

Derivatives Service Bureau (ISIN)
CHANGE REQUEST FORM

Version	State	Author	Date	Description
1	Draft	M. Surop	14 Oct 2022	Initial Document
2	Draft	M. Surop	31 Jan 2023	Update Validation for Commodity Classification
3	Draft	M. Surop	09 Mar 2023	<ul style="list-style-type: none"> Update Request and Record template4s layout for Delivery Type Remove ISO Delivery Type and CFI Option Type and Style in Derivation Section Add GUI Details for Delivery Type

Title	COMMODITIES OPTION Non-Standard Template Definition		
Background	<p>The following CRF presents a specification for the generation and retrieval of an ISIN for the following product:</p> <ul style="list-style-type: none"> Commodities : Option : Non_Standard 	DSB-ID	DSB-1611
		Type	New Template
		Owner	M. Surop
		Version	3
		State	Final
Terms of Reference			
Scope	<ul style="list-style-type: none"> This CRF specifies the product definition required for the generation / retrieval of an ISIN 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 is to be based on the attributes, values and behaviour of the current OTC ISIN and equivalent UPI. The product definition will return an equivalent UPI based on the new requirements of the OTC ISIN. 		
Dependencies	<ul style="list-style-type: none"> 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 TAC Approval for the DSB approach to ISO 10962 (CFI:2019) migration. This specification is dependent on ISO 4914 (UPI) requirements, to be able to create an equivalent UPI parent for created OTC ISIN. 		
Assumptions	<ul style="list-style-type: none"> This specification assumes that, unless stated, all values and behaviours are based on DSB's current OTC product definition. The specification assumes that no defaulted or blank values in the input request to align the requirements with the ISO 4914 (UPI) requirement. The specification will support the requirement of ISO 4914 (UPI) – including the attributes that are not currently supported in the current OTC ISIN. This specification is based on the attributes and values defined in ISO 10962 (CFI:2015). 		

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 (HT****)	Y
	Instrument Type	Set	M	N	Option		CFI:2015 Char#1 (HT****)	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
	Option Type	Enum	M	N	CALL	[PUTO, CALL, OPTL]	ISO 20022/ CFI:2015 Char#4 (HT****)	Y
	Option Exercise Style	Enum	M	N	AMER	[AMER, BERM, EURO]	ISO 20022/ CFI:2015 Char#4 (HT****)	Y
	Valuation Method or Trigger	Enum	M	N	Vanilla	[Vanilla, Asian, Barrier, Lookback, etc.]	CFI:2015 Char#5 (HT****)	Y
	Delivery Type	Enum	M	N	CASH	[CASH; PHYS; OPTL]	ISO 20022/ CFI:2015 Char#6 (HT****)	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	Enum	(M)	Y	LEAD-LME CASH	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
	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 (HT****)	Y
	Instrument Type	Set	M	N	Option		CFI:2015 Char#1 (HT****)	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
	Option Type	Enum	M	N	CALL	[PUTO, CALL, OPTL]	ISO 20022/ CFI:2015 Char#4 (HT****)	Y
	Option Exercise Style	Enum	M	N	AMER	[AMER, BERM, EURO]	ISO 20022/ CFI:2015 Char#4 (HT****)	Y
	Valuation Method or Trigger	Enum	M	N	Vanilla	[Vanilla, Asian, Barrier, Lookback, etc.]	CFI:2015 Char#5 (HT****)	Y
	Delivery Type	Enum	M	N	CASH	[CASH; PHYS; OPTL]	ISO 20022/ CFI:2015 Char#6 (HT****)	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	Enum	(M)	Y	LEAD-LME CASH	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
	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	EZL3MRNS2967			Y
	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 Option Non_Standard AGRI GROS FWHT AUD 20210827	See CRF (Derivations)	RTS23 / Field 2	N
	Classification Type	String	D	N	HTABVC	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/Option AGRI Call AUD 20210827	See CRF (Derivations)	ISO 18774: 2015	Y
	Underlying Asset Type	String	D	N	Agriculture	See CRF (Derivations)	CFI:2015 Char#3 (HT****)	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"> • Underlying Instrument User must select at least one of the following Underlying Instruments and below validation will apply depending on the Underlying Instrument selected. <ul style="list-style-type: none"> a. Underlying Instrument Index / Index Prop <ul style="list-style-type: none"> i. Underlying Instrument Index <ul style="list-style-type: none"> • Enumeration list is based on JSON codeset (CommoditiesIndex.json). • User can only select the value of "OTHER". ii. Underlying Instrument Index Prop <ul style="list-style-type: none"> • The input text by user must exist in the DSB Proprietary Index Enumeration.

	<ul style="list-style-type: none"> User can input a single or multiple Underlying Instrument Index Prop. 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. 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". <p>b. Reference Rate</p> <ul style="list-style-type: none"> Enumeration list is based on JSON codeset (FpmlCommoditiesReferenceRate.json). User can input a single or multiple Reference Rate(s). <p>c. Base Product / Sub Product / Additional Sub Product</p> <ul style="list-style-type: none"> The user inputs the Base Product, Sub Product and Additional Sub Product in such order. Sub Product and Additional Sub Product enumerated list is dependent on the input Base Product (<i>refer to Appendix 1 & 2 below</i>). If Sub Product or Additional Sub Product does not have a corresponding value, attribute(s) must not be present in the REQUEST template. 																																		
Additional Attribute Dictionary	<p>This section provides the exact reference or source of the attribute that are not currently supported in the OTC ISIN.</p> <table border="1" data-bbox="288 786 1503 1877"> <thead> <tr> <th data-bbox="288 786 683 846">Full Name</th> <th data-bbox="683 786 1257 846">Source</th> <th data-bbox="1257 786 1503 846">Type</th> </tr> </thead> <tbody> <tr> <td data-bbox="288 846 683 929">Delivery Type</td> <td data-bbox="683 846 1257 929">ISO 20022 FinancialInstrumentReportingReferenceDataReportV02</td> <td data-bbox="1257 846 1503 929">Enums [CASH; PHYS; OPTL]</td> </tr> <tr> <td data-bbox="288 929 683 990">Notional Currency</td> <td data-bbox="683 929 1257 990">ISO 4217 Currency Codes</td> <td data-bbox="1257 929 1503 990">Pattern: [A-Z]{3,3}</td> </tr> <tr> <td data-bbox="288 990 683 1072">Option Exercise Style</td> <td data-bbox="683 990 1257 1072">ISO 20022 FinancialInstrumentReportingReferenceDataReportV01</td> <td data-bbox="1257 990 1503 1072">Enums [AMER; BERM; EURO]</td> </tr> <tr> <td data-bbox="288 1072 683 1155">Option Type</td> <td data-bbox="683 1072 1257 1155">ISO 20022 FinancialInstrumentReportingReferenceDataReportV01</td> <td data-bbox="1257 1072 1503 1155">Enums [CALL; PUT; OPTL]</td> </tr> <tr> <td data-bbox="288 1155 683 1263">Reference Rate</td> <td data-bbox="683 1155 1257 1263">ISDA Taxonomy 2.0</td> <td data-bbox="1257 1155 1503 1263">Max350Text (based on string) minLength: 1 maxLength: 350</td> </tr> <tr> <td data-bbox="288 1263 683 1346">Base Product</td> <td data-bbox="683 1263 1257 1346">ISO 20022 StandardRepository/type/ AssetClassProductType1Code</td> <td data-bbox="1257 1263 1503 1509" rowspan="3">Max35Text (based on string) minLength: 1 maxLength: 35</td> </tr> <tr> <td data-bbox="288 1346 683 1429">Sub Product</td> <td data-bbox="683 1346 1257 1429">ISO 20022 StandardRepository/type/ AssetClassSubProductType1Code</td> </tr> <tr> <td data-bbox="288 1429 683 1509">Additional Sub Product</td> <td data-bbox="683 1429 1257 1509">ISO 20022 StandardRepository/type/ AssetClassDetailedSubProductType1Code</td> </tr> <tr> <td data-bbox="288 1509 683 1617">Underlying Instrument Index</td> <td data-bbox="683 1509 1257 1617"><i>At present, OTHER is the only permitted enumerated value for this attribute. See comments for further details.</i></td> <td data-bbox="1257 1509 1503 1617">Enum [OTHER]</td> </tr> <tr> <td data-bbox="288 1617 683 1702">Underlying Instrument Index Prop</td> <td data-bbox="683 1617 1257 1702">DSB Proprietary Index Enumerations</td> <td data-bbox="1257 1617 1503 1702">(Based on string)</td> </tr> <tr> <td data-bbox="288 1702 683 1877">Valuation Method or Trigger</td> <td data-bbox="683 1702 1257 1877">ISO 10962 Classification of financial instruments (CFI code)</td> <td data-bbox="1257 1702 1503 1877">Enums [Vanilla; Asian; Digital (Binary); Barrier; Digital Barrier; Lookback; Other path dependent; Other]</td> </tr> </tbody> </table>	Full Name	Source	Type	Delivery Type	ISO 20022 FinancialInstrumentReportingReferenceDataReportV02	Enums [CASH; PHYS; OPTL]	Notional Currency	ISO 4217 Currency Codes	Pattern: [A-Z]{3,3}	Option Exercise Style	ISO 20022 FinancialInstrumentReportingReferenceDataReportV01	Enums [AMER; BERM; EURO]	Option Type	ISO 20022 FinancialInstrumentReportingReferenceDataReportV01	Enums [CALL; PUT; OPTL]	Reference Rate	ISDA Taxonomy 2.0	Max350Text (based on string) minLength: 1 maxLength: 350	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)	Valuation Method or Trigger	ISO 10962 Classification of financial instruments (CFI code)	Enums [Vanilla; Asian; Digital (Binary); Barrier; Digital Barrier; Lookback; Other path dependent; Other]
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Normalization	Not Required.																																		
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
ENVR	Index
FRGT	Index
FRTL	Index
INDP	Index
INFL	Index
OEST	Index
MCEX	Multi Commodity
METL	Index

	<table border="1"> <tr> <td>PAPR</td> <td></td> <td>Index</td> </tr> <tr> <td>POLY</td> <td></td> <td>Index</td> </tr> <tr> <td>OTHC</td> <td></td> <td>Index</td> </tr> <tr> <td>OTHR</td> <td></td> <td>Index</td> </tr> </table>	PAPR		Index	POLY		Index	OTHC		Index	OTHR		Index
PAPR		Index											
POLY		Index											
OTHC		Index											
OTHR		Index											
<p>Classification Type</p>	<p>Concatenation of the following attributes/values:</p> <ul style="list-style-type: none"> • Instrument Type: "H" • Asset Class: "T" • Underlying Asset Type: from Record Derived UnderlyingAssetType... <ul style="list-style-type: none"> - Agriculture → A - Energy → J - Environmental → N - Freight → G - Fertilizer → S - Index → I - Metals → K - Multi Commodity → Q - Paper → T - Polypropylene Products → P - Other → M • Option Type/Style: from Record OptionType and Record OptionExerciseStyle... <ul style="list-style-type: none"> - PUTO/AMER → E - PUTO/BERM → F - PUTO/EURO → D - CALL/AMER → B - CALL/BERM → C - CALL/EURO → A - OPTL/AMER → H - OPTL/BERM → I - OPTL/EURO → G • Valuation Method or Trigger: from Record ValuationMethodorTrigger... <ul style="list-style-type: none"> - Vanilla → V - Asian → A - Digital (Binary) → D - Barrier → B - Digital Barrier → G - Lookback → L - Other Path Dependent → P - Other → M • Delivery Type: from Record DeliveryType... <ul style="list-style-type: none"> - CASH → C - PHYS → P - OPTL → E <p>E.g.: "HTABVC"</p>												
<p>Short Name</p>	<p>Concatenation of the following attributes/values:</p> <ul style="list-style-type: none"> • Issuer Name: "NA/" • Instrument Type: "Option" • Base Product: from Record BaseProduct... <ul style="list-style-type: none"> - AGRI → AGRI - NRGY → NRGY - ENVR → ENVR - FRGT → FRGT - FRTL → FRTL - INDP → INDP - INFL → INFL - OEST → OEST - MCEX → MCEX - METL → METL - PAPR → PAPR - POLY → POLY 												

	<ul style="list-style-type: none"> - OTHC → OTHC - OTHR → OTHR • Option Type: from Record OptionType... <ul style="list-style-type: none"> - PUTO → Put - CALL → Call - OPTL → OPTL • Notional Currency: e.g.: AUD - from ISO 4217 input value • Expiry Date: from Record ExpiryDate <p>E.g.: "NA/Option AGRI Call AUD 20210827"</p>												
Full Name	<p>Concatenation of the following attributes/values:</p> <ul style="list-style-type: none"> • Asset Class: "Commodities" • Instrument Type: "Option" • Product: "Non_Standard" • Base Product: from Record BaseProduct • Sub Product: from Record SubProduct • Additional Sub Product: from Record AdditionalSubProduct • Notional Currency: from Record NotionalCurrency • Expiry Date: from Record ExpiryDate <p>E.g.: "Commodities Option Non_Standard AGRI GROS FWHT AUD 20210827"</p>												
ISO Underlying Instrument Index	<p>Derived from the input Underlying Instrument Index & Underlying Instrument Index Prop...</p> <ul style="list-style-type: none"> - Single input → Derived ISOUnderlyingInstrumentIndex of the input - Multiple input → "Multiple Indices" <p>Notes: 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>												
GUI Details	<p>The following section provides display information for any attributes (and values).</p> <table border="1"> <thead> <tr> <th>Enum Value</th> <th>Display Name</th> <th>Tool Tip (and • value elaboration)</th> </tr> </thead> <tbody> <tr> <td>CASH</td> <td>Cash</td> <td>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>PHYS</td> <td>Physical</td> <td>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>OPTL</td> <td>Elect at Exercise</td> <td>the method of delivery of the underlying instrument when the option is exercised shall be determined at the time of exercise</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 Exercise	the method of delivery of the underlying instrument when the option is exercised shall be determined at the time of exercise
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Additional Information													
Reference	<ul style="list-style-type: none"> • ISO 10962 Classification of financial instruments (CFI code) • ISO 20022 FinancialInstrumentReportingReferenceDataReportV02 • DSB OTC ISIN Product Definitions 												
Comments	<ul style="list-style-type: none"> • 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. 												

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 (HT***)		
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 (HTA***)].
 INDP is the given example of an unknown Base Product where derived Underlying Asset Type is set to "Other" [CFI:2015 Char#3 (HTM*)].
 MCEX is the given example where derived Underlying Asset Type is set to "Multi Commodity" [CFI:2015 Char#3 (HTQ)].