Derivatives Service Bureau (ISIN)

CHANGE REQUEST FORM

Version	State	Author	Date	Description
1	Draft	J. Lim	18 Aug 2021	Initial Document
2	Draft	M. Surop	26 Nov 2021	Updated Request & Record templates layout, added Validation for Term of Contract, updated Validation and Comment for Debt Seniority.
3	Draft	M. Surop	26 Jan 2022	Updated Request template layout, Validation and Comment Section for Debt Seniority.
4	Draft	M. Surop	31 Jan 2022	• Allowing value of 0 integer for attributes “Reference Rate Term Value” / “Other Leg Reference Rate Term Value” and “Underlying Instrument Index Term Value” in Request template layout. • Removed the derived attribute “Further Grouping” in Record template layout. - Updated Request & Record templates layout, Validation, Normalization, Comments and Appendix 1 sections.
5	Draft	M. Surop	15 Feb 2022	Updated Request & Record templates layout and added Validation rules for Debt Seniority.
6	Draft	M. Surop	10 Mar 2022	Updated templates layout, Validation, Derivation and Comments sections related to Underlying Instrument Index Term Value/Unit, Credit Index Series/Version, Delivery Type and ISO Delivery Type.
7	Draft	M. Surop	25 Apr 2022	Updated templates layout, Validation for error messages, Normalisation, Derivation and Appendix 1 sections.
8	Draft	M. Surop	06 May 2022	Updated Request template layout to include Other Reference Rate in the oneOf structure, Derivation section to include ISO Reference Rate, ISO Other Leg Reference Rate and ISO Underlying Instrument Index.
9	Draft	M. Surop	11 May 2022	Updated Record template layout for the Underlying oneOf structure.
10	Draft	M. Surop	20 May 2022	Updated Request and Record templates layout and Validation section for Strike Price components.
11	Draft	M. Surop	13 Jun 2022	Updated Derivation Section of the Short Name Notes for Notional Currency.
12	Draft	M. Surop	28 Jul 2022	Updated Derived Section in the Record Template Layout, ISO derivation statement and Comment Section.
13	Draft	M. Surop	12 Sep 2022	Updated error message for Underlying Credit Index Series/Version.

Title	**OTHER OTHER Non Standard Template Definition**		
Background	The following CRF presents a specification for the generation and retrieval of a ISIN for the following product: • **Other : Other : Non_Standard**	**DSB-ID**	**DSB-1440**
		Type	New Template
		Owner	J.Lim
		Version	13
		State	Final
Terms of Reference			

Scope	• This CRF specifies the product definition required for the generation / retrieval of a 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	• 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	• 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	• 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	Condition	Enum Source	in UPI
Header Section	Asset Class	Set	M	N	Other				
	Instrument Type	Set	M	N	Other				
	Product	Set	M	N	Non_Standard				
	Level	Set	M	N	InstRefDataReporting				
Attribute Section	Expiry Date	String	M	N	2021-08-27			RTS23/ Field 13	N
	Price Multiplier	number	M	N	1			RTS23/ Field 25	N
	Option Type	Enum	C	N	CALL	[PUTO; CALL; OPTL]	if option style or val method is selected, attribute is required	RTS23/ Field 30	Y
	Option Exercise Style	Enum	C	N	AMER	[AMER; BERM; EURO]	if option type or val method is selected, attribute is required	RTS23/ Field 33	Y
	Valuation Method or Trigger	Enum	C	N	Vanilla	[Vanilla; Asian; Barrier; Lookback etc.]	if option style or type is selected, attribute is required	CFI 2015 superset values	Y
	Delivery Type	Enum	M	N	Physical	[Cash; Physical; Auction; Elect At Exercise; etc.]		CFI 2015 superset values	Y
	Underlying Asset Class.Rates	Object	C	Y					Y
	Term of Contract (oneOf)	Object	(M)	N	By Tenor				N
	Term of Contract Value	Integer	(M)	N	1	1 to 999 (excluding 0)		RTS23/ Field 41	N
	Term of Contract Unit	Enum	(M)	N	DAYS	[DAYS, WEEK, MNTH, YEAR]		RTS23/ Field 41	N
	Term of Contract (oneOf)	Object	(M)	N	By Effective Date				N
	Effective Date	String	(M)	N	2021-08-27				N
	Expiry Date Adjusted	Boolean	(C)	N	FALSE				N
	Tenor Calculation Method	String	(C)	N	ESMA				N
	Notional Currency	Enum	(M)	N	AUD	ISOCurrencyCode.json	required if asset is selected	ISO 4217 (3-Char CCY)	Y
	Reference Rate	Enum	(M)	Y	AUD-CPI		required if asset is selected	Fpml Coding Scheme 5.98 & 5.108	Y
	Reference Rate Term Value	Integer	(M)	N	3	-999 to 999 (including 0)	required if asset is selected		Y
	Reference Rate Term Unit	Enum	(M)	N	MNTH	[DAYS, WEEK, MNTH, YEAR]	required if asset is selected	ISO 20022	Y
	Return or Payout Trigger	Enum	(C)	N	Spreadbets	[Spreadbets; Forward price of underlying instrument]		CFI:2015 Char#5 (JR****)	Y
	Other Notional Currency	Enum	(C)	N	EUR	ISOCurrencyCode.json		ISO 4217 (3-Char CCY)	Y
	Other Leg Reference Rate	Enum	(C)	Y	USD-LIBOR-LIBO			Fpml Coding Scheme 5.98 & 5.108	Y
	Other Leg Reference Rate Term Value	Integer	(C)	N	3	-999 to 999 (including 0)			Y
	Other Leg Reference Rate Term Unit	Enum	(C)	N	MNTH	[DAYS, WEEK, MNTH, YEAR]		ISO 20022	Y
	Underlying Asset Class.Foreign_Exchange	Object	C	Y					Y
	Notional Currency	Enum	(M)	N	AUD	ISOCurrencyCode.json	both pairs are required	ISO 4217 (3-Char CCY)	Y
	Other Notional Currency	Enum	(M)	N	EUR	ISOCurrencyCode.json	both pairs are required	ISO 4217 (3-Char CCY)	Y
	Return or Payout Trigger	Enum	(C)	N	Spreadbets	[Spreadbets; Contract for Difference (CFD) etc]		CFI:2015 Char#5 (JF****)	Y
	Settlement Currency	Enum	(C)	N	EUR	ISOCurrencyCode.json		ISO 4217 (3-Char CCY)	Y
	Place of Settlement	Enum	(C)	N	Hong Kong			ISO 3166	Y
	Underlying Asset Class.Credit	Object	C	Y					Y
	Return or Payout Trigger	Enum	(C)	N	Credit Default	[Credit Default; Total Return; Other]		CFI:2015 Char#4 (SC****)	Y
	Debt Seniority	Enum	(C)	N	SNDB	[SNDB, MZZD, SBOD, JUND]	Only applicable if Underlier = Underlying Instrument LEI / ISIN	ISO 20022	Y
	Underlying Instrument Index Term Value	Integer	(C)	N	7	-999 to 999 (including 0)	Only applicable if Underlier = Underlying Instrument Index / Index Prop		Y
	Underlying Instrument Index Term Unit	Enum	(C)	N	DAYS		Only applicable if Underlier = Underlying Instrument Index / Index Prop		Y
	Underlying Credit Index Series	Integer	(C)	N	3		Only applicable if Underlier = Underlying Instrument Index / Index Prop		Y
	Underlying Credit Index Version	Integer	(C)	N	5		Only applicable if Underlier = Underlying Instrument Index / Index Prop		Y
	Underlying (anyOf)	String	(M)	N	Underlying Instrument ISIN				Y
	Underlying Instrument ISIN	String	(M)	Y	US87331AAB08				Y
	Underlying (anyOf)	String	(M)	N	Underlying Instrument LEI				Y
	Underlying Instrument LEI	String	(M)	Y	5493005BBCF84ICNQ550				Y
	Underlying (anyOf)	String	(M)	N	Underlying Instrument Index				Y
	Underlying Instrument Index	Enum	(M)	Y	ABX.HE.A			FpmlCreditIndex.json	Y
	Underlying (anyOf)	String	(M)	N	Underlying Instrument Index Prop				Y
	Underlying Instrument Index Prop	String	(M)	Y	11423-BCRICSTI			DSB Proprietary Index Enumeration	Y
	Underlying Asset Class.Equity	Object	C	Y					Y
	Strike Price Type	Enum	(C)	N	Monetary Value				N
	Strike Price Type	Enum	(C)	N	Monetary Value	[Monetary Value; Percentage; Yield; Basis Points; etc.]			N
	Strike Price	String	(C)	N	1.5				N
	Strike Price Currency	Enum	(C)	N	EUR	ISOCurrencyCode.json		ISO 4217 (3-Char CCY)	N
	Return or Payout Trigger	Enum	(C)	N	Spreadbets	[Price; Dividend; Variance etc]		CFI:2015 Char#4 (SE****) Char#5 (JE****)	Y
	Underlying (anyOf)	String	(M)	N	Underlying Instrument ISIN				Y
	Underlying Instrument ISIN	String	(M)	Y	GB0008706128				Y
	Underlying (anyOf)	String	(M)	N	Underlying Instrument Index				Y
	Underlying Instrument Index	Enum	(M)	Y	MSCI EM USD			ESMA TTC	Y
	Underlying (anyOf)	String	(M)	N	Underlying Instrument Index Prop				Y
	Underlying Instrument Index Prop	String	(M)	Y	34810-JP16LMO			DSB Proprietary Index Enumeration	Y
	Underlying Asset Class.Commodities	Object	C	Y					Y
	Notional Currency	Enum	(M)	N	AUD	ISOCurrencyCode.json		ISO 4217 (3-Char CCY)	N
	Underlying (anyOf)	String	(M)	N	Underlying Instrument Index				Y
	Underlying Instrument Index	Enum	(M)	Y	OTHER	CommoditiesIndex.json			Y
	Underlying (anyOf)	String	(M)	N	Underlying Instrument Index Prop				Y
	Underlying Instrument Index Prop	String	(M)	Y	11339-MLCIINKC			DSB Proprietary Index Enumeration	Y
	Underlying (anyOf)	String	(M)	N	Reference Rate				Y
	Reference Rate								
	Refererence Rate	Enum	(M)	Y	LEAD-LME CASH	FpmlCommoditiesReferenceRate.json		ISDA Taxonomy 2.0	Y
	Other Reference Rate	Enum	(C)	Y	ALUMINUM-COMEX	FpmlCommoditiesReferenceRate.json		ISDA Taxonomy 2.0	Y
	Base Product	Enum	(M)	N					Y
	Base Product	Enum	(M)	N	ENVR			RTS 23 (EU 2017/585) Table 2	Y
	Sub Product	Enum	(M)	N	EMIS			RTS 23 (EU 2017/585) Table 2	Y
	Additional Sub Product	Enum	(M)	N	EUAE			RTS 23 (EU 2017/585) Table 2	Y
	Other Notional Currency	Enum	(C)	N	EUR	ISOCurrencyCode.json		ISO 4217 (3-Char CCY)	N
	Other Base Product	Enum	(C)	N					Y
	Other Base Product	Enum	(C)	N	ENVR			RTS 23 (EU 2017/585) Table 2	Y
	Other Sub Product	Enum	(C)	N	EMIS			RTS 23 (EU 2017/585) Table 2	Y
	Other Additional Sub Product	Enum	(C)	N	EUAE			RTS 23 (EU 2017/585) Table 2	Y
	Return or Payout Trigger	Enum	(C)	N	Contract for Difference (CFD)	[Contract for Difference (CFD); Total Return etc]		CFI:2015 Char#4 (ST****) Char#5 (JT****)	Y
	Transaction Type	Enum	(M)	N	FUTR				N
	Final Price Type	Enum	(M)	N	ARGM				N

Record Template Layout

Section	Attribute	Format	Cat	Array	Example Value	Validation / Derivation	Conditions	Enum Source	in UPI
Header Section	Asset Class	Set	M	N	Other				
	Instrument Type	Set	M	N	Other				
	Product	Set	M	N	Non_Standard				
	Level	Set	M	N	InstRefDataReporting				
Attribute Section	Expiry Date	String	M	N	2021-08-27			RTS23/ Field 13	N
	Price Multiplier	number	M	N	1			RTS23/ Field 25	N
	Option Type	Enum	C	N	CALL	[PUTO; CALL; OPTL]	if option style or val method is selected, attribute is required	RTS23/ Field 30	Y
	Option Exercise Style	Enum	C	N	AMER	[AMER; BERM; EURO]	if option type or val method is selected, attribute is required	RTS23/ Field 33	Y
	Valuation Method or Trigger	Enum	C	N	Vanilla	[Vanilla; Asian; Barrier; Lookback etc.]	if option style or type is selected, attribute is required	CFI 2015 superset values	Y
	Delivery Type	Enum	M	N	Physical	[Cash; Physical; Auction; Elect At Exercise; etc.]		CFI 2015 superset values	Y
	Underlying Asset Class.Rates	Object	C	Y					Y
	Term of Contract Value	Integer	(M)	N	1	1 to 999 (excluding 0)		RTS23/ Field 41	N
	Term of Contract Unit	Enum	(M)	N	DAYS	[DAYS, WEEK, MNTH, YEAR]		RTS23/ Field 41	N
	Notional Currency	Enum	(M)	N	AUD	ISOCurrencyCode.json	required if asset is selected	ISO 4217 (3-Char CCY)	Y
	Reference Rate	Enum	(M)	Y	AUD-CPI		required if asset is selected	Fpml Coding Scheme 5.98 & 5.108	Y
	Reference Rate Term Value	Integer	(M)	N	3	-999 to 999 (including 0)	required if asset is selected		Y
	Reference Rate Term Unit	Enum	(M)	N	MNTH	[DAYS, WEEK, MNTH, YEAR]	required if asset is selected	ISO 20022	Y
	Return or Payout Trigger	Enum	(C)	N	Spreadbets	[Spreadbets; Forward price of underlying instrument]		CFI:2015 Char#5 (JR****)	Y
	Other Notional Currency	Enum	(C)	N	EUR	ISOCurrencyCode.json		ISO 4217 (3-Char CCY)	Y
	Other Leg Reference Rate	Enum	(C)	Y	USD-LIBOR-LIBO			Fpml Coding Scheme 5.98 & 5.108	Y
	Other Leg Reference Rate Term Value	Integer	(C)	N	3	-999 to 999 (including 0)			Y
	Other Leg Reference Rate Term Unit	Enum	(C)	N	MNTH	[DAYS, WEEK, MNTH, YEAR]		ISO 20022	Y
	Underlying Asset Class.Foreign_Exchange	Object	C	Y					Y
	Notional Currency	Enum	(M)	N	AUD	ISOCurrencyCode.json	both pairs are required	ISO 4217 (3-Char CCY)	Y
	Other Notional Currency	Enum	(M)	N	EUR	ISOCurrencyCode.json	both pairs are required	ISO 4217 (3-Char CCY)	Y
	Return or Payout Trigger	Enum	(C)	N	Spreadbets	[Spreadbets; Contract for Difference (CFD) etc]		CFI:2015 Char#5 (JF****)	Y
	Settlement Currency	Enum	(C)	N	EUR	ISOCurrencyCode.json		ISO 4217 (3-Char CCY)	Y
	Place of Settlement	Enum	(C)	N	Hong Kong			ISO 3166	Y
	Underlying Asset Class.Credit	Object	C	Y					Y
	Return or Payout Trigger	Enum	(C)	N	Credit Default	[Credit Default; Total Return; Other]		CFI:2015 Char#4 (SC****)	Y
	Underlying (anyOf)	String	(M)	N	Underlying Instrument ISIN				Y
	Underlying Instrument ISIN	String	(M)	Y	US87331AAB08				Y
	Underlying (anyOf)	String	(M)	N	Underlying Instrument LEI				Y
	Underlying Instrument LEI	String	(M)	Y	5493005BBCF84ICNQ550				Y
	Underlying (anyOf)	String	(M)	N	Underlying Instrument Index				Y
	Underlying Instrument Index	Enum	(M)	Y	ABX.HE.A			FpmlCreditIndex.json	Y
	Underlying (anyOf)	String	(M)	N	Underlying Instrument Index Prop				Y
	Underlying Instrument Index Prop	String	(M)	Y	11423-BCRICSTI			DSB Proprietary Index Enumeration	Y
	Underlying Instrument Index Term Value	Integer	(C)	N	7	-999 to 999 (including 0)	Only applicable if Underlier = Underlying Instrument Index / Index Prop		Y
	Underlying Instrument Index Term Unit	Enum	(C)	N	DAYS		Only applicable if Underlier = Underlying Instrument Index / Index Prop	ISO 20022	Y
	Underlying Credit Index Series	Integer	(C)	N	3		Only applicable if Underlier = Underlying Instrument Index / Index Prop		Y
	Underlying Credit Index Version	Integer	(C)	N	5		Only applicable if Underlier = Underlying Instrument Index / Index Prop		Y
	Debt Seniority	Enum	(C)	N	SNDB	[SNDB, MZZD, SBOD, JUND]	Only applicable if Underlier = Underlying Instrument LEI / ISIN	ISO 20022	Y
	Underlying Asset Class.Equity	Object	C	Y					Y
	Strike Price Type	Enum	(C)	N	Monetary Value				N
	Strike Price Type	Enum	(C)	N	Monetary Value	[Monetary Value; Percentage; Yield; Basis Points; etc.]			N
	Strike Price	String	(C)	N	1.5				N
	Strike Price Currency	Enum	(C)	N	EUR	ISOCurrencyCode.json		ISO 4217 (3-Char CCY)	N
	Return or Payout Trigger	Enum	(C)	N	Spreadbets	[Price; Dividend; Variance etc]		CFI:2015 Char#4 (SE****) Char#5 (JE****)	Y
	Underlying (anyOf)	String	(M)	N	Underlying Instrument ISIN				Y
	Underlying Instrument ISIN	String	(M)	Y	GB0008706128				Y
	Underlying (anyOf)	String	(M)	N	Underlying Instrument Index				Y
	Underlying Instrument Index	Enum	(M)	Y	MSCI EM USD			ESMA TTC	Y
	Underlying (anyOf)	String	(M)	N	Underlying Instrument Index Prop				Y
	Underlying Instrument Index Prop	String	(M)	Y	34810-JP16LMO			DSB Proprietary Index Enumeration	Y
	Underlying Asset Class.Commodities	Object	C	Y					Y
	Notional Currency	Enum	(M)	N	AUD	ISOCurrencyCode.json		ISO 4217 (3-Char CCY)	N
	Underlying (anyOf)	String	(M)	N	Underlying Instrument Index				Y
	Underlying Instrument Index	Enum	(M)	Y	OTHER	CommoditiesIndex.json			Y
	Underlying (anyOf)	String	(M)	N	Underlying Instrument Index Prop				Y
	Underlying Instrument Index Prop	String	(M)	Y	11339-MLCIINKC			DSB Proprietary Index Enumeration	Y
	Underlying (anyOf)	String	(M)	N	Reference Rate				Y
	Reference Rate								
	Reference Rate	Enum	(M)	Y	LEAD-LME CASH	FpmlCommoditiesReferenceRate.json		ISDA Taxonomy 2.0	Y
	Other Reference Rate	Enum	(C)	Y	ALUMINUM-COMEX	FpmlCommoditiesReferenceRate.json		ISDA Taxonomy 2.0	Y
	Base Product	Enum	(M)	N	ENVR			RTS 23 (EU 2017/585) Table 2	Y
	Sub Product	Enum	(M)	N	EMIS			RTS 23 (EU 2017/585) Table 2	Y
	Additional Sub Product	Enum	(M)	N	EUAE			RTS 23 (EU 2017/585) Table 2	Y
	Other Notional Currency	Enum	(C)	N	EUR	ISOCurrencyCode.json		ISO 4217 (3-Char CCY)	N
	Other Base Product	Enum	(C)	N	ENVR			RTS 23 (EU 2017/585) Table 2	Y
	Other Sub Product	Enum	(C)	N	EMIS			RTS 23 (EU 2017/585) Table 2	Y
	Other Additional Sub Product	Enum	(C)	N	EUAE			RTS 23 (EU 2017/585) Table 2	Y
	Return or Payout Trigger	Enum	(C)	N	Contract for Difference (CFD)	[Contract for Difference (CFD); Total Return etc]		CFI:2015 Char#4 (ST****) Char#5 (JT****)	Y
	Transaction Type	Enum	(M)	N	FUTR				N
	Final Price Type	Enum	(M)	N	ARGM				N
Identifier Section	Identification	String	D	N	EZHDP620LN52				Y
	Status	String	D	N	New				Y
	Status Reason	String	D	N	<null>	Not applicable to a New record			Y
	Last Update Date Time	String	D	N	2021-02-23T00:00:13	YYYY-MM-DDThh:mm:ss			Y
Derived Section	Full Name	String	M	N	Other Other Non_Standard 1 DAYS Multiple ISINs Multiple LEIs Multiple Indices ENVR EUAE ENVR EUAE Multiple Currencies 20210827				N
	Classification Type	String	M	N	MMSXXX				Y
	Commodity Derivative Indicator	String	M	N	FALSE				N
	Issuer or Operator of the Trading Venue Identifier	String	M	N	NA				N
	Short Name	String	M	N	NA/Oth Oth Nstd Mlt Mlt 20210827				Y
	ISO Underlying Instrument Index	String	C	N	Multiple Indices				N
	ISO Reference Rate	String	C	N	Multiple Indices				N
	ISO Other Leg Reference Rate	String	C	N	Multiple Indices				N
	ISO Delivery Type	String	M	N	PHYS	[CASH; PHYS; OPTL]	See CRF Derivations	ISO 20022	N
	ISO Place of Settlement	String	C	N	HK				N

**(M) – Mandatory if underlying asset class is selected; (C) – Conditional if underlying asset class is selected.*
***See Appendix 2 & 3 for enum_titles and elaboration*

<table>
<tr><th colspan="2">Product Definition</th></tr>
<tr><td>Attributes</td><td>See Template Layout (above).

a. Underlying Asset Class
The Request template described in this document supports multi-asset products and so the Request template allows the user to select asset classes of the underliers.
For this product the user is asked to select one of the following:
• Rates
• Credit
• Equities
• Foreign Exchange
• Commodities</td></tr>
</table>

	Once an asset class is selected the user is then able to input the values for any attributes that are associated with underliers within that asset class.
Validation	The following validations will apply depending on the underlying asset class selected. The product supports multi-asset products and attributes associated to it will be available upon the selection of the underlying asset class. **1. Underlying Asset Class - Rates** a. Term of Contract (oneOf) • User can select either "By Tenor" or "By Effective Date". • If user selects "By Tenor", attributes "Term of Contract Value" and "Term of Contract Unit" must be present in the REQUEST and RECORD templates. • If user selects "By Effective Date", attribute "Effective Date" must be present in the REQUEST template, the attributes "Expiry Date Adjusted" and "Tenor Calculation Method" are optional fields. • Effective Date, Expiry Date Adjusted and Tenor Calculation Method attributes will not be present in the RECORD template. b. Reference Rate and Other Leg Reference Rate • User can select Reference Rate only or both Reference Rate/ Other Leg Reference Rate • If Reference Rate is selected, the Reference Rate Term Value/ Unit must be populated. • If Other Leg Reference Rate is selected, the Other Leg Reference Rate Term Value/ Unit must be populated. • Reference Rate and its term value unit cannot be identical with Other Leg Reference Rate and its term value unit, otherwise an error message will apply: "Error: Reference Rate and Other Leg Reference Rate with Term Value and Unit cannot be identical". • The input text for Reference Rate Term Value/Other Leg Reference Rate Term Value must be an integer (-999 to 999 including 0). c. Notional and Other Notional Currency • User can select Notional Currency only or both Notional/Other Notional Currency. • Notional Currency is a required field, whilst the Other Notional Currency is an optional field. • Currency for both legs cannot be identical. • If the following attributes have the same currency, an error message will apply "Error: Notional Currency and Other Notional Currency cannot be identical". **2. Underlying Asset Class - Equity** a. Underlying Instrument ISIN/ Index/ Index PROP User must select at least one of the following underlying instruments and below validation will apply depending on the selection. i. Underlying Instrument ISIN • The input text by user must be in 12 characters (2 alpha, 9 alphanumeric, 1 numeric). • The input text must not have a prefix of "QZ" or "EZ". • A syntactic validation is being performed to confirm an ISIN when hitting create. • 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 ^(?!(EZ|QZ))[A-Z]{2}[A-Z0-9]{9}[0-9]$." • If the input ISIN is not aligned with the above pattern after hitting create, an error message will apply: "/Attributes/UnderlyingAssetClass/Equity/Underlying/UnderlyingInstrumentISIN/0: ECMA 262 regex ^(?!(EZ\|QZ))[A-Z]{2}[A-Z0-9]{9}[0-9]$" does not match input string "<invalid input string>"". • 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". ii. Underlying Instrument Index • Enumeration list is based on JSON codeset (EsmaEquityIndex.json). iii. Underlying Instrument Index PROP • 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 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 Equity or Multi-Asset Index”.

b. Strike Price Type
The Strike Price value is validated pending on the Strike Price Type selected:
- Strike Price component attributes [Strike Price Type, Strike Price, Strike Price Currency] are conditional fields in the REQUEST and RECORD templates.
- Strike Price Type must be populated for any Strike Price based on the enumeration list [Monetary Value; Percentage; Yield; Basis Points; No Price].
- The Strike Price input value can be a positive or negative integer including 0 or PNDG.
- For Strike Price Currency, the following validation will apply:
    - Enumeration list is based on JSON codeset (ISOCurrencyCode.json).
    - Strike Price Currency is required for an input when Strike Price Type is set to ‘Monetary Value’ or ‘No Price’ (PNDG).
    - Strike Price Currency is not required for an input when Strike Price Type is set to ‘Percentage’, ‘Yield’ or ‘Basis Points’.
    - For Cross-Asset Other, Strike Price Currency is a mandatory user input if Strike Price Type is set to ‘Monetary Value’.
- Strike Price value is validated depending on the Strike Price Type selected:
    - DECIMAL – 18,13 if the price is expressed as monetary value.
    - DECIMAL – 11,10 if the price is expressed as percentage.
    - DECIMAL – 11,10 if the price is expressed as yield.
    - DECIMAL – 18,17 if the price is expressed as basis points.
    - For ‘No Price’, Strike Price must be ‘PNDG’.

3. Underlying Asset Class - Credit

a. Underlying Instrument ISIN/ LEI/ Index/ Index PROP
User must select at least one of the following underlying instruments and below validation will apply depending on the selection.

i. Underlying Instrument ISIN
- The input text by user must be in 12 characters (2 alpha, 9 alphanumeric, 1 numeric).
- The input text must not have a prefix of “QZ” or “EZ”.
- A syntactic validation is being performed to confirm an ISIN when hitting create.
- 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 ^(?!(EZ|QZ))[A-Z]{2}[A-Z0-9]{9}[0-9]$.”
- If the input ISIN is not aligned with the above pattern after hitting create, an error message will apply: “/Attributes/UnderlyingAssetClass/Credit/Underlying/UnderlyingInstrumentISIN/<index>: ECMA 262 regex ^(?!(EZ|QZ))[A-Z]{2}[A-Z0-9]{9}[0-9]$" does not match input string "<invalid input string>"”.
- 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".

ii. Underlying Instrument LEI
- The input text by user must be in 20 characters (18 alphanumeric, 2 numeric).
- A syntactic validation is being performed to confirm LEI.
- 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 ^[A-Z0-9]{18}[0-9]{2}$.
- If the input LEI is not aligned with the pattern and conformed with the syntactic validation after hitting create, an error message will apply: “/Attributes/UnderlyingAssetClass/Credit/Underlying/UnderlyingInstrumentLEI/<index>: ECMA 262 regex "^[A-Z0-9]{18}[0-9]{2}$" does not match input string "<invalid input string>"”.
- The input text by user must be in 20 characters (18 alphanumeric, 2 numeric).
- A syntactic validation is being performed to confirm LEI.
- 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 ^[A-Z0-9]{18}[0-9]{2}$.
- If the input LEI is not aligned with the pattern and conformed with the syntactic validation after hitting create, an error message will apply:

	"/Attributes/UnderlyingAssetClass/Credit/Underlying/UnderlyingInstrumentLEI/<index>: ECMA 262 regex "^[A-Z0-9]{18}[0-9]{2}$" does not match input string "<invalid input string>"". iii. Underlying Instrument Index • Enumeration list is based on JSON codeset (MrktCreditIndex.json). iv. Underlying Instrument Index PROP • 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 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 Credit or Multi-Asset Index". b. Underlying Instrument Index Term Value/ Underlying Instrument Index Term Unit i. If Underlying Instrument selected is either an Index or Index Prop, these attributes must be present in the REQUEST and RECORD templates. • If Underlying Instrument selected is an Index or Index Prop and these attributes are not selected, an error message will apply: o Must have property UnderlyingInstrumentIndexTermValue o Must have property UnderlyingInstrumentIndexTermUnit • If single or multiple Underlying Instrument Index / Index Prop is selected, input text must be an integer (-999 to 999) including 0. Otherwise, an error message will apply: o If the input text is less than -999, an error message will apply: "Value must be at least -999." o If the input text is greater than 999, an error message will apply: "Value must be at most 999." o If the input text contains negative (-) after the integer, an error message will apply: "Value must be of type integer. Value must be at most 999. Value must be at least -999." o If the input text contains character, remove the character and retain the integer if exists. • If Underlying Instrument selected is a combination of Index and Index Prop and these attributes are not selected, an error message will apply: o Must have property UnderlyingInstrumentIndexTermValue o Must have property UnderlyingInstrumentIndexTermUnit • If Underlying Instrument selected is a combination of Index or Index Prop, input text must be an integer (-999 to 999) including 0. Otherwise, an error message will apply: o If the input text is less than -999, an error message will apply: "Value must be at least -999." o If the input text is greater than 999, an error message will apply: "Value must be at most 999." o If the input text contains negative (-) after the integer, an error message will apply: "Value must be of type integer. Value must be at most 999. Value must be at least -999." o If the input text contains character, remove the character and retain the integer if exists. ii. If the Underlying Instrument selected is either an ISIN or LEI: • An error message will apply: "Error: Term Value, Index Series and Index Version requires at least one Underlying Instrument Index". c. Underlying Credit Index Series / Underlying Credit Index Version i. If the Underlying Instrument selected is an Index, the following validation will apply: • Underlying Credit Index Series and Underlying Credit Index Version attributes must be present in the REQUEST and RECORD templates. • If Underlying Instrument selected is an Index and these attributes are not selected, an error message will apply: o Must have property UnderlyingCreditIndexSeries o Must have property UnderlyingCreditIndexVersion • The input text by the user must be a positive integer from 1 to 999. Otherwise, an error message will apply: "Error: Index Series and Index Version can only be zero if there are more than 1 Underlying Instrument Indices or at least 1 Index Prop." • If the input text is less than 0, an error message will apply: "Value must be at least 0." • If the input text is greater than 999, an error message will apply: "Value must be at most 999". • If the input text contains negative (-) after the integer, an error message will apply: "Value must be of type integer. Value must be at most 999. Value must be at least 0."

	• If the input text contains character, remove the character, and retain the integer if exist.
	
	ii. If Underlying Instrument selected is an Index Prop, the following validation will apply:
	• Underlying Credit Index Series and Underlying Credit Index Version attributes must be present in the REQUEST and RECORD templates.
	• If Underlying Instrument selected is an Index Prop and these attributes are not selected, an error message will apply:
	  o Must have property UnderlyingCreditIndexSeries
	  o Must have property UnderlyingCreditIndexVersion
	• The input text by the user must be a positive integer from 0 to 999. Otherwise, an error message will apply based on the following scenarios:
	• If the input text is less than 0, an error message will apply: “Value must be at least 0”.
	• If the input text is greater than 999, an error message will apply: “Value must be a most 999”.
	• If the input text contains negative (-) after the integer, an error message will apply: "Value must be of type integer. Value must be at most 999. Value must be at least 0."
	• If the input text contains character, remove the character and retain the integer if exists.
	
	iii. If multiple Underlying Instrument Index or multiple Underlying Instrument Index Prop are selected, the following validation will apply:
	• Underlying Credit Index Series and Underlying Credit Index Version attributes must be present in the REQUEST and RECORD templates.
	• If multiple Underlying Instrument Index/Index Prop are selected and these attributes are not selected, an error message will apply:
	  o Must have property UnderlyingCreditIndexSeries
	  o Must have property UnderlyingCreditIndexVersion
	• The input text must be a positive integer from 0 to 999. Otherwise, an error message will apply: "Error: UnderlyingCreditIndexSeries and Version must be populated and must be equal to 0."
	• If the input text is less than 0, an error message will apply: “Value must be at least 0”.
	• If the input text is greater than 999, an error message will apply: “Value must be a most 999”.
	• If the input text contains negative (-) after the integer, an error message will apply: "Value must be of type integer. Value must be at most 999. Value must be at least 0."
	• If the input text contains character, remove the character and retain the integer if exists.
	
	iv. If Underlying Instrument selected is a combination of Index or Index Prop, the following validations will apply:
	• Underlying Credit Index Series and Underlying Credit Index Version attributes must be present in the REQUEST and RECORD templates.
	• If a combination of Underlying Instrument Index/Index Prop are selected and these attributes are not selected, an error message will apply:
	  o Must have property UnderlyingCreditIndexSeries
	  o Must have property UnderlyingCreditIndexVersion
	• The input text must be a positive integer from 0 to 999. Otherwise, an error message will apply:
	• If the input text is less than 0, an error message will apply: “Value must be at least 0”.
	• If the input text is greater than 999, an error message will apply: “Value must be a most 999”.
	• If the input text contains negative (-) after the integer, an error message will apply: "Value must be of type integer. Value must be at most 999. Value must be at least 0."
	• If the input text contains character, remove the character and retain the integer if exists.
	
	v. If the Underlying Instrument selected is either an ISIN or LEI:
	• An error message will apply: “Error: Term Value, Index Series and Index Version requires at least one Underlying Instrument Index”.
	
	d. Debt Seniority
	i. Debt Seniority is an optional attribute with enumerated values [SNDB, MZZD, SBOD, JUND] and should only be present if the Underlying Instrument selected is an ISIN or LEI.
	ii. If the Underlying Instrument selected is an ISIN or LEI and the attribute is not selected in the list, an error message will apply “Error: Debt Seniority must be one of (SNDB, MZZD, SBOD, JUND) if Underlying Instrument ISIN/LEI is selected”.
	iii. If Underlying Instrument selected is an Index or Index Prop and the attribute is selected in the list, an error message will apply “Error: Debt Seniority can't be one of (SNDB, MZZD, SBOD, JUND) if Underlying Instrument Index is selected”.

iv. If multiple values are selected for underlier type, e.g., ISIN and/or LEI, attribute is not required. Otherwise, an error message will apply "Error: Debt Seniority can't be one of (SNDB, MZZD, SBOD, JUND) if multiple Underlying Instruments are selected".

Underlier ID Sources selected	Example Input Values		Error Message
Underlying Instrument ISIN	DE0001848083	→	*"Error: Debt Seniority can't be one of (SNDB, MZZD, SBOD, JUND) if multiple Underlying Instruments are selected".*
Underlying Instrument LEI	549300BZXZ66F6DTIF20		

4. Underlying Asset Class - Foreign_Exchange

a. Notional and Other Notional Currency

- Currency for both legs cannot be identical.
- If the following attributes have the same currency, an error message will apply "Error: Notional Currency and Other Notional Currency cannot be identical".

b. Settlement Currency

- If Place of Settlement is selected, Settlement Currency must be populated.
- If Place of Settlement is selected and Settlement currency is not selected in the list, an error message will apply before hitting create "Must have property SettlementCurrency".
- If Place of settlement is selected and Settlement currency is not selected in the list, an error message will apply after hitting create: "/Attributes/UnderlyingAssetClass/Foreign_Exchange: property "PlaceofSettlement" of object has missing property dependencies (schema requires ["SettlementCurrency"]; missing: ["SettlementCurrency "])".
- If Settlement Currency is selected, the delivery type must be "Cash".
- If Settlement currency is selected and delivery type is not "Cash", an error message shall apply "Error: Delivery Type must be Cash".

c. Place of Settlement

- If the Notional and Other Notional Currency are both CNY and has no Place of Settlement attribute, an error message will apply "Error: Notional Currency and Other Notional Currency cannot be identical".
- If the Notional and Other Notional Currency are both CNY and has Place of Settlement of "Hong Kong", the combination string is acceptable.
- If the Notional and Other Notional Currency is both CNY and Place of Settlement is not "Hong Kong, an error message will apply "Error: Place of Settlement must be Hong Kong for CNY/CNY request".

5. Underlying Asset Class - Commodities

User must select at least one of the following underlying instruments and below validation will apply depending on the selection.

a. Underlying Instrument Index/ Index PROP

i. Underlying Instrument Index

- Enumeration list is based on JSON codeset (CommoditiesIndex.json).

ii. Underlying Instrument Index Prop

- 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 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".

b. Reference Rate/ Other Reference Rate

- Enumeration list is based on JSON codeset (FpmlCommoditiesReferenceRate.json).

c. Notional Currency and Other Notional Currency

- User can select Notional Currency only or both Notional/Other Notional Currency.
- Notional Currency is a required field, whilst the Other Notional Currency is an optional field.
- Currency for both legs cannot be identical.
- If the following attributes have the same currency, an error message will apply "Error: Notional Currency and Other Notional Currency cannot be identical".

d. Base Product; Sub Product; Additional Sub Product/Other Base Product; Other Sub Product; Other Additional Sub Product

- 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”.
- 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”.
- 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 *(refer to Appendix 1 & 2 below).*
- If Sub Product or Additional Sub Product does not have a corresponding value, attribute(s) will not be present in the request message.

6. **Return or Payout Trigger/ Valuation Method or Trigger/Option Type/Option Exercise Style**
   - User can select one or both Return or Payout Trigger or Valuation Method or Trigger in request.
   - Combination attribute – Option Type/ Option Exercise Style/ Valuation Method or Trigger.
   - If Option type is selected, Option Exercise Style and Valuation Method or Trigger must be populated.
   - If Option Exercise Style is selected, Option Type and Valuation Method or Trigger must be populated.
   - If Valuation Method or Trigger is selected, Option Exercise Style and Option type must be populated.
   - If one of the combination attributes is/are missing, an error message will apply:
     - GUI: Before sending payload, an error message will apply: “Must have property <Missing Attribute from Combination String>”
     - If user sends in a payload, an error message will apply: “/Attributes: property "OptionType" of object has missing property dependencies (schema requires ["OptionExerciseStyle "," ValuationMethodorTrigger”]; missing: ["OptionExerciseStyle "," ValuationMethodorTrigger "])”

7. **Underlying Asset Class = “Null”**
   - If user did not select any values in the Underlying Asset Class, an error message shall apply:
     - If user sends in a payload with Underlying Asset Class but with no value, an error message will apply: "/Attributes/UnderlyingAssetClass: object has too few properties (found 0 but schema requires at least 1)".
     - If user sends in a payload with no Underlying Asset Class, an error message will apply: “/Attributes:object has missing required properties ([\UnderlyingAssetClass\”])”.

Additional Attribute Dictionary

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 10962 Classification of financial instruments (CFI code)	Enums *[Cash; Physical; Auction; Elect at Exercise; Elect at Settlement; Non-Deliverable]*
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]*
Return or Payout Trigger	ISO 10962 Classification of financial instruments (CFI code)	Enums Rates *[Spreadbets; Forward price of underlying instrument]* Enums Equity *[Price; Dividend; Variance; Volatility; Total Return; Contract for Difference (CFD); Other; Spreadbets; Forward price of underlying instrument]* Enums Credit *[Credit Default; Total Return; Other]* Enums FX *[Spreadbets; Contract for Difference (CFD); Forward price of underlying instrument]* Enums Commodities *[Contract for Difference (CFD); Total Return; Forward price of underlying instrument]*

	Strike Price Type	FIRDS Reference Data System Reporting Instructions	Enums *[Monetary Value; Percentage; Yield; Basis Points; No Price]*

Normalization

1. Underlying Asset Class - Rates

a. Reference Rate Term Value and Reference Rate Term Unit

If Reference Rate Term Unit = “DAYS” and Reference Rate Term Value is divisible by 7, record it in weeks

Reference Rate Term Value	7	→	Reference Rate Term Value	1
Reference Rate Term Unit	DAYS		Reference Rate Term Unit	WEEK

If Reference Rate Term Unit = “MNTH” and Reference Rate Term Value is divisible by 12, record it in years

Reference Rate Term Value	12	→	Reference Rate Term Value	1
Reference Rate Term Unit	MNTH		Reference Rate Term Unit	YEAR

If Reference Rate Term Value is 0 and Reference Rate Term Unit is anything other than DAYS, it will be recorded as 0 DAYS:

Reference Rate Term Value	0	→	Reference Rate Term Value	0
Reference Rate Term Unit	WEEK		Reference Rate Term Unit	DAYS

Reference Rate Term Value	0	→	Reference Rate Term Value	0
Reference Rate Term Unit	MNTH		Reference Rate Term Unit	DAYS

Reference Rate Term Value	0	→	Reference Rate Term Value	0
Reference Rate Term Unit	YEAR		Reference Rate Term Unit	DAYS

b. Notional Currency and Other Notional Currency

The input Notional and Other Notional Currency submitted by users need to normalize to ensure that same ISIN is returned for a same set of attributes.

- Order the attributes alphabetically. The Notional Currency should be first alphabetically and Other Leg 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
A.1	Reference Rate	AUD-LIBOR-BBA		A.1	Reference Rate	AED-EBOR-Reuters
	Reference Rate Term Value	3			Reference Rate Term Value	3
	Reference Rate Term Unit	DAYS			Reference Rate Term Unit	DAYS
	Other Notional Currency	AUD	→		Other Notional Currency	EUR
B.1	Other Leg Reference Rate	AED-EBOR-Reuters		B.1	Other Leg Reference Rate	AUD-LIBOR-BBA
	Other Leg Reference Rate Term Value	3			Other Leg Reference Rate Term Value	3
	Other Leg Reference Rate Term Unit	DAYS			Other Leg Reference Rate Term Unit	DAYS

c. Reference Rate and Other Leg Reference Rate

If only “Notional Currency” is selected, the input reference rate and other reference rate submitted by users need to normalize to ensure that same ISIN is returned for a same set of attributes.

The normalization applies if same code set is used for both attributes.

- Order the “Reference Rate” and “Other Reference Rate” alphabetically.
- If the “Reference Rate” is first alphabetically, then record it as “Reference Rate”.
- If the “Reference Rate” is not first alphabetically, then record the fields as below:

Reference Rate		Other Leg Reference Rate
Reference Rate Term Value	→	Other Leg Reference Rate Term Value
Reference Rate Term Unit		Other Leg Reference Rate Term Unit

Other Leg Reference Rate		Reference Rate
Other Leg Reference Rate Term Value	→	Reference Rate Term Value
Other Leg Reference Rate Term Unit		Reference Rate Term Unit

If the Reference rate and Other Leg reference rate are identical, the term value and unit will normalize to ensure that singular ISIN is returned for same set of attributes.

- If the Term unit is the same, then order the Term Value numerically from lowest to highest.
- If the Term unit is different, then convert the term unit as per order term multiplier below:

DAYS = 1
WEEK = 7
MNTH = 30

YEAR = 365

- Multiply the number of Term value and order term multiplier for both reference rate legs. Then order the equivalent value numerically from lowest to highest as per below:

Reference Rate	AUD-LIBOR-BBA	→	Reference Rate	AUD-LIBOR-BBA
Reference Rate Term Value	15		Reference Rate Term Value	1
Reference Rate Term Unit	DAYS		Reference Rate Term Unit	WEEK
Other Leg Reference Rate	AUD-LIBOR-BBA		Other Leg Reference Rate	AUD-LIBOR-BBA
Other Leg Reference Rate Term Value	1		Other Leg Reference Rate Term Value	15
Other Leg Reference Rate Term Unit	WEEK		Other Leg Reference Rate Term Unit	DAYS

If the Reference Rate Term Value/Unit and Other Reference Rate Term Value/Unit has same equivalent value based on the order term multiplier, the details for the said attributes will be as is in the record template.

2. Underlying Asset Class - Equity

a. Underlying Instrument Index

- For any given Equity Index submission, a validation will apply against the existence of an ISIN and return the Index ISIN as part of the record in place of the Index Name.

Request Template		Record Template
Underlying Instrument Index	→	Underlying Instrument ISIN
KOSPI 200		KRD020020016

- If Index name has no associated Index ISIN, the index name input by the user will return in the record.

Request Template		Record Template
Underlying Instrument Index	→	Underlying Instrument Index
MSCI EM USD		MSCI EM USD

List of Indices and associated ISINs can be found here.

3. Underlying Asset Class - Credit

a. Underlying Instrument Index Term Value / Underlying Instrument Index Term Unit

- If Underlying Instrument Index Term Unit = "DAYS" and Underlying Instrument Index Term Value is divisible by 7, record it in weeks:

Underlying Instrument Index Term Value	7	→	Underlying Instrument Index Term Value	1
Underlying Instrument Index Term Unit	DAYS		Underlying Instrument Index Term Unit	WEEK

- If Underlying Instrument Index Term Unit = "MNTH" and Underlying Instrument Index Term Value is divisible by 12, record it in years:

Underlying Instrument Index Term Value	12	→	Underlying Instrument Index Term Value	1
Underlying Instrument Index Term Unit	MNTH		Underlying Instrument Index Term Unit	YEAR

- If Underlying Instrument Index Term Value is 0 and Underlying Instrument Index Term Unit is anything other than DAYS, it will be recorded as 0 DAYS:

Underlying Instrument Index Term Value	0	→	Underlying Instrument Index Term Value	0
Underlying Instrument Index Term Unit	WEEK		Underlying Instrument Index Term Unit	DAYS

Underlying Instrument Index Term Value	0	→	Underlying Instrument Index Term Value	0
Underlying Instrument Index Term Unit	MNTH		Underlying Instrument Index Term Unit	DAYS

Underlying Instrument Index Term Value	0	→	Underlying Instrument Index Term Value	0
Underlying Instrument Index Term Unit	YEAR		Underlying Instrument Index Term Unit	DAYS

4. Underlying Asset Class – Foreign_Exchange

a. Notional Currency and Other Notional Currency

The input Notional and Other Notional Currency submitted by users need to normalize to ensure that same ISIN is returned for a same set of attributes.

- Order the "Notional currency" and "Other Notional Currency" alphabetically.
- If the "Notional Currency" is first alphabetically, then record it as "Notional Currency".
- If the "Notional Currency" is not first alphabetically, then record it as "Other Notional Currency".

Notional Currency	EUR	→	Notional Currency	AUD
Other Notional Currency	AUD		Other Notional Currency	EUR

5. Underlying Asset Class – Commodities

a. Notional Currency and Other Notional Currency

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

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 Reference Rate	WHEAT FEED-NYSE Liffe	Other Reference Rate	NATURAL GAS-CHICAGO CITY-GATES-INSIDE FERC
Other Notional Currency	AUD	Other Notional Currency	EUR
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:

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

6. Full Name derivation

- After the derivation of each attribute defined in the long name, the normalisation will take place to remove the repeated derived values for attributes with same classification e.g., "Multiple Indices".
- Combination string: ISO Underlying Instrument Index, ISO Reference Rate, and ISO Other Leg Reference Rate – If user inputs multiple underlying for each attribute or any two of the attributes, the long name abbreviation will be "Multiple Indices". The normalisation will remove repeated values in the derivation.

Attribute	Long Name Abbreviation	
	before normalisation	after normalisation
ISO Underlying Instrument Index	Multiple Indices	Multiple Indices
ISO Reference Rate	Multiple Indices	
ISO Other Leg Reference Rate	Multiple Indices	

- Combination string: Notional Currency and Other Notional Currency – if user inputs multiple currency for each attribute or any two of the attributes, the long name abbreviation will be "Multiple Currencies". The normalisation will remove repeated values in the derivation.

Attribute	Long Name Abbreviation	
	before normalisation	after normalisation
Notional Currency	Multiple Currencies	Multiple Currencies
Other Notional Currency	Multiple Currencies	

Derivation

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

Classification Type

Concatenation of the following attributes/values:

- Instrument Type: “M”
- Asset Class: “M”
- Further Grouping: “S”
- Not applicable/undefined: “X”
- Not applicable/undefined: “X”
- Not applicable/undefined: “X”

E.g.: “MMSXXX”

Note: CFI characters are all fixed values.

Short Name

Concatenation of the following attributes/values:

- Issuer Name: “NA/”
- Instrument Type: “Oth” (fixed value)
- Asset Class: “Oth” (fixed value)
- Use Case: “Nstd”
- Notional Currency
  - Single currency → from Request.NotionalCurrency
  - Multiple currency → “Mlt”
- Other Notional Currency
  - Single currency → from Request.OtherNotionalCurrency
  - Multiple Currency → “Mlt”
- Expiry Date

E.g.: “NA/Oth Oth Nstd Mlt Mlt 20210827”
Note:
The multiple currencies short name abbreviation is based on ISO Abbrev w acronyms-Final_v0.5.5.FINAL.xlsm.

- If the Notional Currency is either from Underlying Asset Class Rates, Foreign Exchange, or Commodities, the Notional currency will be taken from the input value.
- If the Notional Currency is both from Underlying Asset Class Rates, Foreign Exchange, and Commodities, the Notional Currency will be “Mlt”.
- Same behaviour will apply for Other Notional Currency.

Full Name

Concatenation of the following attributes/values:

- Asset Class: “Other” (fixed value)
- Instrument Type: “Other” (fixed value)
- Use Case: “Non_Standard” (fixed value)
- Term of Contract Value: from Request.TermofContractValue
- Term of Contract Unit: from Request.TermofContractUnit
- Underlying Instrument ISIN: from Request.UnderlyingInstrumentISIN (Underlying AssetClass.Credit & UnderlyingAssetClass.Equity)
  - Single input → same value
  - Multiple input → “Multiple ISINs”
- Underlying Instrument LEI: from Request.UnderlyingInstrumentLEI (Underlying AssetClass.Credit)
  - Single input → same value
  - Multiple input → “Multiple LEIs”
- ISO Underlying Instrument Index: from Request.UnderlyingInstrumentIndex (Underlying AssetClass.Credit & UnderlyingAssetClass.Equity) & from Request.UnderlyingInstrumentIndexProp (UnderlyingAssetClass.Credit & UnderlyingAssetClass.Equity & UnderlyingAssetClass.Commodities)
  - Single input → Derived.UnderlyingInstrumentIndex of the input
  - Multiple input → “Multiple Indices”

		• Base Product: from Request.BaseProduct • Additional Sub Product: from Request.AdditionalSubProduct • Other Base Product: from Request.OtherBaseProduct • Other Additional Sub Product: from Request.OtherAdditionalSubProduct • ISO Reference Rate from Request.ReferenceRate (UnderlyingAssetClass.Rates) - Single input → Derived.ISOReferenceRate of the input - Multiple input → “Multiple Indices” • ISO Other Leg Reference Rate from Request.OtherLegReference Rate (UnderlyingAssetClass.Rates) - Single input → Derived.ISOReferenceRate of the input - Multiple input → “Multiple Indices” • Notional Currency - Single currency → from Request.NotionalCurrency - Multiple input → “Multiple Currencies” • Other Notional Currency - Single currency → from Request.OtherNotionalCurrency - Multiple input → “Multiple Currencies” • Expiry Date E.g.: Other Other Non_Standard 1 DAYS Multiple ISINs Multiple LEIs Multiple Indices ENVR EUAE ENVR EUAE Multiple Currencies 20210827 Notes: • If the Notional Currency is either from Underlying Asset Class Rates, Foreign Exchange, or Commodities, the Notional currency will be taken from the input value. • If the Notional Currency is both from Underlying Asset Class Rates, Foreign Exchange, and Commodities, the Notional Currency will be “Multiple Currencies”. • Same behaviour will apply for Other Notional Currency. • Normalisation of the Long name is indicated in Normalisation section of the document.
	ISO Underlying Instrument Index	Derived from the input Underlying Instrument Index & Underlying Instrument Index Prop… - Single input → Derived.UnderlyingInstrumentIndex of the input - Multiple input → “Multiple Indices” Notes: • Underlying Instrument Index input value is from Underlying Asset Class Credit & Equity. • Underlying Instrument Index Prop input value is from Underlying Asset Class Credit, Equity & Commodities. • If Underlying Instrument Index and Index Prop are not selected, the ISO Underlying Instrument Index attribute must not be present in the RECORD template.
	ISO Reference Rate / ISO Other Leg Reference Rate	• Derived from the input Reference Rate… - Single input → Derived.ISOReferenceRate of the input - Multiple input → “Multiple Indices” • Derived from the input Other Leg Reference Rate… - Single input → Derived.ISOOtherLegReferenceRate of the input - Multiple input → “Multiple Indices” Note: • Reference Rate and Other Leg Reference Rate input value is from Underlying Asset Class Rates. • If Reference Rate and Other Leg Reference Rate are not selected, the ISO Reference Rate/ISO Other Leg Reference Rate attributes must not be present in the RECORD template.
	ISO Delivery Type	Derived from the input Delivery Type… • Cash → “CASH” • Physical → “PHYS” • Auction → “OPTL” • Elect at Exercise → “OPTL” • Elect at Settlement → “OPTL” • Non-Deliverable → “OPTL”

GUI Details

The following section provides display information for any attributes (and values) that are not included in the related OTC ISIN definition.

Attribute	Display Name	Tool Tip (and • *value elaboration*)
Delivery Type	Delivery Type	The Delivery Type as defined by CFI code: ISO 10962 (2015) • *As defined by CFI Code: ISO 10962 (2015)*
Enum	**Enum_Title**	**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
Physical	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
Auction	Auction	An independently administered synthetic auction process on a set of defined deliverable obligations that sets a reference final price that can be used to facilitate cash settlement of all covered transactions following a credit event
Elect at Exercise	Elect at Exercise	The method of delivery of the underlying instrument when the option is exercised shall be determined at the time of exercise
Elect at Settlement	Elect at Settlement	Determined at the time of settlement
Non-Deliverable	Non-Deliverable	The Delivery Type as defined by CFI code: ISO 10962 (2015) • *As defined by CFI Code: ISO 10962 (2015)*

Additional Information

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

- Code set name for Commodities, Credit and Equity of OTC ISIN should be aligned with UPI code set name.
- Defaulted values will be removed in the input to align the requirements with the ISO 4914 (UPI)
- Additional attributes are added in accordance with ISO 4914 (UPI) requirement.
- There is no existing reference data that will support the validation of underlying instrument index for Commodities. In addition, an existing ticket (DSB-8) has been raised to address the issue.
- Normalization of Notional and Other Notional Currency in OTC ISIN for Other.Other has invalid error message relating to an existing ticket (DSB-646).
- The current behaviour in the OTC ISIN for attributes “Reference Rate Term Value/Unit”, “Other Leg Reference Rate Term Value/Unit” and “Underlying Instrument Index Term Value/Unit” wherein 0 is an acceptable integer value remain unchanged. This only applies to OTC ISIN Multi-Asset Non-Standard templates.
- Underlying Instrument Index Term Value/Unit are required fields in the DSB OTC ISIN having a default value of “0 DAYS” if Underlying Instrument Index PROP is selected where the input text must accept positive or negative integer (-999 to 999) including 0.
- Underlying Credit Index Series/Version are required fields in the DSB OTC ISIN having a default value of “0” if Underlying Instrument Index PROP is selected where the input text must accept positive integer (0 to 999).
- Return or Payout Trigger enumerated values are superset values of CFI whether an instrument type is a swap or forward. This is to align with the UPI requirement where the attribute is a conditional field.
- Valuation Method or Trigger enumerated values are superset values of CFI and is limited to option instrument type only. This is to align with the UPI requirement where the attribute is a conditional field.
- For OTC ISIN Multi-Asset Non-Standard template, there is no requirement to provide a text version of the CFI character. Hence, the removal of the derived attribute “Further Grouping”.
- The Delivery Type enumerated values [Cash; Physical; Auction; Elect at Exercise, Elect at Settlement, Non-Deliverable] are the superset of values from CFI 2015. Thus, CFI Delivery Type is no longer required as a derived value in the RECORD message. It is not included as an attribute in the CFI code (MMSXXX) but it is being added on the basis of the CDIDE requirement.
- The Delivery type “Non-Deliverable” is included in the CFI 2015 but is not supported in OTC ISIN for Other.Option.Non-Standard template. However, both OTC ISIN and UPI will support this enumerated value for this product.
- ISO Delivery Type derivation is being maintained for standardization to all OTC ISIN Multi-Asset Non-Standard templates.
- The current behaviour in the OTC ISIN for attributes “ISO Underlying Instrument Index”, “ISO Reference Rate”, “ISO Other Leg Reference Rate”, “ISO Place of Settlement” remain unchanged.

Appendix 1

Below table shows the supported fields in the Current OTC ISIN against the Proposed ISIN change.

Current ISIN	Proposed ISIN		Comment
Asset Class		Asset Class	
Instrument Type		Instrument Type	
Product		Product	
Level		Level	
Underlying Instrument ISIN	EQUITY	Underlying Instrument ISIN	Original attribute does not define the asset class
	CREDIT	Underlying Instrument ISIN	Original attribute does not define the asset class
Notional Currency	RATES	Notional Currency	Original attribute does not define the asset class
	FOREIGN_EXCHANGE	Notional Currency	Original attribute does not define the asset class
	COMMODITIES	Notional Currency	Original attribute does not define the asset class
Expiry Date		Expiry Date	
Price Multiplier		Price Multiplier	
By Tenor		By Tenor	
Term of Contract Value		Term of Contract Value	
Term of Contract Unit		Term of Contract Unit	
By Effective Date		By Effective Date	
Effective Date		Effective Date	
Expiry Date Adjusted		Expiry Date Adjusted	
Tenor Calculation Method		Tenor Calculation Method	
Underlying Instrument LEI	CREDIT	Underlying Instrument LEI	Original attribute does not define the asset class
Underlying Instrument Index	EQUITY	Underlying Instrument Index	Original attribute does not define the asset class
	COMMODITIES	Underlying Instrument Index	Original attribute does not define the asset class
	CREDIT	Underlying Instrument Index	Original attribute does not define the asset class
Underlying Instrument Index Prop	EQUITY	Underlying Instrument Index Prop	Original attribute does not define the asset class
	COMMODITIES	Underlying Instrument Index Prop	Original attribute does not define the asset class
	CREDIT	Underlying Instrument Index Prop	Original attribute does not define the asset class
Underlying Instrument Index Term Value	CREDIT	Underlying Instrument Index Term Value	Original attribute does not define the asset class
Underlying Instrument Index Term Unit	CREDIT	Underlying Instrument Index Term Unit	Original attribute does not define the asset class
Underlying Credit Index Series	CREDIT	Underlying Credit Index Series	Original attribute does not define the asset class
Underlying Credit Index Version	CREDIT	Underlying Credit Index Version	Original attribute does not define the asset class
Debt Seniority	CREDIT	Debt Seniority	Original attribute does not define the asset class
Strike Price Type		Strike Price Type	
Strike Price		Strike Price	
Strike Price Currency		Strike Price Currency	
Option Type		Option Type	

Option Exercise Style		Option Exercise Style	
Base Product		Base Product	
Sub Product		Sub Product	
Additional Sub Product		Additional Sub Product	
Other Base Product		Other Base Product	
Other Sub Product		Other Sub Product	
Other Additional Sub Product		Other Additional Sub Product	
Transaction Type		Transaction Type	
Final Price Type		Final Price Type	
Reference Rate Commodities		Reference Rate Commodities	
Other Reference Rate Commodities		Other Reference Rate Commodities	
Reference Rate		Reference Rate	
Reference Rate Term Value		Reference Rate Term Value	
Reference Rate Term Unit		Reference Rate Term Unit	
Other Leg Reference Rate		Other Leg Reference Rate	
Other Leg Reference Rate Term Value		Other Leg Reference Rate Term Value	
Other Leg Reference Rate Term Unit		Other Leg Reference Rate Term Unit	
Other Notional Currency	RATES	Other Notional Currency	Original attribute does not define the asset class
	FOREIGN_EXCHANGE	Other Notional Currency	Original attribute does not define the asset class
	COMMODITIES	Other Notional Currency	Original attribute does not define the asset class
Settlement Currency		Settlement Currency	
Place of Settlement		Place of Settlement	
N/A		Valuation Method or Trigger	New attribute to align with UPI requirements
N/A		Delivery Type	New attribute to align with UPI requirements
N/A		Return or Payout Trigger	New attribute to align with UPI requirements
Identification		Identification	
Status		Status	
Status Reason		Status Reason	
Last Update Date Time		Last Update Date Time	
Full Name		Full Name	Amended contents
Classification Type		Classification Type	
Commodity Derivative Indicator		Commodity Derivative Indicator	
Issuer or Operator of the Trading Venue Identifier		Issuer or Operator of the Trading Venue Identifier	
Short Name		Short Name	Amended contents
Further Grouping		N/A	See Comments section above
ISO Underlying Instrument Index		ISO Underlying Instrument Index	
ISO Reference Rate		ISO Reference Rate	
ISO Other Leg Reference Rate		ISO Other Leg Reference Rate	
ISO Place of Settlement N/A		ISO Place of Settlement ISO Delivery Type	 See Comments section above

Appendix 2

Below is the limited set of enumerations based on RTS 23 (EU 2017/585) Table 2 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
				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

Base Product	Code	Sub Product	Code	Additional Sub Product	Code
Environmental	ENVR	Emissions	EMIS	CER ERU EUA EUAA Other	CERE ERUE EUAE EUAA OTHR
		CarbonRelated	CRBR		
		Weather	WTHR		
Freight	FRGT	Dry	DRYF	DryBulkCarrier	DBCR
		Wet	WETF	Tanker	TNKR
		ContainerShip	CSHP		
Fertilizer	FRTL	Ammonia DiammoniumPhosphate Potash Sulphur Urea UreaAndAmmoniumNitrate	AMMO DAPH PTSH SLPH UREA UAAN		
IndustrialProduct	INDP	Construction Manufacturing	CSTR MFTG		
Inflation	INFL				
OfficialEconomicStatistics	OEST				
Metal	METL	NonPrecious	NPRM	Aluminum AluminumAlloy Cobalt Copper IronOre Molybdenum NASAAC Nickel Steel Tin Zinc Other Lead	ALUM ALUA CBLT COPR IRON MOLY NASC NICK STEL TINN ZINC OTHR LEAD
		Precious	PRME	Gold Other Palladium Platinum Silver	GOLD OTHR PLDM PTNM SLVR
MultiCommodityExotic	MCEX				
Paper	PAPR	Containerboard Newsprint Pulp RecoveredPaper	CBRD NSPT PULP RCVP		
Polypropylene	POLY	Plastic	PLST		
OtherC10	OTHC	Deliverable NonDeliverable	DLVR NDLV		
Other	OTHR				

Appendix 3

Listed below are the corresponding enum_titles for each product code based on RTS 23 (EU 2017/585) Table 2:

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
MultiCommodityExotic[MCEX]	MCEX
Paper[PAPR]	PAPR
Polypropylene[POLY]	POLY
OtherC10[OTHC]	OTHC
Other[OTHR]	OTHR

Sub Product	
enum_titles	enum
GrainOilSeed[GROS]	GROS
Dairy[DIRY]	DIRY
Forestry[FRST]	FRST
Livestock[LSTK]	LSTK
Seafood[SEAF]	SEAF
Soft[SOFT]	SOFT
OliveOil[OOLI]	OOLI
Potato[POTA]	POTA
Grain[GRIN]	GRIN
Coal[COAL]	COAL
Distillates[DIST]	DIST
InterEnergy[INRG]	INRG
LightEnd[LGHT]	LGHT
RenewableEnergy[RNNG]	RNNG
Electricity[ELEC]	ELEC
NaturalGas[NGAS]	NGAS
Oil[OILP]	OILP
Emissions[EMIS]	EMIS
CarbonRelated[CRBR]	CRBR
Weather[WTHR]	WTHR
Dry[DRYF]	DRYF
Wet[WETF]	WETF
ContainerShip[CSHP]	CSHP
Ammonia[AMMO]	AMMO
DiammoniumPhosphate[DAPH]	DAPH
Potash[PTSH]	PTSH
Sulphur[SLPH]	SLPH
Urea[UREA]	UREA
UreaAndAmmoniumNitrate[UAAN]	UAAN
Construction[CSTR]	CSTR
Manufacturing[MFTG]	MFTG
NonPrecious[NPRM]	NPRM
Precious[PRME]	PRME
Containerboard[CBRD]	CBRD
Newsprint[NSPT]	NSPT
Pulp[PULP]	PULP
RecoveredPaper[RCVP]	RCVP
Plastic[PLST]	PLST
Deliverable[DLVR]	DLVR
NonDeliverable[NDLV]	NDLV

Additional Sub Product	
enum_titles	enum
FeedWheat[FWHT]	FWHT
Soybeans[SOYB]	SOYB
Rapeseed[RPSD]	RPSD
Other[OTHR]	OTHR
Maize[CORN]	CORN
Rice[RICE]	RICE
RobustaCoffee[ROBU]	ROBU
Cocoa[CCOA]	CCOA
RawSugar[BRWN]	BRWN
WhiteSugar[WHSG]	WHSG
Other[OTHR]	OTHR
Lampante[LAMP]	LAMP
MillingWheat[MWHT]	MWHT
BaseLoad[BSLD]	BSLD
FinancialTransmissionRights[FITR	FITR
PeakLoad[PKLD]	PKLD
OffPeak[OFFP]	OFFP
Other[OTHR]	OTHR
GasPool[GASP]	GASP
LNG[LNGG]	LNGG
NCG[NCGG]	NCGG
TTF[TTFG]	TTFG
NBP[NBPG]	NBPG
Bakken[BAKK]	BAKK
Biodiesel[BDSL]	BDSL
Brent[BRNT]	BRNT
BrentNX[BRNX]	BRNX
Canadian[CNDA]	CNDA
Condensate[COND]	COND
Diesel[DSEL]	DSEL
Dubai[DUBA]	DUBA
ESPO[ESPO]	ESPO
Ethanol[ETHA]	ETHA
Fuel[FUEL]	FUEL
FuelOil[FOIL]	FOIL
Gasoil[GOIL]	GOIL
Gasoline[GSLN]	GSLN
HeatingOil[HEAT]	HEAT
JetFuel[JTFL]	JTFL
Kerosene[KERO]	KERO

Additional Sub Product	
enum_titles	enum
LightLouisianaSweet[LLSO	LLSO
Mars[MARS]	MARS
Naphta[NAPH]	NAPH
NGL[NGLO]	NGLO
Tapis[TAPI]	TAPI
WTI[WTIO]	WTIO
Urals[URAL]	URAL
CER[CERE]	CERE
ERU[ERUE]	ERUE
EUA[EUAE]	EUAE
EUAA[EUAA]	EUAA
Other[OTHR]	OTHR
DryBulkCarrier[DBCR]	DBCR
Tanker[TNKR]	TNKR
Aluminium[ALUM]	ALUM
AluminiumAlloy[ALUA]	ALUA
Cobalt[CBLT]	CBLT
Copper[COPR]	COPR
IronOre[IRON]	IRON
Molybdenum[MOLY]	MOLY
NASAAC[NASC]	NASC
Nickel[NICK]	NICK
Steel[STEL]	STEL
Tin[TINN]	TINN
Zinc[ZINC]	ZINC
Other[OTHR]	OTHR
Lead[LEAD]	LEAD
Gold[GOLD]	GOLD
Other[OTHR]	OTHR
Palladium[PLDM]	PLDM
Platinum[PTNM]	PTNM
Silver[SLVR]	SLVR

Appendix 4

Naming convention differences between RTS 23 (EU 2017/585) Table 2 and the DSB OTC ISIN.

Base Product	ISO 20022		RTS23	DSB OTC ISIN
	Sub Product			
Agricultural	GrainOilSeed	GrainOilSeeds	Grains and Oil Seeds	GrainOilSeed
	Soft	Softs	Softs	Soft
Energy	LightEnd	LightEnds	Light Ends	LightEnd
	Carbon	Carbon	-	-
Environmental	Emissions	Emission	Emissions	Emissions
Fertilizer	UreaAndAmmoniumNitrate	UreaAndAmmoniumNitrite	Urea and Ammonium Nitrate	UreaAndAmmoniumNitrate
Freight	ContainerShip	ContainerShip	Container Ships	ContainerShip
OtherC10	Deliverable	Deliverable	-	Deliverable
	NonDeliverable	NonDeliverable	-	NonDeliverable

Sub Product	ISO 20022		RTS23	DSB OTC ISIN
	Additonal Sub Product			
Dry	DryBulkCarrier	DryBulkCarrier	Dry bulk carriers	DryBulkCarrier