

Derivatives Service Bureau (UPI)
CHANGE REQUEST FORM

Version	State	Author	Date	Description
1	Draft	J. Lim	05 May 2021	Initial Document
2	Draft	J. Lim	21 Jul 2021	Updated attribute data dictionary and reference
3	Draft	M.A. Gariplan	15 Dec 2021	Updated Classification Type derivation sample

Title	FOREIGN EXCHANGE SWAP FX 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"> Foreign_Exchange : Swap : FX_Swap 	DSB-ID	UPI-0293
		Type	New Template
		Owner	J.Lim
		Version	3
		State	Draft
Terms of Reference			
Scope	<ul style="list-style-type: none"> This CRF specifies the product definition required for the generation / retrieval of a UPI only. This CRF covers both the input (Request) and output (Record) templates. Support for local jurisdiction / alternate underlier identifier input is currently out of scope. Support for CFI 2019 values is currently out of scope. 		
Requirements	<ul style="list-style-type: none"> The product definition will conform to ISO 4914 (UPI). Where possible, the product definition is to be based on the attributes, values and behaviour of the equivalent OTC ISIN. The product definition will return a product short name (FISN). All UPI records stored on the DSB RDL will include the ISO 10962 (CFI) code associated with the UPI along with an equivalent text value for all attributes that are included in the definition of the CFI. 		
Dependencies	<ul style="list-style-type: none"> This specification is dependent on final sign-off of the ISO 4914 (UPI) specification. This specification is dependent on PC approval for the use of the OTC ISIN definitions as a basis for the UPI. This specification is dependent on PC approval for the inclusion of ISO 4914 (UPI) conditional attributes. This specification is dependent on TAC Approval for the DSB approach to ISO 10962 (CFI:2019) migration. This specification is dependent on the provision of a human-readable alias for the primary underlier for inclusion in the Short Name (FISN) and a human-readable alias for the Contract Specification. The format of the Short Name is dependent upon the outcome of the ISO 18774 (FISN) systematic review. 		
Assumptions	<ul style="list-style-type: none"> This specification assumes that, unless stated, all values and behaviours are based on those of the equivalent OTC ISIN product definition. This specification assumes that no input values are to be defaulted by the system. This specification is based on the current ISO 4914 (UPI) specification (CD) – including attributes that are not currently supported by the equivalent OTC ISIN. This specification is based on the DSB's current equivalent OTC ISIN product definition. This specification is based on the attributes and values defined in ISO 10962 (CFI:2015). In order to provide an example Short Name, this specification defines a format for this attribute that may not conform to the eventually agreed FISN format for the UPI. This specification assumes that the Short Name is defined using the same attributes (where available) as the OTC ISIN Short Name. Where possible, this specification derives GUI details from the ISO 4914 (UPI) specification for attributes that are not included in the current OTC ISIN product definition. The display information in the GUI for the existing attributes (and values) are taken from the OTC ISIN. If such information contains an "ISIN" in the description, replace the value into "UPI". The specification for UPI does not include expiry date as part of the attributes, hence "expired" status does not apply. 		

	<ul style="list-style-type: none"> The specification for Settlement Currency as a mandatory attribute for all FX OTC Derivatives is subject for review and approval by CDIDE as part of ISO 4914 standard.
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Request Template Layout

Section	Attribute	Format	Cat	Example Value	Validation / Derivation	Enum Source	ORIGIN
Header Section	Asset Class	Set	M	Foreign_Exchange		CFI:2015 Char#2 (SF****)	ISIN
	Instrument Type	Set	M	Swap		CFI 2015 Char#1 (SF****)	ISIN
	Product	Set	M	FX_Swap			ISIN
	Level	Set	M	UPI			NEW
Attribute Section	Underlier ID	Enum	M	AUD	ISOCurrencyCode.json	ISO 4217 (3-Char CCY)	NEW
	Underlier ID Source	String	M	CCY	[CCY]	internal	NEW
	Other Underlier ID	Enum	M	USD	ISOCurrencyCode.json	ISO 4217 (3-Char CCY)	NEW
	Other Underlier ID Source	String	M	CCY	[CCY]	internal	NEW
	Delivery Type	Enum	M	PHYS	[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	Foreign_Exchange		CFI:2015 Char#2 (SF****)	ISIN
	Instrument Type	Set	M	Swap		CFI 2015 Char#1 (SF****)	ISIN
	Product	Set	M	FX_Swap			ISIN
	Level	Set	M	UPI			NEW
	Template Version	Integer	D	1			ISIN
Attribute Section	Notional Currency	Enum	M	AUD	ISOCurrencyCode.json	ISO 4217 (3-Char CCY)	ISIN
	Other Notional Currency	Enum	M	USD	ISOCurrencyCode.json	ISO 4217 (3-Char CCY)	ISIN
	Delivery Type	Enum	M	PHYS	[PHYS;OPTL]	ISO 20022	ISIN
Identifier Section	UPI	String	D	OZGK72481GT4	See UPI Document (UPI Code structure and Annex C)	ISO 4914	NEW
	Status	String	D	New			ISIN
	Status Reason	String	D	<null>	Not applicable to a New record		ISIN
	Last Update Date Time	DdTm	D	2021-02-23T00:00:13	YYYY-MM-DDThh:mm:ss		ISIN
Derived Section	Classification Type	String	D	SFCXXN	See CRF (Derivations)	ISO 10962:2015	ISIN
	Short Name	String	D	NA/Swaps AUD USD	See CRF (Derivations)	ISO 18774: 2015	NEW
	Underlying Asset Type	String	D	Forward-Forward Swap	Fixed value	CFI:2015 Char#3 (SFC****)	ISIN
	CFI Delivery Type	String	D	Physical	See CRF (Derivations)	CFI:2015 Char#6 (SF****)	NEW

Product Definition			
Attributes	See Template Layout (above).		
Validation	<ol style="list-style-type: none"> Notional Currency and Other Notional Currency <ul style="list-style-type: none"> 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". 		
Attribute Data Dictionary	This section provides the exact reference or source of the attribute.		
	Full Name	Source	Type
	Delivery Type	ISO 20022 FinancialInstrumentReportingReferenceDataReportV01	Enums [PHYS; OPTL]
	CFI Delivery Type	ISO 10962 Classification of financial instruments (CFI code)	Enums [Physical; Non-Deliverable]
	Notional Currency	ISO 4217 Currency Codes	Pattern: [A-Z]{3,3}
Other Notional Currency			
Normalization	<ol style="list-style-type: none"> Notional Currency and Other Notional Currency The input notional and other notional currency submitted by users need to normalize to ensure that same UPI is returned for a same set of attributes. <ul style="list-style-type: none"> 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 the fields as below: 		

	<table border="1"> <tr> <td>Notional Currency</td> <td>→</td> <td>Other Notional Currency</td> </tr> <tr> <td>Other Notional Currency</td> <td>→</td> <td>Notional Currency</td> </tr> </table>	Notional Currency	→	Other Notional Currency	Other Notional Currency	→	Notional Currency
Notional Currency	→	Other Notional Currency					
Other Notional Currency	→	Notional Currency					
Derivation	This section provides additional details to the derivation logic specified in the Template Layout sections (above).						
	Classification on Type	<p>Concatenation of the following attributes/values:</p> <ul style="list-style-type: none"> Instrument Type: "S" Asset Class: "F" Underlying Asset Type: "C" Not applicable/undefined: "X" Not applicable/undefined: "X" Delivery Type: from Request.DeliveryType <ul style="list-style-type: none"> - PHYS → P - OPTL → N <p>E.g.: "SFCXXN"</p>					
	Short Name	<p>Concatenation of the following attributes/values:</p> <ul style="list-style-type: none"> Issuer Name: "NA/" Instrument Type: "Swaps" (fixed value) Notional Currency: "AUD" (from output value) Other Notional Currency: "USD" (from output value) <p>E.g.: "NA/Swaps AUD USD".</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"> - Expiry Date 					
	CFI Delivery Type	<p>Derived from the input Delivery Type...</p> <ul style="list-style-type: none"> PHYS → "Physical" OPTL → "Non-Deliverable" 					
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 ID	Underlier ID	An identifier that can be used to determine the asset(s), index (indices) or benchmark underlying a contract or, in the case of a foreign exchange derivative, identification of the currency pair or index				
	Underlier ID Source	Underlier ID Source	The origin, or publisher, of the associated underlier ID.				
	Other Underlier ID	Other Underlier ID	An identifier that can be used to determine the asset(s), index (indices) or benchmark underlying a contract or, in the case of a foreign exchange derivative, identification of the currency pair or index				
	Other Underlier ID Source	Other Underlier ID Source	The origin, or publisher, of the associated underlier ID.				
	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"> Text values in the Short Name are taken from "ISO Abbrev w acronyms-Final_v0.5.5.FINAL." The Settlement Currency for the UPI will follow the behaviour / definition of the equivalent OTC ISIN templates – including the attribute where the OTC ISIN has one and excluding it where OTC ISIN excludes it. 						

	<ul style="list-style-type: none"> Existing OTC ISIN product definition methodology of the Short Name abbreviation (Issuer of TV + "/" + Instrument Type) for Equity and Foreign_Exchange Asset Class has "NA/Swaps" whereas Rates has "NA/Swap". 			
ISO 4914 Equivalence	ISO 4914		Request Attribute	Record Attribute
	Asset Class	M	Asset Class	Asset Class
	Instrument Type	M	Instrument Type	Instrument Type
	Delivery Type	M	Delivery Type	Delivery Type
				CFI Delivery Type
	Settlement Currency*	M	Not Required	
	Underlier ID	C	Underlier ID	Notional Currency
		C	Other Underlier ID	Other Notional Currency
	Underlier ID source	C	Underlier ID source	Not Required
		C	Other Underlier ID source	Not Required
Underlier Type	M	Not Required	Underlying Asset Type	

*Settlement Currency does not apply for this product, refer on comment section above.