

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

Version	State	Author	Date	Description
1	Draft	J. Lim	07 Apr 2021	Initial Document
2	Draft	J. Lim	21 Jul 2021	Updated attribute data dictionary and reference

Title	FOREIGN EXCHANGE FORWARD NDF Template Definition		
<b>Background</b>	<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"> <li><b>Foreign_Exchange : Forward : NDF</b></li> </ul>	<b>DSB-ID</b>	<b>UPI-0150</b>
		<b>Type</b>	New Template
		<b>Owner</b>	J.Lim
		<b>Version</b>	2
		<b>State</b>	Draft
<b>Terms of Reference</b>			
<b>Scope</b>	<ul style="list-style-type: none"> <li>This CRF specifies the product definition required for the generation / retrieval of a UPI only.</li> <li>This CRF covers both the input (Request) and output (Record) templates.</li> <li>Support for local jurisdiction / alternate underlier identifier input is currently out of scope.</li> <li>Support for CFI 2019 values is currently out of scope.</li> </ul>		
<b>Requirements</b>	<ul style="list-style-type: none"> <li>The product definition will conform to ISO 4914 (UPI).</li> <li>Where possible, the product definition is to be based on the attributes, values and behaviour of the equivalent OTC ISIN.</li> <li>The product definition will return a product short name (FISN).</li> <li>The product definition will support the entry of and/or access to all CFI attributes and names for the product.</li> </ul>		
<b>Dependencies</b>	<ul style="list-style-type: none"> <li>This specification is dependent on final sign-off of the ISO 4914 (UPI) specification.</li> <li>This specification is dependent on PC approval for the use of the OTC ISIN definitions as a basis for the UPI.</li> <li>This specification is dependent on PC approval for the inclusion of ISO 4914 (UPI) conditional attributes.</li> <li>This specification is dependent on TAC Approval for the DSB approach to ISO 10962 (CFI:2019) migration.</li> <li>This specification is dependent on 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.</li> <li>The format of the Short Name is dependent upon the outcome of the ISO 18774 (FISN) systematic review.</li> </ul>		
<b>Assumptions</b>	<ul style="list-style-type: none"> <li>This specification assumes that, unless stated, all values and behaviours are based on those of the equivalent OTC ISIN product definition.</li> <li>This specification assumes that no input values are to be defaulted by the system.</li> <li>This specification is based on the current ISO 4914 (UPI) specification (CD) – including attributes that are not currently supported by the equivalent OTC ISIN.</li> <li>This specification is based on the DSB's current equivalent OTC ISIN product definition.</li> <li>This specification is based on the attributes and values defined in ISO 10962 (CFI:2015).</li> <li>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.</li> <li>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.</li> <li>The specification for UPI does not include expiry date as part of the attributes, hence "expired" status does not apply.</li> <li>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".</li> </ul>		

**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	ISIN
	Instrument Type	Set	M	Forward		CFI 2015 Char#1	ISIN
	Product	Set	M	NDF			ISIN
	Level	Set	M	UPI			NEW
Attribute Section	Underlier ID	Enum	M	USD	ISOCurrencyCode.json	ISO 4217 (3-Char CCY)	NEW
	Underlier ID Source	String	M	CCY	[CCY]	internal	NEW
	Other Underlier ID	Enum	M	EUR	ISOCurrencyCode.json	ISO 4217 (3-Char CCY)	NEW
	Other Underlier ID Source	String	M	CCY	[CCY]	internal	NEW
	Settlement Currency	Enum	M	EUR	ISOCurrencyCode.json	ISO 4217 (3-Char CCY)	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	ISIN
	Instrument Type	Set	M	Forward		CFI 2015 Char#1	ISIN
	Product	Set	M	NDF			ISIN
	Level	Set	M	UPI			NEW
	Template Version	Integer	D	1			ISIN
Attribute Section	Notional Currency	Enum	M	EUR	ISOCurrencyCode.json	ISO 4217 (3-Char CCY)	ISIN
	Other Notional Currency	Enum	M	USD	ISOCurrencyCode.json	ISO 4217 (3-Char CCY)	ISIN
	Settlement Currency	Enum	M	EUR	ISOCurrencyCode.json	ISO 4217 (3-Char CCY)	ISIN
Identifier Section	UPI	String	D	QZGK726P32G2	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	JFTXFC	See CRF (Derivations)	ISO 10962:2015	ISIN
	Short Name	String	D	NA/Fwd NDF EUR USD	See CRF (Derivations)	ISO 18774: 2015	NEW
	Underlying Asset Type	String	D	Spot	Fixed value	CFI:2015 Char#3 (JFT***)	ISIN
	Return or Payout Trigger	String	D	Forward price of underlying instrument	Fixed value	CFI:2015 Char#5 (JF**F*)	ISIN
	Delivery Type	String	D	CASH	Fixed value	ISO 20022	NEW
	CFI Delivery Type	String	D	Cash	Fixed value	CFI:2015 Char#6 (JF***C)	NEW

Product Definition									
<b>Attributes</b>	See Template Layout (above).								
<b>Validation</b>	1. Notional Currency and Other Notional Currency 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>Attribute Data Dictionary</b>	This section provides the exact reference or source of the attribute.								
	<b>Full Name</b>	<b>Source</b>	<b>Type</b>						
	Notional Currency	ISO 4217 Currency Codes	Pattern: [A-Z]{3,3}						
	Other Notional Currency								
Settlement Currency									
<b>Normalization</b>	1. <b>Notional Currency and Other Notional Currency</b> 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"> <li>Order the "Notional currency" and "Other Notional Currency" alphabetically.</li> <li>If the "Notional Currency" is first alphabetically, then record it as "Notional Currency".</li> <li>If the "Notional Currency" is not first alphabetically, then record the fields as below:</li> </ul> <table border="1" style="margin-left: 20px;"> <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							
<b>Derivation</b>	This section provides additional details to the derivation logic specified in the Template Layout sections (above).								
	<b>Classification Type</b>	Concatenation of the following attributes/values: <ul style="list-style-type: none"> <li>Instrument Type: "J"</li> <li>Asset Class: "F"</li> </ul>							

		<ul style="list-style-type: none"> <li>Underlying Asset Type: "T"</li> <li>Not applicable/undefined: "X"</li> <li>Return or Payout Trigger: "F"</li> <li>Delivery Type: "C"</li> </ul> <p>E.g.: "JFTXFC"</p>		
	<b>Short Name</b>	<p>Concatenation of the following attributes/values:</p> <ul style="list-style-type: none"> <li>Issuer Name: "NA/"</li> <li>Instrument Type: "Fwd" (fixed value)</li> <li>Product: "NDF" (fixed value)</li> <li>Notional Currency: "EUR" (from output value)</li> <li>Other Notional Currency: "USD" (from output value)</li> </ul> <p>E.g.: "NA/Fwd NDF EUR 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"> <li>- Expiry Date</li> </ul>		
<b>GUI Details</b>	The following section provides display information for any attributes (and values) that are not included in the related OTC ISIN definition.			
	<b>Attribute</b>	<b>Display Name</b>	<b>Tool Tip (and • value elaboration)</b>	
	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 • Cash	The Delivery Type as defined by CFI code: ISO 10962 • As defined by CFI Code: ISO 10962	
<b>Additional Information</b>				
<b>Reference</b>	References to external documents can be found on the DSB website at this address [ <a href="https://www.anna-dsb.com/upi-external-reference-documents/">https://www.anna-dsb.com/upi-external-reference-documents/</a> ].			
<b>Comments</b>	<ul style="list-style-type: none"> <li>Text values in the Short Name are taken from "ISO Abbrev w acronyms-Final_v0.5.5.FINAL."</li> <li>For NDF products, only "CASH" is supported as Delivery type and will display the value in the derived section. The value will differ in the request since DSB OTC ISIN added the delivery type in the request attributes but does not allow to choose "Physical" as Delivery type.</li> </ul>			
<b>ISO 4914 Equivalence</b>	<b>ISO 4914</b>		<b>Request Attribute</b>	<b>Record Attribute</b>
	Asset Class	M	Asset Class	Asset Class
	Instrument Type	M	Instrument Type	Instrument Type
	Delivery Type	M	Not Required	Delivery Type
				CFI Delivery Type
	Return, pricing method or payout trigger	M	Not Required	Return or Payout Trigger
	Settlement currency	M	Settlement Currency	Settlement Currency
Underlier ID	C	Underlier ID	Notional Currency	
		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
	Underlying contract tenor period *	C	Not Required	
	Underlying contract tenor period multiplier *	C	Not Required	

\*Underlying Contract Tenor Period / Multiplier applies only to a derivative contract underlying another derivative. For this product, the underlying is a currency pair and so these attributes are not required.