

Derivatives Service Bureau (UPI)
CHANGE REQUEST FORM

Version	State	Author	Date	Description
1	Draft	M.A. Gariplan	11 May 2021	Initial Document
2	Draft	M.A. Gariplan	14 Jul 2021	Revised Template Layouts and GUI details (Underlier Input Method); Removed active hyperlinks in Data Dictionary; Amended References section with standard text; Removed Short Name comment in the Comment section
3	Draft	M.A. Gariplan	27 Aug 2021	Added Assumption on Underlier ID tooltip

Title	COMMODITIES SWAP Single Index Template Definition		
Background	<p>The following CRF presents a specification for the generation and retrieval of a Unique Product Identifier for the following product:</p> <ul style="list-style-type: none"> Commodities : Swap : Single_Index 	DSB-ID	UPI-0297
		Type	New Template
		Owner	M.A. Gariplan
		Version	3
		State	Draft
Terms of Reference			
Scope	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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. 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. 		

<ul style="list-style-type: none"> The specification is based on the DSB's current equivalent OTC ISIN product definition that follows enumerated values based on RTS 23 (EU 2017/585) Table 2 rather than the ISO 20022. The tooltip for the Underlier ID = Commodity Index is removed temporarily to keep in line with the ISIN behaviour until such time that a source provider is appointed for the Commodity Index identifiers.
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Request Template Layout

Section	Attribute	Format	Cat	Example Value	Validation / Derivation	Enum Source	Origin
Header Section	Asset Class	Set	M	Commodities		CFI:2015 Char#2 (ST****)	ISIN
	Instrument Type	Set	M	Swap		CFI:2015 Char#1 (ST****)	ISIN
	Product	Set	M	Single_Index			ISIN
	Level	Set	M	UPI			NEW
Attribute Section	Underlier Type (One Of)	Enum	C	Commodity Index	[Commodity Index]	Internal	NEW
	Underlier ID Source	String	M	INDX	[INDX]	Internal	NEW
	Underlier ID	Enum	M	OTHER	See CRF (Validation)	CommoditiesIndex.json	NEW
	Underlier Type (One Of)	Enum	C	Proprietary Index	[Proprietary Index]	Internal	NEW
	Underlier ID Source	String	M	PROP	[PROP]	Internal	NEW
	Underlier ID	Enum	M	58354-NMFRUIBN	See CRF (Validation)	DSB Proprietary Index Enumeration	NEW
	Base Product	Enum	M	OTHR	[AGRI; NRGY; ENVR; FRGT; etc]	RTS 23 (EU 2017/585) Table 2	ISIN
	Return or Payout Trigger	Enum	M	Contract for Difference (CFD)	[Contract for Difference (CFD); Total Return]	CFI:2015 Char#4 (ST****)	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	Commodities		CFI:2015 Char#2 (ST****)	ISIN
	Instrument Type	Set	M	Swap		CFI:2015 Char#1 (ST****)	ISIN
	Product	Set	M	Single_Index			ISIN
	Level	Set	M	UPI			NEW
	Template Version	Integer	D	1			ISIN
Attribute Section	Underlying Instrument Index	String	C	OTHER	See CRF (Validation)	CommoditiesIndex.json	ISIN
	Underlying Instrument Index Prop	String	C	58354-NMFRUIBN	See CRF (Validation)	DSB Proprietary Index Enumeration	ISIN
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	Delivery Type	Enum	M	CASH	[CASH; PHYS; OPTL]	ISO 20022	ISIN
Identifier Section	UPI	String	D	QZK4G0KJRVJH	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	2021-05-11T03:55:52	YYYY-MM-DDThh:mm:ss		ISIN
Derived Section	Classification Type	String	D	STICXC	See CRF (Derivations)	ISO 10962: 2015	ISIN
	Short Name	String	D	NA/Swap OTHR	See CRF (Derivations)	ISO 18774: 2015	NEW
	Underlying Asset Type	String	D	Index	Fixed	CFI:2015 Char#3 (ST****)	ISIN
	CFI Delivery Type	String	D	Cash	See CRF (Derivations)	CFI:2015 Char#6 (ST****)	NEW

Product Definition	
Attributes	<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>a) Underlier Type 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"> Proprietary Index Commodity Index <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>
Validation	<p>1. Underlier ID The following validation will be applied to Underlier ID based on the value selected on Underlier ID Source [INDX; PROP]:</p> <p>a. OTHER</p> <ul style="list-style-type: none"> Enumeration list is based on JSON codeset (CommoditiesIndex.json).

	<p>b. PROP</p> <ul style="list-style-type: none"> This attribute is to be validated against a list of Commodity Proprietary Indices that must have been pre-submitted to the DSB. The input text by user must exist in the DSB Proprietary Index Enumeration. The Proprietary Index is made on a per asset class and only relevant to the particular asset class based on DSB data. The only exception is asset class "Other" which is applicable to all asset class. If the input Prop Index does not exist in the DSB Proprietary Index Enumeration, value will be rejected with an error message "Error: Given Index/ices must be an existing and valid Commodity or Multi-Asset Index". 																					
Normalization	Not Required.																					
Attribute Data Dictionary	<p>This section provides the exact reference or source of the attribute.</p> <table border="1" data-bbox="288 600 1495 1218"> <thead> <tr> <th data-bbox="288 600 557 658">Full Name</th> <th data-bbox="557 600 1163 658">Source</th> <th data-bbox="1163 600 1495 658">Type</th> </tr> </thead> <tbody> <tr> <td data-bbox="288 658 557 741">Delivery Type</td> <td data-bbox="557 658 1163 741">ISO 20022 FinancialInstrumentReportingReferenceDataReportV01</td> <td data-bbox="1163 658 1495 741">Enums [CASH; PHYS; OPTL]</td> </tr> <tr> <td data-bbox="288 741 557 824">CFI Delivery Type</td> <td data-bbox="557 741 1163 824">ISO 10962 Classification of financial instruments (CFI code)</td> <td data-bbox="1163 741 1495 824">Enums [Cash; Physical; Elect at Settlement]</td> </tr> <tr> <td data-bbox="288 824 557 907">Underlying Instrument Index</td> <td data-bbox="557 824 1163 907">*At present, OTHER is the only permitted enumerated value for this attribute. See comments for further details.</td> <td data-bbox="1163 824 1495 907">Enums [OTHER]</td> </tr> <tr> <td data-bbox="288 907 557 990">Underlying Instrument Index Prop</td> <td data-bbox="557 907 1163 990">DSB Proprietary Index Enumerations</td> <td data-bbox="1163 907 1495 990">(Based on string)</td> </tr> <tr> <td data-bbox="288 990 557 1133">Base Product</td> <td data-bbox="557 990 1163 1133">RTS23 (EU 2017/585) Table 2 <i>Note: Please see Appendix 1 below for corresponding enum_titles of enum_values.</i></td> <td data-bbox="1163 990 1495 1133">Max35Text (based on string) minLength: 1 maxLength: 35</td> </tr> <tr> <td data-bbox="288 1133 557 1218">Return or Payout Trigger</td> <td data-bbox="557 1133 1163 1218">ISO 10962 Classification of financial instruments (CFI code)</td> <td data-bbox="1163 1133 1495 1218">Enums [Contract for Difference (CFD); Total Return]</td> </tr> </tbody> </table>	Full Name	Source	Type	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 Settlement]	Underlying Instrument Index	*At present, OTHER is the only permitted enumerated value for this attribute. See comments for further details.	Enums [OTHER]	Underlying Instrument Index Prop	DSB Proprietary Index Enumerations	(Based on string)	Base Product	RTS23 (EU 2017/585) Table 2 <i>Note: Please see Appendix 1 below for corresponding enum_titles of enum_values.</i>	Max35Text (based on string) minLength: 1 maxLength: 35	Return or Payout Trigger	ISO 10962 Classification of financial instruments (CFI code)	Enums [Contract for Difference (CFD); Total Return]
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	<ul style="list-style-type: none"> - INFL → INFL - OEST → OEST - METL → METL - PAPR → PAPR - POLY → POLY - OTHC → OTHC - OTHR → OTHR <p><i>Note: Please see Appendix 1 below for the complete list of values and their corresponding codes.</i></p> <p>E.g.: "NA/Swap OTHR"</p> <p><i>Note: The Short Name is based on the OTC ISIN that excludes the following fields:</i></p> <ul style="list-style-type: none"> - Notional Currency - Expiry Date 																										
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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	<ul style="list-style-type: none"> • Existing OTC ISIN product definition methodology of the Short Name abbreviation (Issuer of TV + "/" + Instrument Type) for Rates and Commodities has "NA/Swap" whereas Equity has "NA/Swaps". • For Commodities.Swap.Single_Index, there is no existing reference data that will support the validation of underlying instrument index. In addition, an existing ticket (DSB-8) has been raised to address the issue. 																										
ISO 4914 Equivalence	<table border="1"> <thead> <tr> <th colspan="2">ISO 4914</th> <th>Request Attribute</th> <th>Record Attribute</th> </tr> </thead> <tbody> <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 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>Return, pricing method or payout trigger</td> <td>M</td> <td>Return or Payout Trigger</td> <td>Return or Payout Trigger</td> </tr> <tr> <td rowspan="2">Underlier ID</td> <td rowspan="2">C</td> <td rowspan="2">Underlier ID</td> <td>Underlying Instrument Index</td> </tr> <tr> <td>Underlying Instrument Index Prop</td> </tr> </tbody> </table>	ISO 4914		Request Attribute	Record Attribute	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	Return or Payout Trigger	Return or Payout Trigger	Underlier ID	C	Underlier ID	Underlying Instrument Index	Underlying Instrument Index Prop
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	Underlier ID source	C	Underlier ID Source	Not Required
	Underlier type	M	Base Product	Base Product
	Underlier sub-type (first level) *	M	Not Required	Underlying Asset Type
	Underlier sub-type (second level) **	C	Not Required	

* Underlying Asset Type will be used as the Underlier sub-type (first level) for this product.

** The Underlier sub-type (second level) does not apply for this product as the underlying is an index, so these attributes are not required.

Appendix 1

Below is the limited set of enumerations based on [RTS 23 \(EU 2017/585\) Table 2](#) to support the following entries:

Base Product	
enum_titles	enum
Agricultural[AGRI]	AGRI
Energy[NRGY]	NRGY
Environmental[ENVR]	ENVR
Freight[FRGT]	FRGT
Fertilizer[FRTL]	FRTL
IndustrialProduct[INDP]	INDP
Inflation[INFL]	INFL
OfficialEconomicStatistics[OEST]	OEST
Metal[METL]	METL
Paper[PAPR]	PAPR
Polypropylene[POLY]	POLY
OtherC10[OTHC]	OTHC
Other[OTHR]	OTHR