

Derivatives Service Bureau (UPI)
CHANGE REQUEST FORM

Version	State	Author	Date	Description
1	Draft	M. Surop	17 May 2021	Initial Document
2	Draft	M. Surop	07 June 2021	Update Validation, Derivation and Comments
3	Draft	M. Surop	23 June 2021	Update ToR, Templates Layout, Product Definition, Comment & ISO 4914 Equivalence
4	Draft	M. Surop	19 July 2021	Removed active hyperlinks in Attribute Data Dictionary; Amended References section with standard text; Updated Record Template Layout & GUI details; Removed Short Name comment in the Comment section.

Title	COMMODITIES SWAP Multi Exotic Swap Template Definition		
Background	<p>The following CRF presents a specification for the generation and retrieval of a Unique Product Identifier for the following product:</p> <ul style="list-style-type: none"> Commodities : Swap : Multi_Exotic_Swap 	DSB-ID	UPI-0334
		Type	New Template
		Owner	M. Surop
		Version	4
		State	Draft
Terms of Reference			
Scope	<ul style="list-style-type: none"> This CRF specifies the product definition required for the generation / retrieval of a UPI only. This CRF covers both the input (Request) and output (Record) templates. Support for local jurisdiction / alternate underlier identifier input is currently out of scope. Support for CFI 2019 values is currently out of scope. 		
Requirements	<ul style="list-style-type: none"> The product definition will conform to ISO 4914 (UPI). Where possible, the product definition is to be based on the attributes, values and behaviour of the equivalent OTC ISIN. The product definition will return a product short name (FISN). All UPI records stored on the DSB RDL will include the ISO 10962 (CFI) code associated with the UPI along with an equivalent text value for all attributes that are included in the definition of the CFI. 		
Dependencies	<ul style="list-style-type: none"> This specification is dependent on final sign-off of the ISO 4914 (UPI) specification. This specification is dependent on PC approval for the use of the OTC ISIN definitions as a basis for the UPI. This specification is dependent on PC approval for the inclusion of ISO 4914 (UPI) conditional attributes. This specification is dependent on TAC Approval for the DSB approach to ISO 10962 (CFI:2019) migration. This specification is dependent on the provision of a human-readable alias for the primary underlier for inclusion in the Short Name (FISN) and a human-readable alias for the Contract Specification. The format of the Short Name is dependent upon the outcome of the ISO 18774 (FISN) systematic review. 		
Assumptions	<ul style="list-style-type: none"> This specification assumes that, unless stated, all values and behaviours are based on those of the equivalent OTC ISIN product definition. This specification assumes that no input values are to be defaulted by the system. This specification is based on the current ISO 4914 (UPI) specification (CD) – including attributes that are not currently supported by the equivalent OTC ISIN. This specification is based on the DSB's current equivalent OTC ISIN product definition. This specification is based on the attributes and values defined in ISO 10962 (CFI:2015). In order to provide an example Short Name, this specification defines a format for this attribute that may not conform to the eventually agreed FISN format for the UPI. This specification assumes that the Short Name is defined using the same attributes (where available) as the OTC ISIN Short Name. Where possible, this specification derives GUI details from the ISO 4914 (UPI) specification for attributes that are not included in the current OTC ISIN product definition. The display information in the GUI for the existing attributes (and values) are taken from the OTC ISIN. If such information contains an "ISIN" in the description, replace the value into "UPI". 		

	<ul style="list-style-type: none"> The specification for UPI does not include expiry date as part of the attributes, hence "expired" status does not apply. The specification of Base Product is based on the DSB’s current equivalent OTC ISIN product definition that follows enumerated values based on RTS 23 (EU 2017/585) Table 2 rather than the ISO 20022. The solution assumes that all multi exotics are only used to support a product based on multiple underliers (i.e., Basket). Therefore, it is not required to define the individual underliers. The specification of individual underlying identifiers and their sources is not required as part of the definition of a product based on a custom basket – as defined in the ISO 4914 (UPI) specification.
--	--

Request Template Layout

Section	Attribute	Format	Cat	Example Value	Validation / Derivation	Enum Source	Origin
Header Section	Asset Class	Set	M	Commodities		CFI:2015 Char#2 (ST****)	ISIN
	Instrument Type	Set	M	Swap		CFI:2015 Char#1 (ST****)	ISIN
	Product	Set	M	Multi_Exotic_Swap			ISIN
	Level	Set	M	UPI			NEW
Attribute Section	Base Product	Enum	M	MCEX	[AGRI; NRGY; ENVR; FRGT; FRTL; etc.]	RTS 23 (EU 2017/585) Table 2	ISIN
	Return or Payout Trigger	Enum	M	Contract for Difference (CFD)	[Contract for Difference (CFD); Total Return]	CFI:2015 Char#4 (ST****)	ISIN
	Delivery Type	Enum	M	CASH	[CASH; PHYS; OPTL]	ISO 20022	ISIN

Record Template Layout

Section	Attribute	Format	Cat	Example Value	Validation / Derivation	Enum Source	Origin
Header Section	Asset Class	Set	M	Commodities		CFI:2015 Char#2 (ST****)	ISIN
	Instrument Type	Set	M	Swap		CFI:2015 Char#1 (ST****)	ISIN
	Product	Set	M	Multi_Exotic_Swap			ISIN
	Level	Set	M	UPI			NEW
	Template Version	Integer	D	1			ISIN
Attribute Section	Base Product	Enum	M	MCEX	[AGRI; NRGY; ENVR; FRGT; FRTL; etc.]	RTS 23 (EU 2017/585) Table 2	ISIN
	Return or Payout Trigger	Enum	M	Contract for Difference (CFD)	[Contract for Difference (CFD); Total Return]	CFI:2015 Char#4 (ST****)	ISIN
	Delivery Type	Enum	M	CASH	[CASH; PHYS; OPTL]	ISO 20022	ISIN
Identifier Section	UPI	String	D	QZJM6TLRS520	UPI	ISO 4914	NEW
	Status	String	D	New			ISIN
	Status Reason	String	D	<null>	Not applicable to a New record		ISIN
	Last Update Date Time	DtTm	D	2021-05-17T03:52:23	YYYY-MM-DDThh:mm:ss		ISIN
Derived Section	Classification Type	String	D	STQXCX	See CRF (Derivations)	ISO 10962: 2015	ISIN
	Short Name	String	D	NA/Swap MCEX	See CRF (Derivations)	ISO 18774: 2015	NEW
	Underlier Characteristic	String	D	Basket	Fixed value	Internal	NEW
	Underlying Asset Type	String	D	Multi Commodity	See CRF (Derivations)	CFI:2015 Char#3 (ST****)	ISIN
	CFI Delivery Type	String	D	Cash	See CRF (Derivations)	CFI:2015 Char#6 (ST****)	NEW

Product Definition			
Attributes	See Template Layout (above).		
Validation	Not Required.		
Normalization	Not Required.		
Attribute Data Dictionary	This section provides the exact reference or source of the attribute.		
	Full Name	Source	
	Type		
	Delivery Type	ISO 20022 FinancialInstrumentReportingReferenceDataReportV01	Enums [CASH; PHYS; OPTL]
	CFI Delivery Type	ISO 10962 Classification of financial instruments (CFI code)	Enums [Cash; Physical; Elect at Settlement]
	Return or Payout Trigger	ISO 10962 Classification of financial instruments (CFI code)	Enums [Contract for Difference (CFD); Total Return]
Base Product	RTS23 (EU 2017/585) Table 2 <i>Note: Please see Appendix below for corresponding enum_titles of enum values.</i>	Max35Text (based on string) minLength: 1 maxLength: 35	
This section provides additional details to the derivation logic specified in the Template Layout sections (above).			

<p>Derivation</p>	<p>Underlying Asset Type</p>	<p>The following underlying asset type derivations will apply based on Underlier Characteristic:</p> <ul style="list-style-type: none"> • Set the Underlying Asset Type based on the input Base Product: <ul style="list-style-type: none"> ○ AGRI → "Agriculture" ○ NRGY → "Energy" ○ ENVR → "Environmental" ○ FRGT → "Freight" ○ FRTL → "Fertilizer" ○ INDP → "Other" ○ INFL → "Other" ○ OEST → "Other" ○ METL → "Metals" ○ MCEX → "Multi Commodity" ○ PAPR → "Paper" ○ POLY → "Polypropylene Products" ○ OTHC → "Other" ○ OTHR → "Other"
	<p>Classification Type</p>	<p>Concatenation of the following attributes/values:</p> <ul style="list-style-type: none"> • Instrument Type: "S" • Asset Class: "T" • Underlying Asset Type: Derived.UnderlyingAssetType <ul style="list-style-type: none"> - Agriculture → A - Energy → J - Environmental → N - Freight → G - Fertilizer → S - Metals → K - Multi Commodity → Q - Paper → T - Polypropylene products → P - Other → M • Return or Payout Trigger: from Request.ReturnorPayoutTrigger... <ul style="list-style-type: none"> - Contract for Difference (CFD) → C - Total Return → T • Not applicable/undefined: "X" • Delivery Type: from Request.DeliveryType... <ul style="list-style-type: none"> - CASH → C - PHYS → P - OPTL → E <p>E.g.: "STQCXC"</p>
	<p>Short Name</p>	<p>Concatenation of the following attributes/values:</p> <ul style="list-style-type: none"> • Issuer: "NA/" • Instrument Type: "Swap" (fixed value) • Base Product: from Request.BaseProduct... <ul style="list-style-type: none"> - AGRI → AGRI - NRGY → NRGY - ENVR → ENVR - FRGT → FRGT - FRTL → FRTL - INDP → INDP - INFL → INFL - OEST → OEST - METL → METL - MCEX → MCEX - PAPR → PAPR - POLY → POLY - OTHC → OTHC - OTHR → OTHR <p><i>Note: Please see Appendix below for corresponding enum_titles of enum values.</i></p> <p>E.g.: "NA/Swap MCEX"</p>

		<p><i>Note: The Short Name is based on the OTC ISIN that excludes the following fields:</i></p> <ul style="list-style-type: none"> - Notional Currency - Expiry Date 		
	CFI Delivery Type	Derived from the input Delivery Type... <ul style="list-style-type: none"> • CASH → "Cash" • PHYS → "Physical" • OPTL → "Elect at Settlement" 		
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)	
	Underlier Characteristic	Underlier Characteristic	An attribute that is used to specify whether the product is based on a single or multiple underliers.	
	UPI	Identification	Unique Product Identifier (ISO 4914).	
	CFI Delivery Type	CFI Delivery Type	The Delivery Type as defined by CFI code: ISO 10962 <ul style="list-style-type: none"> • As defined by CFI Code: ISO 10962 	
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	<ul style="list-style-type: none"> • Existing OTC ISIN product definition methodology of the Short Name abbreviation (Issuer of TV + "/" + Instrument Type) for Rates and Commodities have "NA/Swap"; Foreign_Exchange and Equity have "NA/Swaps" whereas Credit has "NA/CDS". • In DSB OTC ISIN, the Sub product and additional sub product attributes are included in the record as blank fields, while in UPI these attributes will be removed as it is not included in the request template. 			
ISO 4914 Equivalence	ISO 4914		Request Attribute	Record Attribute
	Asset Class	M	Asset Class	
	Instrument type	M	Instrument Type	
	Delivery type	M	Delivery Type	Delivery Type
				CFI Delivery Type
	Return, pricing method or payout trigger	M	Return or Payout Trigger	
	Underlier ID*	C	Not Required	
	Underlier ID source*	C	Not Required	
	Underlier type	M	Base Product	
	Underlier sub-type (first level)**	M	Not Required	Underlying Asset Type
Underlier sub-type (second level)***	C	Not Required		

*Underlier ID/Source are not required for a custom basket defined in the ISO 4914 (UPI) specification.

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

***Underlier sub-type (second level) is not required, refer to comments above.

Appendix

Listed below are the corresponding enum_titles for Base Product 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