

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

Version	State	Author	Date	Description
1	Draft	M. Surop	12 Oct 2022	Initial Document
2	Draft	M. Surop	09 Mar 2023	<ul style="list-style-type: none"> <li>Update Request and Record templates layout for Delivery Type</li> <li>Remove ISO Delivery Type in Derivation Section</li> <li>Add GUI Details for Delivery Type</li> </ul>

Title	COMMODITIES SWAP Non-Standard Template Definition		
<b>Background</b>	<p>The following CRF presents a specification for the generation and retrieval of a ISIN for the following product:</p> <ul style="list-style-type: none"> <li><b>Commodities : Swap : Non_Standard</b></li> </ul>	<b>DSB-ID</b>	<b>DSB-1610</b>
		<b>Type</b>	New Template
		<b>Owner</b>	M. Surop
		<b>Version</b>	2
		<b>State</b>	Final
<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 an ISIN 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 is to be based on the attributes, values and behaviour of the current OTC ISIN and equivalent UPI.</li> <li>The product definition will return an equivalent UPI based on the new requirements of the OTC ISIN.</li> </ul>		
<b>Dependencies</b>	<ul style="list-style-type: none"> <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 TAC Approval for the DSB approach to ISO 10962 (CFI:2019) migration.</li> <li>This specification is dependent on ISO 4914 (UPI) requirements, to be able to create an equivalent UPI parent for created OTC ISIN.</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 DSB's current OTC product definition.</li> <li>The specification assumes that no defaulted or blank values in the input request to align the requirements with the ISO 4914 (UPI) requirement.</li> <li>The specification will support the requirement of ISO 4914 (UPI) – including the attributes that are not currently supported in the current OTC ISIN.</li> <li>This specification is based on the attributes and values defined in ISO 10962 (CFI:2015).</li> </ul>		

**Request Template Layout**

Section	Attribute	Format	Cat	Array	Example Value	Validation / Derivation	Enum Source	in UPI
Header Section	Asset Class	Set	M	N	Commodities		CFI:2015 Char#2 (ST****)	Y
	Instrument Type	Set	M	N	Swap		CFI:2015 Char#1 (ST****)	Y
	Product	Set	M	N	Non_Standard			Y
	Level	Set	M	N	InstRefDataReporting			Y
Attribute Section	Expiry Date	String	M	N	2021-08-27		RTS23/ Field 24	N
	Price Multiplier	number	M	N	1		RTS23/ Field 25	N
	Notional Currency	Enum	M	N	AUD	ISOCurrencyCode.json	ISO 4217 (3-Char CCY)	Y
	Delivery Type	Enum	M	N	CASH	[CASH; PHYS; OPTL]	ISO 20022/ CFI:2015 Char#6 (ST****)	Y
	Return or Payout Trigger	Enum	M	N	Contract for Difference (CFD)	[Contract for Difference (CFD), Total Return]	CFI:2015 Char#4 (ST****)	Y
	Underlying (anyOf)	Object	(M)	N	Underlying Instrument Index			Y
	Underlying Instrument Index	Enum	(M)	N	OTHER	See CRF (Validations)	CommoditiesIndex.json	Y
	Underlying (anyOf)	Object	(M)	N	Underlying Instrument Index Prop			Y
	Underlying Instrument Index Prop	String	(M)	Y	11339-MLCIINKC	See CRF (Validations)	DSB Proprietary Index Enumeration	Y
	Underlying (anyOf)	Object	(M)	N	Reference Rate			Y
	Reference Rate							
	Reference Rate	Enum	(M)	Y	LEAD-LME CASH	See CRF (Validations)	FpmlCommoditiesReferenceRate.json / ISDA Taxonomy 2.0	Y
	Other Reference Rate	Enum	(C)	Y	ALUMINUM-COMEX	See CRF (Validations)	FpmlCommoditiesReferenceRate.json / ISDA Taxonomy 2.0	Y
	Base Product	Enum	(M)	N				Y
	Base Product	Enum	(M)	N	AGRI	[AGRI, NRGY, ENVR, etc.]	ISO 20022	Y
	Sub Product	Enum	(M)	N	GROS	[GROS, COAL, EMIS, etc.]	ISO 20022	Y
	Additional Sub Product	Enum	(M)	N	FWHT	[FWHT, BSLD, CERE, etc.]	ISO 20022	Y
	Other Notional Currency	Enum	C	N	EUR	ISOCurrencyCode.json	ISO 4217 (3-Char CCY)	Y
	Other Base Product	Enum	(C)	N				Y
	Other Base Product	Enum	(C)	N	ENVR	[AGRI, NRGY, ENVR, etc.]	ISO 20022	Y
	Other Sub Product	Enum	(C)	N	EMIS	[GROS, COAL, EMIS, etc.]	ISO 20022	Y
	Other Additional Sub Product	Enum	(C)	N	CERE	[FWHT, BSLD, CERE, etc.]	ISO 20022	Y
	Transaction Type	Enum	M	N	FUTR	[FUTR, OPTN, TAPO, etc.]	RTS23/ Field 38	N
Final Price Type	Enum	M	N	ARGM	[ARGM, BLTC, EXOF, etc.]	RTS23/ Field 39	N	

**Record Template Layout**

Section	Attribute	Format	Cat	Array	Example Value	Validation / Derivation	Enum Source	in UPI
Header Section	Asset Class	Set	M	N	Commodities		CFI:2015 Char#2 (ST****)	Y
	Instrument Type	Set	M	N	Swap		CFI:2015 Char#1 (ST****)	Y
	Product	Set	M	N	Non_Standard			Y
	Level	Set	M	N	InstRefDataReporting			Y
Attribute Section	Expiry Date	String	M	N	2021-08-27		RTS23/ Field 24	N
	Price Multiplier	number	M	N	1		RTS23/ Field 25	N
	Delivery Type	Enum	M	N	CASH	[CASH; PHYS; OPTL]	ISO 20022/ CFI:2015 Char#6 (ST****)	Y
	Notional Currency	Enum	M	N	AUD	ISOCurrencyCode.json	ISO 4217 (3-Char CCY)	Y
	Return or Payout Trigger	Enum	M	N	Contract for Difference (CFD)	[Contract for Difference (CFD), Total Return]	CFI:2015 Char#4 (ST****)	Y
	Underlying (anyOf)	Object	(M)	N	Underlying Instrument Index			Y
	Underlying Instrument Index	Enum	(M)	N	OTHER	See CRF (Validations)	CommoditiesIndex.json	Y
	Underlying (anyOf)	Object	(M)	N	Underlying Instrument Index Prop			Y
	Underlying Instrument Index Prop	String	(M)	Y	11339-MLCIINKC	See CRF (Validations)	DSB Proprietary Index Enumeration	Y
	Underlying (anyOf)	Object	(M)	N	Reference Rate			Y
	Reference Rate							
	Reference Rate	Enum	(M)	Y	LEAD-LME CASH	See CRF (Validations)	FpmlCommoditiesReferenceRate.json / ISDA Taxonomy 2.0	Y
	Other Reference Rate	Enum	(C)	Y	ALUMINUM-COMEX	See CRF (Validations)	FpmlCommoditiesReferenceRate.json / ISDA Taxonomy 2.0	Y
	Base Product	Enum	M	N	AGRI	[AGRI, NRGY, ENVR, etc.]	ISO 20022	Y
	Sub Product	Enum	M	N	GROS	[GROS, COAL, EMIS, etc.]	ISO 20022	Y
	Additional Sub Product	Enum	M	N	FWHT	[FWHT, BSLD, CERE, etc.]	ISO 20022	Y
	Other Notional Currency	Enum	C	N	EUR	ISOCurrencyCode.json	ISO 4217 (3-Char CCY)	Y
	Other Base Product	Enum	C	N	ENVR	[AGRI, NRGY, ENVR, etc.]	ISO 20022	Y
	Other Sub Product	Enum	C	N	EMIS	[GROS, COAL, EMIS, etc.]	ISO 20022	Y
	Other Additional Sub Product	Enum	C	N	CERE	[FWHT, BSLD, CERE, etc.]	ISO 20022	Y
	Transaction Type	Enum	M	N	FUTR	[FUTR, OPTN, TAPO, etc.]	RTS23/ Field 38	N
	Final Price Type	Enum	M	N	ARGM	[ARGM, BLTC, EXOF, etc.]	RTS23/ Field 39	N
	Identifier Section	Identification	String	D	N	EZH4NLN52983		
Status		String	D	N	New			Y
Status Reason		String	D	N	<null>	Not applicable to a New record		Y
Derived Section	Last Update Date Time	String	D	N	2021-02-23T00:00:13	YYYY-MM-DDThh:mm:ss		Y
	Full Name	String	D	N	Commodities Swap Non_Standard AGRI GROS FWHT AUD ENVR EMIS CERE EUR 20210827	See CRF (Derivations)	RTS23 / Field 2	N
	Classification Type	String	D	N	STNCXC	See CRF (Derivations)	ISO 10962:2015	Y
	Commodity Derivative Indicator	String	D	N	TRUE		RTS23 / Field 4	N
	Issuer or Operator of the Trading Venue Identifier	String	D	N	NA		RTS23 / Field 5	N
	Short Name	String	D	N	NA/Swap AGRI ENVR AUD EUR 20210827	See CRF (Derivations)	ISO 18774: 2015	Y
	Underlying Asset Type	String	D	N	Environmental	See CRF (Derivations)	CFI:2015 Char#3 (ST****)	Y
ISO Underlying Instrument Index	String	D	N	Multiple Indices	See CRF (Derivations)		N	

Product Definition	
Attributes	See Template Layout (above).
Validation	<ul style="list-style-type: none"> <li><b>Underlying Instrument</b> User must select at least one of the following Underlying Instruments and below validation will apply depending on the Underlying Instrument selected.</li> </ul>

	<p><b>a. Underlying Instrument Index / Index Prop</b></p> <p>i. Underlying Instrument Index</p> <ul style="list-style-type: none"> <li>Enumeration list is based on JSON codeset (CommoditiesIndex.json).</li> <li>User can only select the value of "OTHER".</li> </ul> <p>ii. Underlying Instrument Index Prop</p> <ul style="list-style-type: none"> <li>The input text by user must exist in the DSB Proprietary Index Enumeration.</li> <li>User can input a single or multiple Underlying Instrument Index Prop.</li> <li>The Proprietary index is made on a per asset class and only relevant to the particular asset class selected in the request message. The only exception is asset class "Other" which is applicable to all asset classes.</li> <li>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 Commodities or Multi-Asset Index".</li> </ul> <p><b>b. Reference Rate / Other Reference Rate</b></p> <ul style="list-style-type: none"> <li>Enumeration list is based on JSON codeset (FpmlCommoditiesReferenceRate.json).</li> <li>User can input a single or multiple Reference Rate(s) or Other Reference Rate(s).</li> </ul> <p><b>c. Notional Currency and Other Notional Currency</b></p> <ul style="list-style-type: none"> <li>User can select Notional Currency only or both Notional / Other Notional Currency.</li> <li>Notional Currency is a required field, whilst the Other Notional Currency is an optional field.</li> <li>Currency for both legs cannot be identical.</li> <li>If the following attributes have the same currency, an error message will apply "Error: Notional Currency and Other Notional Currency cannot be identical".</li> </ul> <p><b>d. Base Product; Sub Product; Additional Sub Product / Other Base Product; Other Sub Product; Other Additional Sub Product</b></p> <ul style="list-style-type: none"> <li>The user inputs the Base Product, Sub Product and Additional Sub Product in such order.</li> <li>Sub Product and Additional Sub Product enumerated list is dependent on the input Base Product (<i>refer to Appendix 1 &amp; 2 below</i>).</li> <li>If Sub Product or Additional Sub Product does not have a corresponding value, attribute(s) must not be present in the REQUEST templates.</li> <li>If Other Reference Rate is selected, Other Base Product, Other Sub Product and Other Additional Sub Product must be present in the REQUEST and RECORD templates. Otherwise, an error message will apply: "Other Base Product is required".</li> <li>If Other Base Product, Other Sub Product and Other Additional Sub Product are selected but Other Reference Rate is not selected, and error message will apply: "Other Reference Rate is required".</li> </ul>
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<b>Additional Attribute Dictionary</b>	This section provides the exact reference or source of the attribute that are not currently supported in the OTC ISIN.		
	Full Name	Source	Type
	Delivery Type	ISO 20022 FinancialInstrumentReportingReferenceDataReportV02	Enums [CASH; PHYS; OPTL]
	Notional Currency	ISO 4217 Currency Codes	Pattern: [A-Z]{3,3}
	Reference Rate	ISDA Taxonomy 2.0	Max350Text (based on string) minLength: 1 maxLength: 350
	Return or Payout Trigger	ISO 10962 Classification of financial instruments (CFI code)	Enums [Contract for Difference (CFD); Total Return]
	Base Product	ISO 20022 StandardRepository/type/ AssetClassProductType1Code	Max35Text (based on string) minLength: 1 maxLength: 35
	Sub Product	ISO 20022 StandardRepository/type/ AssetClassSubProductType1Code	

Additional Sub Product	ISO 20022 StandardRepository/type/ AssetClassDetailedSubProductType1Code	
Underlying Instrument Index	<i>At present, OTHER is the only permitted enumerated value for this attribute. See comments for further details.</i>	Enum [OTHER]
Underlying Instrument Index Prop	DSB Proprietary Index Enumerations	(Based on string)

**Normalization**

**a. Notional Currency and Other Notional Currency**

- Order the attributes alphabetically. The Notional Currency should be first alphabetically and Other Notional Currency the second alphabetically. The associated attributes of the Notional Currency will move as part of normalization.

REQUEST		→	RECORD	
Notional Currency	EUR		Notional Currency	AUD
Reference Rate	NATURAL GAS-CHICAGO CITY-GATES-INSIDE FERC		Reference Rate	WHEAT FEED-NYSE Liffe
Base Product	NRGY		Base Product	AGRI
Sub Product	NGAS		Sub Product	GROS
Additional Sub Product	GASP		Additional Sub Product	FWHT
Other Notional Currency	AUD		Other Notional Currency	EUR
Other Reference Rate	WHEAT FEED-NYSE Liffe		Other Reference Rate	NATURAL GAS-CHICAGO CITY-GATES-INSIDE FERC
Other Base Product	AGRI		Other Base Product	NRGY
Other Sub Product	GROS		Other Sub Product	NGAS
Other Additional Sub Product	FWHT		Other Additional Sub Product	GASP

**b. Base Product / Sub Product / Additional Sub Product / Reference Rate / Other Base Product / Other Sub Product / Other Additional Sub Product / Other Reference Rate**

- Regardless of the order in which the reference legs are supplied, the DSB assumes the same ISIN would be allocated to the instrument, i.e., the following user entries will be considered the same instrument. The following normalization will apply if only "Notional Currency" is selected:

REQUEST		→	RECORD	
Base Product	NRGY		Base Product	AGRI
Sub Product	NGAS		Sub Product	GROS
Additional Sub Product	GASP		Additional Sub Product	FWHT
Other Base Product	AGRI		Other Base Product	NRGY
Other Sub Product	GROS		Other Sub Product	NGAS
Other Additional Sub Product	FWHT		Other Additional Sub Product	GASP
Reference Rate	NATURAL GAS-CHICAGO CITY-GATES-INSIDE FERC		Reference Rate	WHEAT FEED-NYSE Liffe
Other Reference Rate	WHEAT FEED-NYSE Liffe		Other Reference Rate	NATURAL GAS-CHICAGO CITY-GATES-INSIDE FERC

- Order alphabetically the combination string of "Base Product + Sub Product + Additional Sub Product + Reference Rate" and "Other Base Product + Other Sub Product + Other Additional Sub Product + Other Reference Rate".
- If "Base Product" and "Other Base Product" are different – alphabetically order them. The Base Product should be the first alphabetically and Other Base Product the second alphabetically. The associated attributes (Sub Product + Additional Sub Product + Reference Rate) are then moved as part of the normalization.
- If Base Product and Other Base Product are the same, and if "Sub Product" and "Other Sub Product" are different – alphabetically order them. The Sub Product should be the first alphabetically and Other Sub Product the second alphabetically. The associated attributes (Additional Sub Product + Reference Rate) are then moved as part of the normalization.

- If Base Product and Sub Product are the same as Other Base Product and Other Sub Product, and if “Additional Sub Product” and “Other Additional Sub product” are different – alphabetically order them. The Additional Sub Product should be the first alphabetically and Other Additional Sub Product the second alphabetically. The associated Reference Rate is then moved as part of the normalization.
- If “Base Product/ Sub Product/ Additional Sub Product” and “Other Base Product/ Other Sub Product/ Other Additional Sub Product” are the same, alphabetically order Reference Rate and Other Reference Rate.

**Derivation**

This section provides additional details to the derivation logic specified in the Template Layout sections (above).

**Underlying Asset Type**

- If the Underlying Instrument selected is a single Commodity Ref Rate, the Underlying Asset Type will be derived based on the input Base Product.

Input Base Product	Derived Underlying Asset Type
AGRI	Agriculture
NRGY	Energy
ENVR	Environmental
FRGT	Freight
FRTL	Fertilizer
INDP	Other
INFL	Other
OEST	Other
MCEX	Multi Commodity
METL	Metals
PAPR	Paper
POLY	Polypropylene Products
OTHC	Other
OTHR	Other

- If the Underlying Instrument selected are combinations of multiple underliers, the Underlying Asset Type will be derived based on the input Base Product.

Input Base Product	Derived Underlying Asset Type
AGRI	Agriculture
NRGY	Energy
ENVR	Environmental
FRGT	Freight
FRTL	Fertilizer
INDP	Other
INFL	Other
OEST	Other
MCEX	Multi Commodity
METL	Metals
PAPR	Paper
POLY	Polypropylene Products
OTHC	Other
OTHR	Other

- If the Underlying Instrument selected is a single Commodity Index or a single Proprietary Index, the Underlying Asset Type will be derived based on the input Base Product as follows:
  - If the input Base Product is MCEX, then set the Underlying Asset Type to “Multi Commodity”.
  - If the input Base Product is other than MCEX, then set the Underlying Asset Type to “Index”.

Input Base Product	Derived Underlying Asset Type
AGRI	Index
NRGY	Index

	<table border="1" data-bbox="588 181 1158 589"> <tr><td>ENVR</td><td>Index</td></tr> <tr><td>FRGT</td><td>Index</td></tr> <tr><td>FRTL</td><td>Index</td></tr> <tr><td>INDP</td><td>Index</td></tr> <tr><td>INFL</td><td>Index</td></tr> <tr><td>OEST</td><td>Index</td></tr> <tr><td>MCEX</td><td>Multi Commodity</td></tr> <tr><td>METL</td><td>Index</td></tr> <tr><td>PAPR</td><td>Index</td></tr> <tr><td>POLY</td><td>Index</td></tr> <tr><td>OTHC</td><td>Index</td></tr> <tr><td>OTHR</td><td>Index</td></tr> </table> <ul style="list-style-type: none"> <li>• For Commodities basis-style product, regardless of the input Base Product, the Underlying Asset Type will be derived to "Multi Commodity" with expected Underlying Instrument combinations as follows:             <ol style="list-style-type: none"> <li>a. Reference Rate and Other Reference Rate</li> <li>b. Reference Rate and Multiple Other Reference Rate</li> <li>c. Multiple Reference Rate and Multiple Other Reference Rate</li> </ol> </li> </ul>	ENVR	Index	FRGT	Index	FRTL	Index	INDP	Index	INFL	Index	OEST	Index	MCEX	Multi Commodity	METL	Index	PAPR	Index	POLY	Index	OTHC	Index	OTHR	Index
ENVR	Index																								
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PAPR	Index																								
POLY	Index																								
OTHC	Index																								
OTHR	Index																								
<p><b>Classification Type</b></p>	<p>Concatenation of the following attributes/values:</p> <ul style="list-style-type: none"> <li>• Instrument Type: "S"</li> <li>• Asset Class: "T"</li> <li>• Underlying Asset Type: from Record Derived UnderlyingAssetType...             <ul style="list-style-type: none"> <li>- Agriculture → A</li> <li>- Energy → J</li> <li>- Environmental → N</li> <li>- Freight → G</li> <li>- Fertilizer → S</li> <li>- Index → I</li> <li>- Metals → K</li> <li>- Multi Commodity → Q</li> <li>- Paper → T</li> <li>- Polypropylene Products → P</li> <li>- Other → M</li> </ul> </li> <li>• Return or Payout Trigger: from Record ReturnorPayoutTrigger...             <ul style="list-style-type: none"> <li>- Contract for Difference (CFD) → C</li> <li>- Total Return → T</li> </ul> </li> <li>• Not applicable/undefined: "X" (fixed value)</li> <li>• Delivery Type: from Record DeliveryType...             <ul style="list-style-type: none"> <li>- CASH → C</li> <li>- PHYS → P</li> <li>- OPTL → E</li> </ul> </li> </ul> <p>E.g.: "STNCXC"</p>																								
<p><b>Short Name</b></p>	<p>Concatenation of the following attributes/values:</p> <ul style="list-style-type: none"> <li>• Issuer Name: "NA/"</li> <li>• Instrument Type: "Swap" (fixed value)</li> <li>• Base Product: from Record BaseProduct...             <ul style="list-style-type: none"> <li>- AGRI → AGRI</li> <li>- NRGY → NRGY</li> <li>- ENVR → ENVR</li> <li>- FRGT → FRGT</li> <li>- FRTL → FRTL</li> <li>- INDP → INDP</li> <li>- INFL → INFL</li> <li>- OEST → OEST</li> <li>- MCEX → MCEX</li> <li>- METL → METL</li> <li>- PAPR → PAPR</li> </ul> </li> </ul>																								

	<ul style="list-style-type: none"> <li>- POLY → POLY</li> <li>- OTHC → OTHC</li> <li>- OTHR → OTHR</li> <li>• Other Base Product: from Record OtherBaseProduct...</li> <li>- AGRI → AGRI</li> <li>- NRGY → NRGY</li> <li>- ENVR → ENVR</li> <li>- FRGT → FRGT</li> <li>- FRTL → FRTL</li> <li>- INDP → INDP</li> <li>- INFL → INFL</li> <li>- OEST → OEST</li> <li>- MCEX → MCEX</li> <li>- METL → METL</li> <li>- PAPR → PAPR</li> <li>- POLY → POLY</li> <li>- OTHC → OTHC</li> <li>- OTHR → OTHR</li> <li>• Notional Currency: e.g.: AUD - from ISO 4217 input value</li> <li>• Other Notional Currency: e.g.: EUR - from ISO 4217 input value</li> <li>• Expiry Date: from Record ExpiryDate</li> </ul> <p>E.g.: "NA/Swap AGRI ENVR AUD EUR 20210827"</p>														
<p><b>Full Name</b></p>	<p>Concatenation of the following attributes/values:</p> <ul style="list-style-type: none"> <li>• Asset Class: "Commodities"</li> <li>• Instrument Type: "Swap"</li> <li>• Product: "Non_Standard"</li> <li>• Base Product: from Record BaseProduct</li> <li>• Sub Product: from Record SubProduct</li> <li>• Additional Sub Product: from Record AdditionalSubProduct</li> <li>• Notional Currency: from Record NotionalCurrency</li> <li>• Other Base Product: from Record OtherBaseProduct</li> <li>• Other Sub Product: from Record OtherSubProduct</li> <li>• Other Additional Sub Product: from Record OtherAdditionalSubProduct</li> <li>• Other Notional Currency: from Record OtherNotionalCurrency</li> <li>• Expiry Date: from Record ExpiryDate</li> </ul> <p>E.g.: "Commodities Swap Non_Standard AGRI GROS FWHT AUD ENVR EMIS CERE EUR 20210827"</p>														
<p><b>ISO Underlying Instrument Index</b></p>	<p>Derived from the input Underlying Instrument Index &amp; Underlying Instrument Index Prop...</p> <ul style="list-style-type: none"> <li>- Single input → Derived ISOUnderlyingInstrumentIndex of the input</li> <li>- Multiple input → "Multiple Indices"</li> </ul> <p><i>Notes:</i> If Underlying Instrument Index and Index Prop are not selected, the ISO Underlying Instrument Index attribute must not be present in the RECORD template.</p>														
<p><b>GUI Details</b></p>	<p>The following section provides display information for any attributes (and values).</p> <table border="1" data-bbox="284 1599 1505 1850"> <thead> <tr> <th data-bbox="284 1599 493 1648">Enum Value</th> <th data-bbox="493 1599 703 1648">Display Name</th> <th data-bbox="703 1599 1505 1648">Tool Tip (and • value elaboration)</th> </tr> </thead> <tbody> <tr> <td data-bbox="284 1648 493 1727">CASH</td> <td data-bbox="493 1648 703 1727">Cash</td> <td data-bbox="703 1648 1505 1727">the discharge of an obligation by payment or receipt of a net cash amount instead of payment or delivery by both parties</td> </tr> <tr> <td data-bbox="284 1727 493 1805">PHYS</td> <td data-bbox="493 1727 703 1805">Physical</td> <td data-bbox="703 1727 1505 1805">the meeting of a settlement obligation under a derivative contract through the receipt or delivery of the actual underlying instrument(s) instead of through cash settlement</td> </tr> <tr> <td data-bbox="284 1805 493 1850">OPTL</td> <td data-bbox="493 1805 703 1850">Elect at Settlement</td> <td data-bbox="703 1805 1505 1850">Determined at the time of settlement</td> </tr> </tbody> </table>			Enum Value	Display Name	Tool Tip (and • value elaboration)	CASH	Cash	the discharge of an obligation by payment or receipt of a net cash amount instead of payment or delivery by both parties	PHYS	Physical	the meeting of a settlement obligation under a derivative contract through the receipt or delivery of the actual underlying instrument(s) instead of through cash settlement	OPTL	Elect at Settlement	Determined at the time of settlement
Enum Value	Display Name	Tool Tip (and • value elaboration)													
CASH	Cash	the discharge of an obligation by payment or receipt of a net cash amount instead of payment or delivery by both parties													
PHYS	Physical	the meeting of a settlement obligation under a derivative contract through the receipt or delivery of the actual underlying instrument(s) instead of through cash settlement													
OPTL	Elect at Settlement	Determined at the time of settlement													
<p><b>Additional Information</b></p>															
<p><b>Reference</b></p>	<ul style="list-style-type: none"> <li>• <a href="#">ISO 10962 Classification of financial instruments (CFI code)</a></li> <li>• <a href="#">ISO 20022 FinancialInstrumentReportingReferenceDataReportV02</a></li> <li>• <a href="#">DSB OTC ISIN Product Definitions</a></li> </ul>														

<b>Comments</b>	<ul style="list-style-type: none"><li>• At present, the values of the Underlying Asset Type are provided by the ISO 20022 Base Product which is being used as the reference for the derivation of the CFI Code.</li></ul>
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### Appendix 1

Below is the limited set of enumerations based on ISO 20022 to support the following entries:

Base Product	Code	Sub Product	Code	Additional Sub Product	Code
Agricultural	AGRI	GrainOilSeed	GROS	FeedWheat	FWHT
				Soybeans	SOYB
				Rapeseed	RPSD
				Other	OTHR
				Maize	CORN
				Rice	RICE
		Dairy	DIRY		
		Forestry	FRST		
		Livestock	LSTK		
		Seafood	SEAF		
		Soft	SOFT	RobustaCoffee	ROBU
				Cocoa	CCOA
				RawSugar	BRWN
				WhiteSugar	WHSG
				Other	OTHR
		OliveOil	OOLI	Lampante	LAMP
		Potato	POTA		
		Grain	GRIN	MillingWheat	MWHT
		Energy	NRGY	Coal	COAL
Distillates	DIST				
InterEnergy	INRG				
LightEnd	LGHT				
RenewableEnergy	RNNG				
Electricity	ELEC			Baseload	BSLD
				FinancialTransmissionRights	FITR
				PeakLoad	PKLD
				OffPeak	OFFP
				Other	OTHR
NaturalGas	NGAS			GasPool	GASP
		LNG	LNGG		

Base Product	Code	Sub Product	Code	Additional Sub Product	Code		
				NCG	NCGG		
				TTF	TTFG		
				NBP	NBPG		
		Oil			OILP	Bakken	BAKK
						Biodiesel	BDSL
						Brent	BRNT
						BrentNX	BRNX
						Canadian	CNDA
						Condensate	COND
						Diesel	DSEL
						Dubai	DUBA
						ESPO	ESPO
						Ethanol	ETHA
						Fuel	FUEL
						FuelOil	FOIL
						Gasoil	GOIL
						Gasoline	GSLN
						HeatingOil	HEAT
						JetFuel	JTFL
						Kerosene	KERO
						LightLouisianaSweet	LLSO
						Mars	MARS
						Naphta	NAPH
NGL	NGLO						
Tapis	TAPI						
WTI	WTIO						
Urals	URAL						
Environmental	ENVR	Emissions	EMIS	CER	CERE		
				ERU	ERUE		
				EUA	EUAE		
				EUAA	EUAA		
				Other	OTHR		

Base Product	Code	Sub Product	Code	Additional Sub Product	Code
		CarbonRelated	CRBR		
		Weather	WTHR		
Freight	FRGT	Dry	DRYF	DryBulkCarrier	DBCR
		Wet	WETF	Tanker	TNKR
		ContainerShip	CSHP		
Fertilizer	FRTL	Ammonia	AMMO		
		DiammoniumPhosphate	DAPH		
		Potash	PTSH		
		Sulphur	SLPH		
		Urea	UREA		
		UreaAndAmmoniumNitrate	UAAN		
IndustrialProduct	INDP	Construction	CSTR		
		Manufacturing	MFTG		
Inflation	INFL				
OfficialEconomicStatistics	OEST				
Metal	METL	NonPrecious	NPRM	Aluminum	ALUM
				AluminumAlloy	ALUA
				Cobalt	CBLT
				Copper	COPR
				IronOre	IRON
				Molybdenum	MOLY
				NASAAC	NASC
				Nickel	NICK
				Steel	STEL
				Tin	TINN
				Zinc	ZINC
				Other	OTHR
				Lead	LEAD
		Precious	PRME	Gold	GOLD
				Other	OTHR
				Palladium	PLDM
Platinum	PTNM				

Base Product	Code	Sub Product	Code	Additional Sub Product	Code
				Silver	SLVR
MultiCommodityExotic	MCEX				
Paper	PAPR	Containerboard	CBRD		
		Newsprint	NSPT		
		Pulp	PULP		
		RecoveredPaper	RCVP		
Polypropylene	POLY	Plastic	PLST		
OtherC10	OTHC	Deliverable	DLVR		
		NonDeliverable	NDLV		
Other	OTHR				

## Appendix 2

Listed below are the corresponding enum\_titles for each product code based on ISO 20022:

Base Product		Sub Product		Additional Sub Product	
Enum_Title	Enum	Enum_Title	Enum	Enum_Title	Enum
Agricultural[AGRI]	AGRI	Ammonia[AMMO]	AMMO	Aluminium[ALUM]	ALUM
Energy[NRGY]	NRGY	CarbonRelated[CRBR]	CRBR	AluminiumAlloy[ALUA]	ALUA
Environmental[ENVR]	ENVR	Coal[COAL]	COAL	Bakken[BAKK]	BAKK
Freight[FRGT]	FRGT	Construction[CSTR]	CSTR	BaseLoad[BSLD]	BSLD
Fertilizer[FRTL]	FRTL	Containerboard[CBRD]	CBRD	Biodiesel[BDSL]	BDSL
IndustrialProduct[INDP]	INDP	ContainerShip[CSHP]	CSHP	Brent[BRNT]	BRNT
Inflation[INFL]	INFL	Dairy[DIRY]	DIRY	BrentNX[BRNX]	BRNX
OfficialEconomicStatistics[OEST]	OEST	Deliverable[DLVR]	DLVR	Canadian[CNDA]	CNDA
Metal[METL]	METL	DiammoniumPhosphate[DAPH]	DAPH	CER[CERE]	CERE
MultiCommodityExotic[MCEX]	MCEX	Distillates[DIST]	DIST	Cobalt[CBLT]	CBLT
Paper[PAPR]	PAPR	Dry[DRYF]	DRYF	Cocoa[CCOA]	CCOA
Polypropylene[POLY]	POLY	Electricity[ELEC]	ELEC	Condensate[COND]	COND
OtherC10[OTHC]	OTHC	Emissions[EMIS]	EMIS	Copper[COPR]	COPR
Other[OTHR]	OTHR	Forestry[FRST]	FRST	Diesel[DSEL]	DSEL
		Grain[GRIN]	GRIN	DryBulkCarrier[DBCR]	DBCR
		GrainOilSeed[GROS]	GROS	Dubai[DUBA]	DUBA
		InterEnergy[INRG]	INRG	ERU[ERUE]	ERUE
		LightEnd[LGHT]	LGHT	ESPO[ESPO]	ESPO
		Livestock[LSTK]	LSTK	Ethanol[ETHA]	ETHA
		Manufacturing[MFTG]	MFTG	EUA[EUAE]	EUAE
		NaturalGas[NGAS]	NGAS	EUAA[EUAA]	EUAA
		Newsprint[NSPT]	NSPT	FeedWheat[FWHT]	FWHT
		NonDeliverable[NDLV]	NDLV	FinancialTransmissionRights[FITR]	FITR
		NonPrecious[NPRM]	NPRM	Fuel[FUEL]	FUEL
		Oil[OILP]	OILP	FuelOil[FOIL]	FOIL
		OliveOil[OOLI]	OOLI	Gasoil[GOIL]	GOIL
		Plastic[PLST]	PLST	Gasoline[GSLN]	GSLN
		Potash[PTSH]	PTSH	GasPool[GASP]	GASP
		Potato[POTA]	POTA	Gold[GOLD]	GOLD

Base Product		Sub Product		Additional Sub Product	
Enum_Title	Enum	Enum_Title	Enum	Enum_Title	Enum
		Precious[PRME]	PRME	HeatingOil[HEAT]	HEAT
		Pulp[PULP]	PULP	IronOre[IRON]	IRON
		RecoveredPaper[RCVP]	RCVP	JetFuel[JTFL]	JTFL
		RenewableEnergy[RNNG]	RNNG	Kerosene[KERO]	KERO
		Seafood[SEAF]	SEAF	Lampante[LAMP]	LAMP
		Soft[SOFT]	SOFT	Lead[LEAD]	LEAD
		Sulphur[SLPH]	SLPH	LightLouisianaSweet[LLSO]	LLSO
		Urea[UREA]	UREA	LNG[LNGG]	LNGG
		UreaAndAmmoniumNitrate[UAAN]	UAAN	Maize[CORN]	CORN
		Weather[WTHR]	WTHR	Mars[MARS]	MARS
		Wet[WETF]	WEFT	MillingWheat[MWHT]	MWHT
				Molybdenum[MOLY]	MOLY
				Naphta[NAPH]	NAPH
				NASAAC[NASC]	NASC
				NBP[NBPG]	NBPG
				NCG[NCGG]	NCGG
				NGL[NGLO]	NGLO
				Nickel[NICK]	NICK
				OffPeak[OFFP]	OFFP
				Other[OTHR]	OTHR
				Palladium[PLDM]	PLDM
				PeakLoad[PKLD]	PKLD
				Platinum[PTNM]	PTNM
				Rapeseed[RPSD]	RPSD
				RawSugar[BRWN]	BRWN
				Rice[RICE]	RICE
				RobustaCoffee[ROBU]	ROBU
				Silver[SLVR]	SLVR
				Soybeans[SOYB]	SOYB
				Steel[STEL]	STEL
				Tanker[TNKR]	TNKR
				Tapis[TAPI]	TAPI

Base Product		Sub Product		Additional Sub Product	
Enum_Title	Enum	Enum_Title	Enum	Enum_Title	Enum
				Tin[TINN]	TINN
				TTF[TTFG]	TTFG
				Urals[URAL]	URAL
				WhiteSugar[WHSG]	WHSG
				WTI[WTIO]	WTIO
				Zinc[ZINC]	ZINC

### Appendix 3

The table below illustrates the expected input combinations of Underlying Instrument, i.e., [Commodity Ref Rate, Commodity Index, Proprietary Index] where the Underlying Asset Type [CFI:2015 Char#3] is derived based on the input Base Product with exceptions if Underlying Instrument selected is a single Commodity Index or Proprietary Index (refer to Derivation section above).

OTC ISIN # of Input Underlier			CFI: 2015 Char#3 – Underlying Asset Type (ST****)		
Commodity Reference Rate	Commodity Index	Proprietary Index	AGRI* [Known]	INDP** [Unknown]	MCEX***
1	0	0	A	M	Q
1	1	0	A	M	Q
1	0	1	A	M	Q
1	1	1	A	M	Q
>1	0	0	A	M	Q
>1	1	0	A	M	Q
>1	0	1	A	M	Q
>1	0	>1	A	M	Q
>1	1	1	A	M	Q
>1	1	>1	A	M	Q
>1	>1	0	A	M	Q
>1	>1	1	A	M	Q
>1	>1	>1	A	M	Q
0	1	0	I	I	Q
0	1	1	A	M	Q
0	>1	0	A	M	Q
0	>1	1	A	M	Q
0	>1	>1	A	M	Q
1	>1	0	A	M	Q
1	>1	1	A	M	Q
1	>1	>1	A	M	Q
0	0	1	I	I	Q
0	0	>1	A	M	Q
1	0	>1	A	M	Q
0	1	>1	A	M	Q
1	1	>1	A	M	Q

\*AGRI is the given example of a known Base Product where derived Underlying Asset Type is set to "Agriculture" [CFI:2015 Char#3 (STA\*\*\*)].  
 \*\*INDP is the given example of an unknown Base Product where derived Underlying Asset Type is set to "Other" [CFI:2015 Char#3 (STM\*\*\*)].  
 \*\*\*MCEX is the given example where derived Underlying Asset Type is set to "Multi Commodity" [CFI:2015 Char#3 (STQ\*\*\*)].