI attributes and names for the product.</li> </ul>			
<b>Dependencies</b>	<ul style="list-style-type: none"> <li>This specification is dependent on final sign-off of the ISO 4194 (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 4194 (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 18874 (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>			

<ul style="list-style-type: none"> <li>The specification for UPI does not include expiry date as part of the attributes, hence "expired" status does not apply.</li> <li>The specification for underlying debt issuance tenor period/underlying debt issuance tenor period multiplier is subject for review and approval by CDIDE as part of ISO 4914 standard. This specification assumes that this attribute is not required.</li> </ul>
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**Request Template Layout**

Section	Att Attribute	Format	Cat	Example Value	Validation / Derivation	Enum Source	Origin
Header Section	Asset Class	Set	M	Credit			ISIN
	Instrument Type	Set	M	Swap			ISIN
	Product	Set	M	Corporate			ISIN
	Level	Set	M	UPI			NEW
Attribute Section	Underlier Type (oneOf)	Enum	M	Fixed Income Security	[Fixed Income Security]		NEW
	Underlier ID Source	String	D	ISIN	[ISIN]	Internal	NEW
	Underlier ID	Enum	M	GB2093849381	See CRF (Validation)		NEW
	Underlier Type (oneOf)	Enum	M	Legal Entity	[Legal Entity]		NEW
	Underlier ID Source	String	D	LEI	[LEI]	Internal	NEW
	Underlier ID	Enum	M	39120071DMHXS09CI766	See CRF (Validation)	ISO 17442 LEI Codes	NEW
	Debt Seniority	Enum	M	SNDB	[SNDB, MZZD, SBOD, JUND]	ISO 20022	ISIN
	Contract Specification	Enum	M	StandardEuropeanCorporate	FpML Matrix Term Scheme (5.130)	FpML 1.120	NEW
Delivery Type	Enum	M	PHYS	[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	Credit			ISIN
	Instrument Type	Set	M	Swap			ISIN
	Product	Set	M	Corporate			ISIN
	Level	Set	M	UPI			NEW
	Template Version	Integer	D	1			ISIN
Attribute Section	Instrument LEI	String	C	39120071DMHXS09CI766	If input record includes LEI		ISIN
	Instrument ISIN	String	C	GB2093849381	If input record includes ISIN		ISIN
	Debt Seniority	Enum	M	SNDB	[SNDB, MZZD, SBOD, JUND]	ISO 20022	ISIN
	Contract Specification	Enum	C	StandardEuropeanCorporate	FpML Matrix Term Scheme (5.130)	FpML 1.120	NEW
	Delivery Type	Enum	M	PHYS	[CASH, PHYS, OPTL]	ISO 20022	ISIN
Identifier Section	Identifier	String	D	QZ2093849381	UPI		ISIN
	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	SCUCCA	See CRF (Derivations)	ISO 10962:2015	ISIN
	Short Name	String	D	NA/Swap CDS Corp SN Sr	See CRF (Derivations)	ISO 18874	NEW
	Underlying Asset type	String	D	Single Name	Fixed value	CFI:2015 Char#3 (SCU***)	ISIN
	Return or Payout Trigger	String	D	Credit Default	Fixed value	CFI:2015 Char#4 (SC*C**)	ISIN
	Underlying Issuer Type	String	D	Corporate	Fixed value	CFI:2015 Char#5 (SC**C*)	ISIN
	CFI Delivery Type	String	D	[Cash, Physical, Auction]	See CRF (Derivations)	CFI:2015 Char#6 (SC****)	NEW

Product Definition	
<b>Attributes</b>	<p>See Template Layout (above).</p> <p>In order to support the different ways in which underliers need to be supported in the definition of this product, the above Request template layout allows the user to specify the following:</p> <p><b>a) Underlier Type</b>                      The Request template described in this document supports products that can be defined on the basis of more than one type of underlier. For this product, the user is asked to select one of the following:</p> <ul style="list-style-type: none"> <li>Legal Entity</li> <li>Fixed Income Security</li> </ul> <p>Once the Underlier Type is chosen, the user will be asked to select one of the Underlier ID Sources associated with that Underlier Type and enter the Underlier ID that matches the ID Source.</p> <p><i>* Please see Underlier Input Method Document (link provided in the Reference Section below) for further details.</i></p>
<b>Validation</b>	<p>See Request Template Layout (above).</p> <p><b>1. Underlier ID</b>                      The following validation will be applied to Underlier ID based on the value selected on Underlier ID Source [LEI, ISIN].</p> <p>a. LEI</p> <ul style="list-style-type: none"> <li>The input text by user must be in 20 characters (18 alphanumeric, 2 numeric).</li> </ul>

	<ul style="list-style-type: none"> <li>• A syntactic validation is being performed to confirm LEI.</li> <li>• If the input LEI is less or more than 20 characters and/or is not aligned with the above pattern before hitting create, an error message will apply "Value must match the pattern <code>^[A-Z0-9]{18}[0-9]{2}\$</code>."</li> <li>• If the input LEI is not aligned with the pattern and conformed with the syntactic validation after hitting create, an error message will apply "Error: /Attributes/Underlying: instance failed to match exactly one schema (matched 0 out of 2)".</li> </ul> <p>b. ISIN</p> <ul style="list-style-type: none"> <li>• The input text by user must be in 12 characters (2 alpha, 9 alphanumeric, 1 numeric).</li> <li>• The input text must not have a prefix of "QZ" or "EZ".</li> <li>• A syntactic validation is being performed to confirm an ISIN when hitting create.</li> <li>• If the input ISIN is less or more than 12 characters and/or is not aligned with the above pattern before hitting create, an error message will apply "Value must match the pattern <code>^(?!EZ QZ)[A-Z]{2}[A-Z0-9]{9}[0-9]\$</code>."</li> <li>• If the input ISIN is not aligned with the above pattern after hitting create, an error message will apply "Error: /Attributes/Underlying: instance failed to match exactly one schema (matched 0 out of 2)".</li> <li>• 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".</li> </ul>		
<b>Normalization</b>	Not required.		
<b>Attribute Data Dictionary</b>	<b>Full Name</b>	<b>Source</b>	<b>Type</b>
	Delivery Type	ISO 20022 FinancialInstrumentReportingReferenceDataReportV01	Enums [CASH, PHYS, OPTL]
	CFI Delivery Type	ISO 10962 Classification of financial instruments (CFI code)	Enums [Cash, Physical, Auction]
	Debt Seniority	ISO 20022 FinancialInstrumentReportingReferenceDataReportV01	Enums [SNDB, MZZD, SBOD, JUND]
	Contract Specification	FpML Coding Scheme  <i>Note: Only the Corporate entries on this list will apply.</i>	Enums [Please see Appendix below.]
	Instrument LEI	ISO 17442 LEI Codes	Max of 20 text (pattern) Char 1-4: LOU Identifier Char 5-18: Entity Identifier Char 19-20: Verification ID
	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
<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: "S"</li> <li>• Asset Class: "C"</li> <li>• Underlying Asset Type: "U"</li> <li>• Return or Payout Trigger: "C"</li> <li>• Underlying Issuer Type: "C"</li> <li>• Delivery Type: from Request.Delivery Type... <ul style="list-style-type: none"> <li>- CASH → C</li> <li>- PHYS → P</li> <li>- OPTL → A</li> </ul> </li> </ul> E.g.: "SCUCCA"	

	<b>Short Name</b>	Concatenation of the following attributes/values: <ul style="list-style-type: none"> <li>• Issuer "NA/"</li> <li>• Instrument Type "CDS"</li> <li>• Underlying Issuer Type "Corp"</li> <li>• Underlying Asset Type "SN"</li> <li>• Debt Seniority derived...                         <ul style="list-style-type: none"> <li>- SNDB → Sr</li> <li>- MZZD → Mz</li> <li>- SBOD → Sub</li> <li>- JUND → Jr</li> </ul> </li> </ul> E.g.: "NA/CDS Corp SN Sr".		
	<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 → "Auction"</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 Type	Underlier Type	Indicates the type of underlying asset or entity on which the product is based.	
	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.	
	Contract Specification	Contract Specification	The name of an existing document or reference that provides standard terms and conditions to be applied to the contract having the underlying asset or benchmark identified by the Underlier ID and Underlier ID source for which the UPI is assigned.	
	UPI	Identification	Unique Product Identifier (ISO 4914).	
	CFI Delivery Type	CFI Delivery Type	The Delivery Type as defined by CFI code: ISO 10962 <ul style="list-style-type: none"> <li>• As defined by CFI Code: ISO 10962</li> </ul>	
<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>• 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.</li> <li>• The Contract Specification only applies to Credit.Swap.Corporate; Credit.Swap.Municipal; Credit.Swap.Sovereign &amp; Credit.Swap.Non_Standard and does not apply to Credit.Swap.Loan; Credit.Swap.ABS; Credit.Swap.Index; Credit.Swap.Index_Tranche; &amp; Credit.Swap.Total_Return_Swap.</li> <li>• In terms of the input template, Contract Specification will be marked as Mandatory so all new UPI will be created with the said value. So, both new OTC ISIN and UPI will have the Contract Specification. In addition, this specification will allow the system to support a UPI with no Contract Specification. Thus, making this field in the record template as Optional. In this way, an existing OTC ISIN with no Contract Specification will automatically create the legacy UPI with no Contract Specification.</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
	Delivery type	M	Delivery Type	Delivery Type
				CFI Delivery Type
	Return, pricing method or payout trigger	M	Not Required	Return or Payout Trigger

Seniority	M	Debt Seniority	Debt Seniority
Standard Contract Specification	C	Contract Specification	Contract Specification
Underlier ID	C	Underlier ID	Instrument LEI
			Instrument ISIN
Underlier ID source	C	Underlier ID Source	Not Required
Underlier type	M	Not Required	Underlying Asset Type
Underlier sub-type (first level)	M	Not Required	Underlying Issuer Type
Underlying credit index series*	C	Not Required	
Underlying credit index version*	C	Not Required	
Underlying debt issuance tenor period**	C	Not Required	
Underlying debt issuance tenor period multiplier**	C	Not Required	

\*Underlying Credit Index Series/Version applies only to an underlying Credit Index. For this product, the underlying is either a Legal Entity or Debt Instrument and so these attributes are not required.

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

## Appendix

Below is the limited set of enumerations based on FpML Matrix Term Scheme (5.130) that is filtered only to support the Sovereign entries on this list:

Attribute	Enumerated List	Value elaboration
Contract Specification	AsiaCorporate	Matrix Transaction Type of ASIA CORPORATE.
	AsiaFinancialCorporate	Matrix Transaction Type of ASIA FINANCIAL CORPORATE.
	AustraliaCorporate	Matrix Transaction Type of AUSTRALIA CORPORATE.
	AustraliaFinancialCorporate	Matrix Transaction Type of AUSTRALIA FINANCIAL CORPORATE.
	EmergingEuropeanCorporate	Matrix Transaction Type of EMERGING EUROPEAN CORPORATE.
	EmergingEuropeanCorporateLPN	Matrix Transaction Type of EMERGING EUROPEAN CORPORATE LPN.
	EmergingEuropeanFinancialCorporate	Matrix Transaction Type of EMERGING EUROPEAN FINANCIAL CORPORATE.
	EmergingEuropeanFinancialCorporateLPN	Matrix Transaction Type of EMERGING EUROPEAN FINANCIAL CORPORATE LPN.
	EuropeanCoCoFinancialCorporate	Matrix Transaction Type of EUROPEAN COCO FINANCIAL CORPORATE.
	EuropeanCorporate	Matrix Transaction Type of EUROPEAN CORPORATE.
	EuropeanFinancialCorporate	Matrix Transaction Type of EUROPEAN FINANCIAL CORPORATE.
	EuropeanSeniorNonPreferredFinancialCorporate	Matrix Transaction Type of EUROPEAN SENIOR NON PREFERRED FINANCIAL CORPORATE.
	JapanCorporate	Matrix Transaction Type of JAPAN CORPORATE.
	JapanFinancialCorporate	Matrix Transaction Type of JAPAN FINANCIAL CORPORATE.
	LatinAmericaCorporate	Matrix Transaction Type of LATIN AMERICA CORPORATE.
	LatinAmericaCorporateBond	Matrix Transaction Type of LATIN AMERICA CORPORATE B.
	LatinAmericaCorporateBondOrLoan	Matrix Transaction Type of LATIN AMERICA CORPORATE BL.
	LatinAmericaFinancialCorporateBond	Matrix Transaction Type of LATIN AMERICA FINANCIAL CORPORATE B.
	LatinAmericaFinancialCorporateBondOrLoan	Matrix Transaction Type of LATIN AMERICA FINANCIAL CORPORATE BL.
	NewZealandCorporate	Matrix Transaction Type of NEW ZEALAND CORPORATE.
	NewZealandFinancialCorporate	Matrix Transaction Type of NEW ZEALAND FINANCIAL CORPORATE.
	NorthAmericanCorporate	Matrix Transaction Type of NORTH AMERICAN CORPORATE.
	NorthAmericanFinancialCorporate	Matrix Transaction Type of NORTH AMERICAN FINANCIAL CORPORATE.
SingaporeCorporate	Matrix Transaction Type of SINGAPORE CORPORATE.	
SingaporeFinancialCorporate	Matrix Transaction Type of SINGAPORE FINANCIAL CORPORATE.	

StandardAsiaCorporate	Matrix Transaction Type of STANDARD ASIA CORPORATE.
StandardAsiaFinancialCorporate	Matrix Transaction Type of STANDARD ASIA FINANCIAL CORPORATE.
StandardAustraliaCorporate	Matrix Transaction Type of STANDARD AUSTRALIA CORPORATE.
StandardAustraliaFinancialCorporate	Matrix Transaction Type of STANDARD AUSTRALIA FINANCIAL CORPORATE.
StandardEmergingEuropeanCorporate	Matrix Transaction Type of STANDARD EMERGING EUROPEAN CORPORATE.
StandardEmergingEuropeanCorporateLPN	Matrix Transaction Type of STANDARD EMERGING EUROPEAN CORPORATE LPN.
StandardEmergingEuropeanFinancialCorporate	Matrix Transaction Type of STANDARD EMERGING EUROPEAN FINANCIAL CORPORATE.
StandardEmergingEuropeanFinancialCorporateLPN	Matrix Transaction Type of STANDARD EMERGING EUROPEAN FINANCIAL CORPORATE LPN.
StandardEuropeanCoCoFinancialCorporate	Matrix Transaction Type of STANDARD EUROPEAN COCO FINANCIAL CORPORATE.
StandardEuropeanCorporate	Matrix Transaction Type of STANDARD EUROPEAN CORPORATE.
StandardEuropeanFinancialCorporate	Matrix Transaction Type of STANDARD EUROPEAN FINANCIAL CORPORATE.
StandardEuropeanSeniorNonPreferredFinancialCorporate	Matrix Transaction Type of STANDARD EUROPEAN SENIOR NON PREFERRED FINANCIAL CORPORATE.
StandardJapanCorporate	Matrix Transaction Type of STANDARD JAPAN CORPORATE.
StandardJapanFinancialCorporate	Matrix Transaction Type of STANDARD JAPAN FINANCIAL CORPORATE.
StandardLatinAmericaCorporateBond	Matrix Transaction Type of STANDARD LATIN AMERICA CORPORATE B.
StandardLatinAmericaCorporateBondOrLoan	Matrix Transaction Type of STANDARD LATIN AMERICA CORPORATE BL.
StandardLatinAmericaFinancialCorporateBond	Matrix Transaction Type of STANDARD LATIN AMERICA FINANCIAL CORPORATE B.
StandardLatinAmericaFinancialCorporateBondOrLoan	Matrix Transaction Type of STANDARD LATIN AMERICA FINANCIAL CORPORATE BL.
StandardNewZealandCorporate	Matrix Transaction Type of STANDARD NEW ZEALAND CORPORATE.
StandardNewZealandFinancialCorporate	Matrix Transaction Type of STANDARD NEW ZEALAND FINANCIAL CORPORATE.
StandardNorthAmericanCorporate	Matrix Transaction Type of STANDARD NORTH AMERICAN CORPORATE.
StandardNorthAmericanFinancialCorporate	Matrix Transaction Type of STANDARD NORTH AMERICAN FINANCIAL CORPORATE.
StandardSingaporeCorporate	Matrix Transaction Type of STANDARD SINGAPORE CORPORATE.

StandardSingaporeFinancialCorporate	Matrix Transaction Type of STANDARD SINGAPORE FINANCIAL CORPORATE.
StandardSubordinatedEuropeanInsuranceCorporate	Transaction Type of STANDARD SUBORDINATED EUROPEAN INSURANCE CORPORATE.
StandardSukukFinancialCorporate	Matrix Transaction Type of STANDARD SUKUK FINANCIAL CORPORATE.
SubordinatedEuropeanInsuranceCorporate	Matrix Transaction Type of SUBORDINATED EUROPEAN INSURANCE CORPORATE.
SukukCorporate	Matrix Transaction Type of SUKUK CORPORATE.
SukukFinancialCorporate	Matrix Transaction Type of SUKUK FINANCIAL CORPORATE.