

DERIVATIVES SERVICE BUREAU

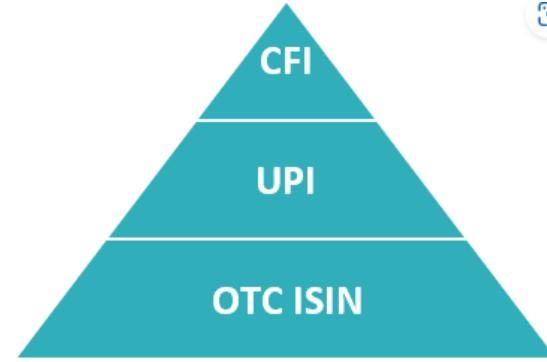
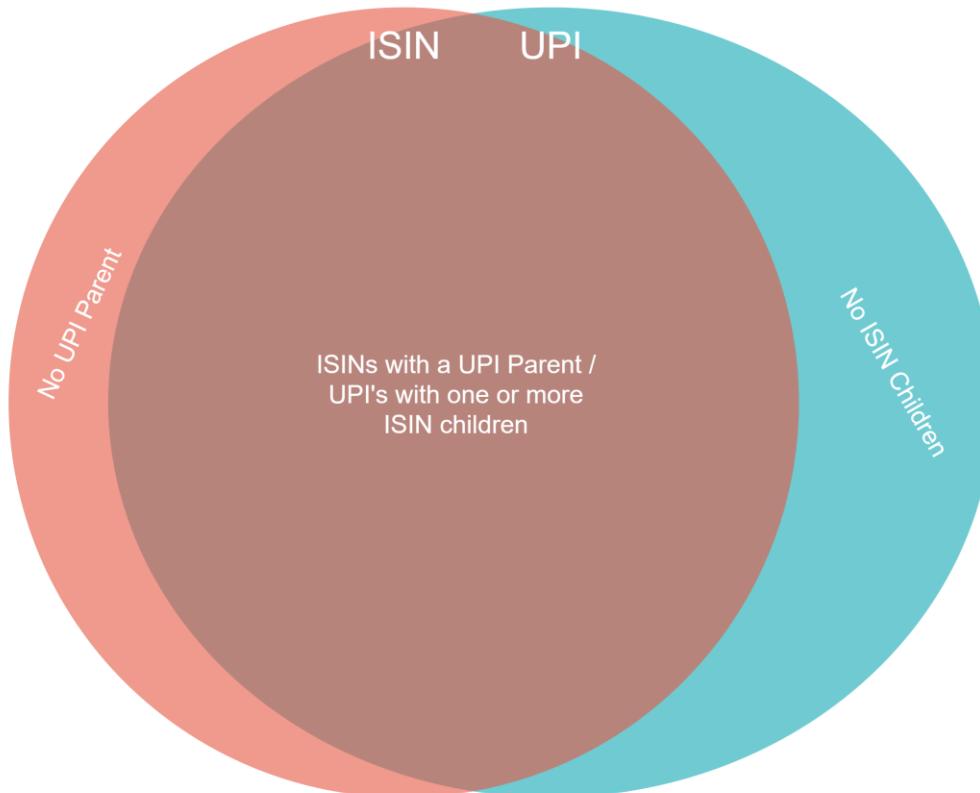
OTC ISIN PRE-POPULATION WITH THE UPI IDENTIFIER

22nd January 2024 – DSB Product Committee

MEMBER FINAL

Pre-Population Overview

The UPI Service will go live on Monday 16th October 2023. While the UPI Service is a totally separate service from the OTC ISIN Service, there is a hierarchical relationship between the UPI and the OTC ISIN, the UPI being the parent of the OTC ISIN. An OTC ISIN will have only one UPI parent, but a UPI may have none, one or many OTC ISIN children.



In terms of pure numbers, the OTC ISIN population will be significantly larger than the UPI population, the OTC ISIN being at the instrument level and the UPI being at the product level.

The diagram to the left is not to scale but highlights that there will be:

- A set of OTC ISIN records with no UPI parent (deleted/deprecated)
- A set of UPI's which are parents of OTC ISINs
- A set of UPI's that do not have associated OTC ISIN records

Pre-Population Overview Continued

Looking at the UPI population the set of UPI's related to the OTC ISIN will be a subset of the entire UPI population. The diagram opposite, again, not to scale, shows this.

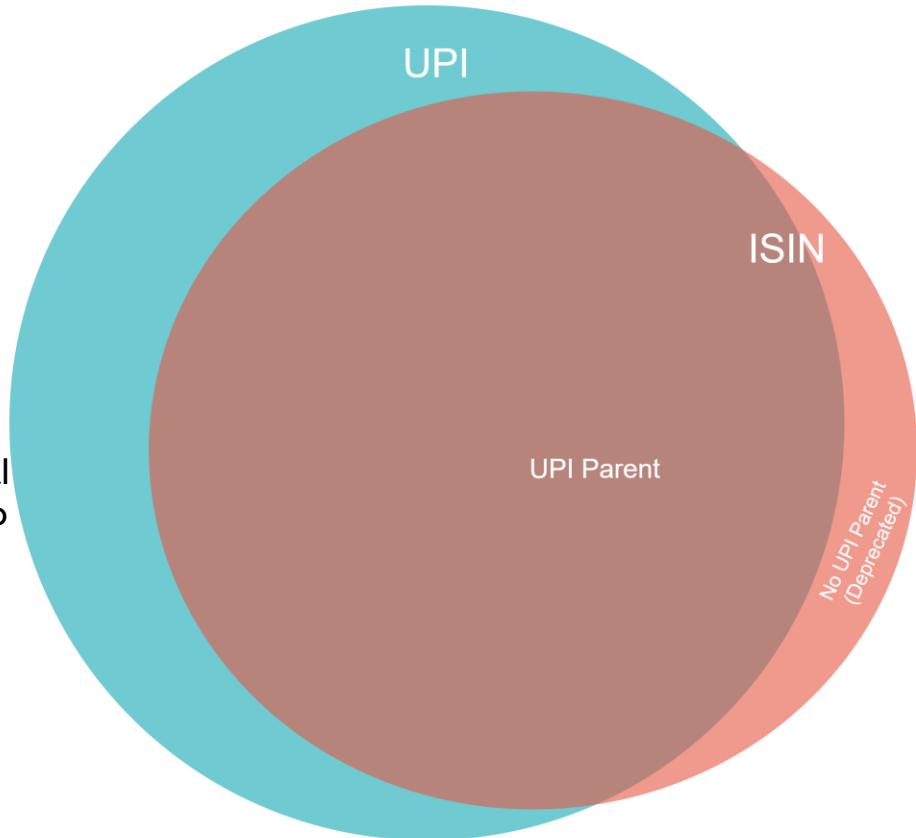
When the UPI Service goes live:

- Users of the UPI Service will be able to create new UPIs for all UPI templates
- Users of the OTC ISIN Service will continue to create new OTC ISINs and each new OTC ISIN will be linked to a UPI parent*. The UPI Identifier will be added to the OTC ISIN record as a new parent.

However, the existing OTC ISIN records will not have a UPI parent.

To address the absence of a UPI Identifier in the existing OTC ISIN records, as an additional service to OTC ISIN users, the DSB will undertake a Pre-population process to add UPIs to the existing OTC ISIN records. This process will:

- Commence when the UPI service goes live on 16 October 2023
- Attempt to assign a UPI Identifier to each existing OTC ISIN, creating a UPI where one does not already exist
- Consider all OTC ISIN records (active and expired) with no UPI assigned that do not have a status of "Deleted" or "Deprecated"
- Complete in time for the first regulatory mandate on 29th January 2024



Note: Due to the stricter UPI validation rules, some OTC ISINs cannot be assigned a UPI parent and will instead be updated with a status of "Deprecated"

Deprecation

If the Pre-population process* is unable to create a UPI parent for an OTC ISIN record, then the status of the OTC ISIN record will be updated to “Deprecated”. This will mean that the OTC ISIN record will not have a UPI parent assigned and users will not be able to obtain a UPI Identifier. The reasons why an OTC ISIN record could be deprecated are as follows:

#	Case description	ISIN Status	ISIN Status Reason
1	For non-swaption products, underlying ISIN's start with 2 letters that are not valid or underlying ISIN starts with EZ or QZ.	Deprecated	The underlying ISIN does not meet the requirements of the product template
2	Missing Option Exercise Style and Option Type	Deprecated	The Option Exercise Style and Option Type cannot be determined
3	Underlying asset class cannot be determined	Deprecated	The Underlying Asset Class cannot be determined
4	Missing Delivery Type	Deprecated	The Delivery Type cannot be determined
5	Rates Swaption, where - the underlying ISIN is not a Rates swap	Deprecated	The underlying ISIN does not meet the requirements of the product template
6	Commodity Swaption, where - the underlying ISIN is not a Rates swap	Deprecated	The underlying ISIN does not meet the requirements of the product template
7	Credit Index Swaption, where - the underlying ISIN asset class is not a Credit, - or the Instrument Type (of the underlying) is not a Swap - or the Product (of the underlying) is neither an Index nor a Tranche	Deprecated	The underlying ISIN does not meet the requirements of the product template
8	Credit Single Name Swaption, where - the underlying ISIN asset class is not a Credit, - or the Instrument Type (of the underlying) is not a Swap - or the Product (of the underlying) is either an Index or a Tranche	Deprecated	The underlying ISIN does not meet the requirements of the product template

Pre-Population Migration Order

The Pre-population process will run in a set order:

- All Swaps (Active OTC ISINs first, followed by Expired OTC ISINs)
 - Load the UPI version of the Swaps templates (see slide 12 for the full list)
 - During this time OTC ISIN users will:
 - Be able to obtain UPI identifiers for new OTC ISINs created using any of the swaps templates listed on slide 8
 - Not be able to obtain UPI identifiers for new OTC ISINs created that are not one of the swaps templates listed on slide 8
- All remaining templates (not listed on slide 12) (Active first, followed by Expired)
 - Load the UPI version of all remaining templates
 - At this point users will be able to obtain UPI identifiers for all new OTC ISINs created for all templates

Within each of the above categories, the templates will be sorted alphabetically by template name then by template version in descending order

The first step in the process is to load the UPI version of the OTC ISIN templates into the system

As soon as this version of the template is loaded the system will start generating UPIs for that template

Please note – Users of the UPI service can create UPI's for all UPI templates as soon as the service is launched. The restrictions above only relate to users of the OTC ISIN service.

Pre-Population Migration Order continued

Important:

- Until the UPI version of the OTC ISIN template is loaded into the system, the identifier engine will not generate UPI's for that template
- This means that users who have created OTC ISIN's after the system go-live, may not see UPI identifiers at the point of OTC ISIN creation
- Once the UPI version of the OTC ISIN template is loaded into the system, users will see UPI identifiers at the point of OTC ISIN creation
- However, the pre-population process will ensure that all OTC ISINs are processed
- Any OTC ISIN records that do not have a UPI identifier will be processed by the pre-population process with one of two possible outcomes:
 - A UPI identifier will be assigned to the OTC ISIN record
 - A UPI identifier cannot be assigned to the OTC ISIN record in which case the OTC ISIN record will be updated with a status of Deprecated
- The users will have to wait until the pre-population process has processed that specific OTC ISIN
- This also applies to OTC ISINs created for non-swap templates after the UPI Service launch on 16 October 2023 and before the non-swap UPI templates are loaded into the system

Notes:

- The Pre-population process is expected to complete by the first regulatory mandate at the end of January 2024
- Templates are being grouped into Swaps and Non-Swaps – Swaps must be processed first as the non-swaps can refer to the swaps (see slide 7)
- Within each of these two groups, priority is being given to Active (non-expired) ISINs
- This is to ensure UPI identifiers for Active ISINs are available as early as possible in the process
- Approximately 50% of the OTC ISIN population have a status of Expired

Swaps First – Why?

ISIN Swaption

```
{
  "Header": {
    "AssetClass": "Rates",
    "InstrumentType": "Option",
    "UseCase": "Swaption",
    "Level": "InstRefDataReporting"
  },
  "ISIN": {
    "ISIN": "EZHTNQWVL027",
    "Parents": {
      "UPI": "QZHFBQQ8H49F"
    },
    ...
  },
  "Derived": { ... },
  "Attributes": {
    "UnderlyingInstrumentISIN": "EZ97SZCH31G0",
    ...
  }
}
```

To ensure the relevant UPI parent references exist for OTC ISIN derivatives which reference an OTC ISIN underlying Swap.

Underlying ISIN (Swap)

```
{
  "Header": {
    "AssetClass": "Rates",
    "InstrumentType": "Swap",
    "UseCase": "Fixed_Float",
    "Level": "InstRefDataReporting"
  },
  "ISIN": {
    "ISIN": "EZ97SZCH31G0",
    "Parents": {
      "UPI": "QZJBD5V2H46M"
    },
    ...
  },
  "Derived": { ... },
  "Attributes": { ... }
}
```

UPI Swaption

```
{
  "Header": {
    "AssetClass": "Rates",
    "InstrumentType": "Option",
    "UseCase": "Swaption",
    "Level": "UPI"
  },
  "Identifier": {
    "UPI": "QZHFBQQ8H49F"
  },
  ...
  "Derived": { ... },
  "Attributes": {
    "UnderlyingInstrumentUPI": "QZJBD5V2H46M",
    ...
  }
}
```

Underlying UPI (Swap)

```
{
  "Header": {
    "AssetClass": "Rates",
    "InstrumentType": "Swap",
    "UseCase": "Fixed_Float",
    "Level": "UPI"
  },
  "Identifier": {
    "UPI": "QZJBD5V2H46M"
  },
  ...
  "Derived": { ... },
  "Attributes": { ... }
}
```

List of Existing Swap Templates (57)

Commodities (4)	Credit (17)	Rates (36)
Commodities.Swap.Basis_Swap.InstRefDataReporting.VI Commodities.Swap.Multi_Exotic_Swap.InstRefDataReporting.VI Commodities.Swap.Single_Index.InstRefDataReporting.VI Commodities.Swap.Swap.InstRefDataReporting.VI	Credit.Swap.ABS.InstRefDataReporting.VI Credit.Swap.Corporate.InstRefDataReporting.V2 Credit.Swap.Corporate.InstRefDataReporting.VI Credit.Swap.Index.InstRefDataReporting.V2 Credit.Swap.Index.InstRefDataReporting.VI Credit.Swap.Index_Tranche.InstRefDataReporting.V2 Credit.Swap.Index_Tranche.InstRefDataReporting.VI Credit.Swap.Loan.InstRefDataReporting.VI Credit.Swap.Municipal.InstRefDataReporting.V2 Credit.Swap.Municipal.InstRefDataReporting.VI Credit.Swap.Non_Standard.InstRefDataReporting.V3 Credit.Swap.Non_Standard.InstRefDataReporting.V2 Credit.Swap.Non_Standard.InstRefDataReporting.VI Credit.Swap.Sovereign.InstRefDataReporting.V2 Credit.Swap.Sovereign.InstRefDataReporting.VI Credit.Swap.Total_Return_Swap.InstRefDataReporting.V2 Credit.Swap.Total_Return_Swap.InstRefDataReporting.VI	Rates.Swap.Basis.InstRefDataReporting.V2 Rates.Swap.Basis.InstRefDataReporting.VI Rates.Swap.Basis_OIS.InstRefDataReporting.V2 Rates.Swap.Basis_OIS.InstRefDataReporting.VI Rates.Swap.Cross_Currency_Basis.InstRefDataReporting.V2 Rates.Swap.Cross_Currency_Basis.InstRefDataReporting.VI Rates.Swap.Cross_Currency_Fixed_Fixed.InstRefDataReporting.V2 Rates.Swap.Cross_Currency_Fixed_Fixed.InstRefDataReporting.VI Rates.Swap.Cross_Currency_Fixed_Float.InstRefDataReporting.V2 Rates.Swap.Cross_Currency_Fixed_Float.InstRefDataReporting.VI Rates.Swap.Cross_Currency_Fixed_Float_NDS.InstRefDataReporting.V2 Rates.Swap.Cross_Currency_Fixed_Float_NDS.InstRefDataReporting.VI Rates.Swap.Cross_Currency_Inflation_Swap.InstRefDataReporting.V2 Rates.Swap.Cross_Currency_Inflation_Swap.InstRefDataReporting.VI Rates.Swap.Cross_Currency_Zero_Coupon.InstRefDataReporting.V2 Rates.Swap.Cross_Currency_Zero_Coupon.InstRefDataReporting.VI Rates.Swap.Fixed_Fixed.InstRefDataReporting.V2 Rates.Swap.Fixed_Fixed.InstRefDataReporting.VI Rates.Swap.Fixed_Float.InstRefDataReporting.V2 Rates.Swap.Fixed_Float.InstRefDataReporting.VI Rates.Swap.Fixed_Float_OIS.InstRefDataReporting.V2 Rates.Swap.Fixed_Float_OIS.InstRefDataReporting.VI Rates.Swap.Fixed_Float_Zero_Coupon.InstRefDataReporting.V2 Rates.Swap.Fixed_Float_Zero_Coupon.InstRefDataReporting.VI Rates.Swap.Inflation_Basis.InstRefDataReporting.V2 Rates.Swap.Inflation_Basis.InstRefDataReporting.VI Rates.Swap.Inflation_Basis_YoY.InstRefDataReporting.VI Rates.Swap.Inflation_Basis_Zero_Coupon.InstRefDataReporting.V2 Rates.Swap.Inflation_Basis_Zero_Coupon.InstRefDataReporting.VI Rates.Swap.Inflation_Fixed_Float_YoY.InstRefDataReporting.V2 Rates.Swap.Inflation_Fixed_Float_YoY.InstRefDataReporting.VI Rates.Swap.Inflation_Fixed_Float_Zero_Coupon.InstRefDataReporting.VI Rates.Swap.Inflation_Swap.InstRefDataReporting.V2 Rates.Swap.Inflation_Swap.InstRefDataReporting.VI Rates.Swap.Non_Standard.InstRefDataReporting.V2 Rates.Swap.Non_Standard.InstRefDataReporting.VI

Please note that Equity and Foreign Exchange swap templates have not been included as they do not have swaptions associated with them.

Pre-Population Statistics

The following tables provide details of the most recent test run undertaken against a recent production copy of the OTC ISIN database with a population of 98 million ISINs:

Status	Rates	Credit	FX	Equity	Commodities	Other	Total
Migrated	24,414,191	854,459	24,658,977	46,414,222	707,133	106	97,049,088
Deprecated	3,564	2,637	126,717	368,787	191	*113,241	615,137
Ignored (Deleted)	6	0	4	9	3	0	22
Total:	24,417,761	857,096	24,785,698	46,783,018	707,327	113,347	97,664,247

The process generated the following UPI population:

Status	Rates	Credit	FX	Equity	Commodities	Other	Total
New	76,327	106,473	24,341	381,199	5,664	22	594,026

**The January 2023 product template release was introduced to address a problem with the Other templates, the ISIN's created since the release will go on to create a UPI parent however, the population of OTC ISINs created before the January 2023 release will be deprecated.*

Pre-Population File Download Delta Files

The pre-population process will feed two delta files:

- The existing delta file will be updated with any deprecated ISIN's, an example of a deprecated record added to the file can be seen below, the changes made by the process have been highlighted:

```
{"TemplateVersion":"1M1","Header": {"AssetClass": "Commodities", "InstrumentType": "Option", "UseCase": "Swaption", "Level": "InstRefD", "InstRefD": "ataReporting"}, "ISIN": {"ISIN": "EZ00534SBWM6", "Status": "Deprecated", "StatusReason": "The underlying ISIN does not meet the requirements of the product template", "LastUpdateTime": "2023-06-20T06:52:39"}, "Derived": {"FullName": "Commodities Swaption HH34KFNTF8S8 MZN 29970826", "ClassificationType": "HTODVE", "CommodityDerivativeIndicator": "TRUE", "IssuerorOperatoroftheTradingVenueIdentifier": "NA", "ShortName": "NA/O Swt Put MZN 29970826"}, "Attributes": {"NotionalCurrency": "MZN", "ExpiryDate": "2997-08-26", "UnderlyingInstrumentISIN": "HH34KFNTF8S8", "UnderlyingAssetType": "Options", "OptionType": "PUTO", "OptionExerciseStyle": "EURO", "ValuationMethodorTrigger": "Vanilla", "DeliveryType": "OPTL", "PriceMultiplier": 524710.8488359662}}
```

A sample data file can be seen here: <https://www.anna-dsb.com/download/sample-isin-daily-delta-file-with-deprecated-records/>

- A new migration delta file will be written to a separate folder, this will contain the ISIN's which have been updated with their parent UPI that day. An example of this can be seen below, again, the changes made by the process have been highlighted:

```
{"TemplateVersion": "1M1", "Header": {"AssetClass": "Commodities", "InstrumentType": "Swap", "UseCase": "Basis_Swap", "Level": "InstRefD", "InstRefD": "ataReporting"}, "ISIN": {"ISIN": "EZV4YX430WJ1", "Status": "Updated", "StatusReason": "Updated with UPI", "LastUpdateTime": "2023-06-08T03:14:31", "Parents": {"UPI": "QZZCCJZK8FJH"}}, "Derived": {"FullName": "Commodities Swap Basis_Swap OTHR OTHR USD 21001231", "ClassificationType": "STQCXC", "CommodityDerivativeIndicator": "TRUE", "IssuerorOperatoroftheTradingVenueIdentifier": "NA", "ShortName": "NA/Swap OTHR OTHR USD 21001231", "UnderlyingAssetType": "Multi Commodity"}, "Attributes": {"NotionalCurrency": "USD", "ExpiryDate": "2100-12-31", "ReturnorPayoutTrigger": "Contract for Difference (CFD)", "DeliveryType": "CASH", "BaseProduct": "OTHR", "SubProduct": "", "AdditionalSubProduct": "", "OtherBaseProduct": "OTHR", "OtherSubProduct": "", "OtherAdditionalSubProduct": "", "TransactionType": "SWAP", "FinalPriceType": "EXOF", "ReferenceRate": "NATURAL GAS-E. TEXAS (HOUSTON SHIP CHANNEL)-INSIDE FERC", "OtherReferenceRate": "OTHER", "PriceMultiplier": 1}}
```

A sample data file can be seen here: <https://www.anna-dsb.com/download/sample-isin-migration-daily-delta-file/>

Pre-Population Production Timeline

This slide shows an approximate timeline for the Pre-Population Production process. These timings have been based on the UAT experience and the current production ISIN volumes with some forecasted growth but may change as the process progresses.

Action	Volume	Start	End
Complete Process:	112,959,505 ¹	12:30PM UTC 15/10/2023	10:26 PM UTC 20/01/2024
<u>Release 1</u> (57 templates) Load new Swap templates (Completed)	N/A	00:30 AM UTC 15/10/2023	12:30 PM UTC 15/10/2023
Swap ISIN Processing (Completed): Total: Active (Completed): Expired (Completed):	23,392,371 ² 17,180,893 ² 6,211,478 ²	12:30 PM UTC 15/10/2023 12:30 PM UTC 15/10/2023 17:52 PM UTC 24/10/2023	22:31 PM UTC 27/10/2023 15:44 PM UTC 24/10/2023 22:31 PM UTC 27/10/2023
<u>Release 2</u> (83 templates) Load remaining new templates (Completed)	N/A	00:30 AM UTC 05/11/2023	12:30 PM UTC 05/11/2023
Remaining ISIN Processing Completed Total: Active (Completed): Expired (Completed):	89,567,134 ³ 29,749,469 ³ 59,817,655 ³	12:30 PM UTC 05/11/2023 12:30 PM UTC 05/11/2023 01:25 AM UTC 03/12/2023	00:30 AM UTC 23/01/2024 18:57 PM UTC 02/12/2023 10:26 AM UTC 20/01/2024

Key: Estimate/Actual; Active/Expired

Progress updates were provided via the website⁴ while the process was running in Production.

¹Actual total number of OTC ISIN's on 05/11/2023

²Actual number of swaps as at 12:30PM UTC on 15/10/2023

³Actual number of non swaps as at 12:30PM UTC on 05/11/2023 was 30,734,376, this reduced down to 29,749,469 on 02/12/2023 due to ISINs having expired during the processing period. Likewise, the number of Expired ISINs was 58,832,758 on 05/11/2023 and has increased by this amount.

⁴<https://www.anna-dsb.com/otc-isin-pre-population/>

Pre-Population Examples

The following slides provide examples of both UPI and OTC ISIN records after the UPI Service has gone live, the examples are summarised below:

1. New UPI Creation
2. New UPI Creation where the UPI already exists
3. New UPI Creation that will be the parent of an existing OTC ISIN
4. Pre-population processing of an OTC ISIN where the UPI Parent already exists
5. New OTC ISIN creation where the UPI Parent already exists
6. New OTC ISIN creation where the UPI Parent does not exist
7. Pre-population depreciation of an existing OTC ISIN record

Pre-Population Examples

1. UPI User A creates a new Rates UPI with Attributes Alpha – e.g., QZ-Rates-Alpha. QZ-Rates-Alpha will be published to the UPI FIX Subscription Channel and will appear in the UPI End of Day delta file.
2. UPI User B attempts to create another new Rates UPI with the same Alpha Attributes as UPI User A – this will return QZ-Rates-Alpha, the existing UPI.
3. UPI User C creates another new Rates UPI with Beta Attributes - e.g., QZ-Rates-Beta. Again, QZ-Rates-Beta will be published to the UPI FIX Subscription Channel and will appear in the UPI End of Day delta file.
4. EZ-Rates-Beta is an existing Rates OTC ISIN with Beta Attributes which has not been assigned a UPI identifier. However, QZ-Rates-Beta, created by UPI User C will be the UPI parent of this OTC ISIN. When the Pre-population process reaches EZ-Rates-Beta it will associate with QZ-Rates-Beta and store the UPI identifier in the “Parents” section of EZ-Rates-Beta. EZ-Rates-Beta will be published to the OTC ISIN FIX Migration Subscription channel and the End of Day migration delta file. QZ-Rates-Beta will not appear on the usual UPI FIX Subscription channel nor the normal UPI End of Day delta file.

Pre-Population Examples

5. OTC ISIN User D creates a new Rates OTC ISIN with Attributes Alpha, e.g., EZ-Rates-Alpha. The system will identify QZ-Rates-Alpha as the parent and store this UPI identifier in the “Parents” section of EZ-Rates-Alpha. EZ-Rates-Alpha will be published on the usual OTC ISIN FIX Subscription channel as well as in the OTC ISIN End of Day delta file.
6. OTC ISIN User E creates a new Rates OTC ISIN with Attributes Charlie, e.g., EZ-Rates-Charlie. The system is unable to find a Rates UPI with the matching Charlie attributes, so a new QZ-Rates-Charlie UPI will be created and the UPI identifier stored in the “Parents” section of EZ-Rates-Charlie. EZ-Rates-Charlie will be published on the usual OTC ISIN FIX Subscription channel and will be published in the OTC ISIN End of Day delta file. In addition, QZ-Rates-Charlie will be published on the usual UPI FIX Subscription Channel and will appear in the UPI End of Day delta file.
7. EZ-Equity-Delta is an existing Equity Option Single_Name OTC-ISIN with Delta Attributes. The Delta Attributes contain an Underlying Instrument ISIN “XC0006013996”. When EZ-Equity-Delta was created, there was no underlying ISIN validation in place. UPI validation has been introduced to verify that the 2-character prefix of the underlying ISIN is on the ANNA list of supported prefixes. “XC” is not on the ANNA list. As a result, a UPI parent cannot be created for EZ-Equity-Delta and the Pre-population process will update the status of EZ-Equity-Delta to “Deprecated”. The updated entry will be published on the usual OTC ISIN FIX Subscription Channel and an updated entry will appear in the OTC ISIN End of Day delta file.

Pre-Population Examples

Example	UPIs			OTC ISINs		
	Identifier	FIX Topic	UPI FDL	Identifiers	FIX Topic	FDL
1	QZ-Rates-Alpha	I02	Delta\UPI\	N/A	N/A	N/A
2	QZ-Rates-Alpha	N/A	N/A	N/A	N/A	N/A
3	QZ-Rates-Beta	I02	Delta\UPI\	N/A	N/A	N/A
4	QZ-Rates-Beta	N/A	N/A	EZ-Rates-Beta	I05	Delta\ISIN-Migration
5	QZ-Rates-Alpha	N/A	N/A	EZ-Rates-Alpha	I01	Delta\ISIN
6	QZ-Rates-Charlie	I02	Delta\UPI\	EZ-Rates-Charlie	I01	Delta\ISIN
7	N/A	N/A	N/A	EZ-Equity-Delta	I01	Delta\ISIN

Template Release Summary

As detailed above, there will be two product template releases during the pre-population processing, one at the beginning and a second release when all of the ISINs associated with the first release have been processed.

Changes also have been made to some request templates to support the introduction of the UPI. These are listed in the following slides along with the change reference number which describes the change in more detail. Please note that the DBS consider DSB-2757 as a breaking change to the affected request templates.

There are also some new templates being released which will be included in the first release – however – they are not part of the pre-population process because there are no existing ISINs for these templates in the system.

The table below summaries the number of existing and new request and record templates included in each release, the breakdown can then be found on the subsequent slides:

Release	Date	Ex. Request	Ex. Record	New Request	New Record	Notes
1	15/10/2023	19	57	6	6	
2	05/11/2023	56	83	0	0	

Release I – Existing Request Templates (19) I of 2

Template Name	DSB-2175	DSB-1908	DSB-2480	DSB-2757*	UPI-1267	DSB-2385
Request.Commodities.Swap.Basis_Swap.InstRefDataReporting.json	Y					
Request.Commodities.Swap.Multi_Exotic_Swap.InstRefDataReporting.json		Y				
Request.Commodities.Swap.Single_Index.InstRefDataReporting.json				Y		
Request.Commodities.Swap.Swap.InstRefDataReporting.json		Y				
Request.Credit.Swap.Index.InstRefDataReporting.json		Y		Y		
Request.Credit.Swap.Index_Tranche.InstRefDataReporting.json		Y		Y		
Request.Credit.Swap.Non_Standard.InstRefDataReporting.json		Y				
Request.Credit.Swap.Total_Return_Swap.InstRefDataReporting.json		Y				Y
Request.Rates.Swap.Basis.InstRefDataReporting.json	Y					
Request.Rates.Swap.Basis_OIS.InstRefDataReporting.json	Y					
Request.Rates.Swap.Cross_Currency_Basis.InstRefDataReporting.json	Y					

Release I – Existing Request Templates (19) I of 2

Template Name	DSB-2175	DSB-1908	DSB-2480	DSB-2757*	UPI-1267	DSB-2385
Request.Rates.Swap.Cross_Currency_Fixed_Float.InstRefDataReporting.json	Y					
Request.Rates.Swap.Cross_Currency_Fixed_Float_NDS.InstRefDataReporting.json	Y					
Request.Rates.Swap.Cross_Currency_Zero_Coupon.InstRefDataReporting.json	Y					
Request.Rates.Swap.Fixed_Float.InstRefDataReporting.json	Y					
Request.Rates.Swap.Fixed_Float_OIS.InstRefDataReporting.json	Y					
Request.Rates.Swap.Fixed_Float_Zero_Coupon.InstRefDataReporting.json	Y					
Request.Rates.Swap.Inflation_Basis.InstRefDataReporting.json	Y					
Request.Rates.Swap.Non_Standard.InstRefDataReporting.json	Y					

Release I – Existing Record Templates

Commodities (4)	Credit (17)	Rates (36)
Commodities.Swap.Basis_Swap.InstRefDataReporting.VIM1.json Commodities.Swap.Multi_Exotic_Swap.InstRefDataReporting.VIM1.json Commodities.Swap.Single_Index.InstRefDataReporting.VIM1.json Commodities.Swap.Swap.InstRefDataReporting.VIM1.json	Credit.Swap.ABS.InstRefDataReporting.VIM1.json Credit.Swap.Corporate.InstRefDataReporting.V2M1.json Credit.Swap.Corporate.InstRefDataReporting.VIM1.json Credit.Swap.Index.InstRefDataReporting.V2M1.json Credit.Swap.Index.InstRefDataReporting.VIM1.json Credit.Swap.Index_Tranche.InstRefDataReporting.V2M1.json Credit.Swap.Index_Tranche.InstRefDataReporting.VIM1.json Credit.Swap.Loan.InstRefDataReporting.VIM1.json Credit.Swap.Municipal.InstRefDataReporting.V2M1.json Credit.Swap.Municipal.InstRefDataReporting.VIM1.json Credit.Swap.Non_Standard.InstRefDataReporting.V3M1.json Credit.Swap.Non_Standard.InstRefDataReporting.V2M1.json Credit.Swap.Non_Standard.InstRefDataReporting.VIM1.json Credit.Swap.Sovereign.InstRefDataReporting.V2M1.json Credit.Swap.Sovereign.InstRefDataReporting.VIM1.json Credit.Swap.Total_Return_Swap.InstRefDataReporting.V2M1.json Credit.Swap.Total_Return_Swap.InstRefDataReporting.VIM1.json	Rates.Swap.Basis.InstRefDataReporting.V2M1.json Rates.Swap.Basis.InstRefDataReporting.VIM1.json Rates.Swap.Basis_OIS.InstRefDataReporting.V2M1.json Rates.Swap.Basis_OIS.InstRefDataReporting.VIM1.json Rates.Swap.Cross_Currency_Basis.InstRefDataReporting.V2M1.json Rates.Swap.Cross_Currency_Basis.InstRefDataReporting.VIM1.json Rates.Swap.Cross_Currency_Fixed_Fixed.InstRefDataReporting.V2M1.json Rates.Swap.Cross_Currency_Fixed_Fixed.InstRefDataReporting.VIM1.json Rates.Swap.Cross_Currency_Fixed_Float.InstRefDataReporting.V2M1.json Rates.Swap.Cross_Currency_Fixed_Float.InstRefDataReporting.VIM1.json Rates.Swap.Cross_Currency_Fixed_Float_NDS.InstRefDataReporting.V2M1.json Rates.Swap.Cross_Currency_Fixed_Float_NDS.InstRefDataReporting.VIM1.json Rates.Swap.Cross_Currency_Inflation_Swap.InstRefDataReporting.V2M1.json Rates.Swap.Cross_Currency_Inflation_Swap.InstRefDataReporting.VIM1.json Rates.Swap.Cross_Currency_Zero_Coupon.InstRefDataReporting.V2M1.json Rates.Swap.Cross_Currency_Zero_Coupon.InstRefDataReporting.VIM1.json Rates.Swap.Fixed_Fixed.InstRefDataReporting.V2M1.json Rates.Swap.Fixed_Fixed.InstRefDataReporting.VIM1.json Rates.Swap.Fixed_Float.InstRefDataReporting.V2M1.json Rates.Swap.Fixed_Float.InstRefDataReporting.VIM1.json Rates.Swap.Fixed_Float_OIS.InstRefDataReporting.V2M1.json Rates.Swap.Fixed_Float_OIS.InstRefDataReporting.VIM1.json Rates.Swap.Fixed_Float_Zero_Coupon.InstRefDataReporting.V2M1.json Rates.Swap.Fixed_Float_Zero_Coupon.InstRefDataReporting.VIM1.json Rates.Swap.Inflation_Basis.InstRefDataReporting.V2M1.json Rates.Swap.Inflation_Basis.InstRefDataReporting.VIM1.json Rates.Swap.Inflation_Basis_YoY.InstRefDataReporting.VIM1.json Rates.Swap.Inflation_Basis_Zero_Coupon.InstRefDataReporting.V2M1.json Rates.Swap.Inflation_Basis_Zero_Coupon.InstRefDataReporting.VIM1.json Rates.Swap.Inflation_Fixed_Float_YoY.InstRefDataReporting.V2M1.json Rates.Swap.Inflation_Fixed_Float_YoY.InstRefDataReporting.VIM1.json Rates.Swap.Inflation_Fixed_Float_Zero_Coupon.InstRefDataReporting.VIM1.json Rates.Swap.Inflation_Swap.InstRefDataReporting.V2M1.json Rates.Swap.Inflation_Swap.InstRefDataReporting.VIM1.json Rates.Swap.Non_Standard.InstRefDataReporting.V2M1.json Rates.Swap.Non_Standard.InstRefDataReporting.VIM1.json

Release I – New Templates

Template (Request & Record for each)	CRF
Commodities.Forward.Non_Standard	DSB-1609
Commodities.Option.Non_Standard	DSB-1611
Commodities.Swap.Non_Standard	DSB-1610
Credit.Forward.Non_Standard	DSB-1613
Other.Forward.Non_Standard	DSB-1615
Rates.Forward.Debt	DSB-1718

Release 2 – Existing Request Templates (56) – I of 5

Template Name	DSB-2175	DSB-2055	DSB-2064	DSB-2065	DSB-2066	DSB-1908	DSB-2480	DSB-2757*	UPI-I267	DSB-1331
Request.Commodities.Forward.Forward.InstRefDataReporting.json						Y	Y			
Request.Commodities.Forward.Multi_Exotic_Forward.InstRefDataReporting.json							Y			
Request.Commodities.Forward.Single_Index.InstRefDataReporting.json								Y		
Request.Commodities.Option.Multi_Exotic_Option.InstRefDataReporting.json							Y			Y
Request.Commodities.Option.Option.InstRefDataReporting.json							Y			
Request.Commodities.Option.Single_Index.InstRefDataReporting.json								Y		Y
Request.Commodities.Option.Swaption.InstRefDataReporting.json							Y			Y
Request.Credit.Option.Index_Swaption.InstRefDataReporting.json						Y				Y
Request.Credit.Option.Non_Standard.InstRefDataReporting.json								Y		Y
Request.Credit.Option.Single_Name_Swaption.InstRefDataReporting.json					Y					Y
Request.Equity.Forward.Non_Standard.InstRefDataReporting.json							Y			
Request.Equity.Forward.Price_Return_Basic_Performance_Basket.InstRefDataReporting.json							Y			
Request.Equity.Forward.Price_Return_Basic_Performance_Basket_CFD.InstRefDataReporting.json							Y			

Release 2 – Existing Request Templates - (56) – 2 of 5

Template Name	DSB-2175	DSB-2055	DSB-2064	DSB-2065	DSB-2066	DSB-1908	DSB-2480	DSB-2757*	UPI-1267	DSB-1331
Request.Equity.Forward.Price_Return_Basic_Performance_Single_Index.InstRefDataReporting.json								Y	Y	
Request.Equity.Forward.Price_Return_Basic_Performance_Single_Index_CFD.InstRefDataReporting.json								Y	Y	
Request.Equity.Forward.Price_Return_Basic_Performance_Single_Name.InstRefDataReporting.json									Y	
Request.Equity.Forward.Price_Return_Basic_Performance_Single_Name_CFD.InstRefDataReporting.json									Y	
Request.Equity.Option.Basket.InstRefDataReporting.json								Y		Y
Request.Equity.Option.Non_Standard.InstRefDataReporting.json								Y		Y
Request.Equity.Option.Single_Index.InstRefDataReporting.json								Y	Y	Y
Request.Equity.Option.Single_Name.InstRefDataReporting.json									Y	
Request.Equity.Swap.Non_Standard.InstRefDataReporting.json								Y		
Request.Equity.Swap.Parameter_Return_Dividend_Basket.InstRefDataReporting.json								Y		
Request.Equity.Swap.Parameter_Return_Dividend_Single_Index.InstRefDataReporting.json								Y	Y	
Request.Equity.Swap.Parameter_Return_Dividend_Single_Name.InstRefDataReporting.json									Y	
Request.Equity.Swap.Parameter_Return_Variance_Basket.InstRefDataReporting.json								Y		
Request.Equity.Swap.Parameter_Return_Variance_Single_Index.InstRefDataReporting.json								Y	Y	

Release 2 – Existing Request Templates (56) – 3 of 5

Template Name	DSB-2175	DSB-2055	DSB-2064	DSB-2065	DSB-2066	DSB-1908	DSB-2480	DSB-2757*	UPI-1267	DSB-1331
Request.Equity.Swap.Parameter_Return_Variance_Single_Name.InstRefDataReporting.json								Y		
Request.Equity.Swap.Parameter_Return_Volatility_Basket.InstRefDataReporting.json								Y		
Request.Equity.Swap.Parameter_Return_Volatility_Single_Index.InstRefDataReporting.json								Y	Y	
Request.Equity.Swap.Parameter_Return_Volatility_Single_Name.InstRefDataReporting.json									Y	
Request.Equity.Swap.Portfolio_Swap.InstRefDataReporting.json								Y		
Request.Equity.Swap.Portfolio_Swap_Other.InstRefDataReporting.json									Y	
Request.Equity.Swap.Portfolio_Swap_Single_Index.InstRefDataReporting.json								Y	Y	
Request.Equity.Swap.Portfolio_Swap_Single_Name.InstRefDataReporting.json									Y	
Request.Equity.Swap.Price_Return_Basic_Performance_Basket.InstRefDataReporting.json								Y		
Request.Equity.Swap.Price_Return_Basic_Performance_Basket_CFD.InstRefDataReporting.json								Y		
Request.Equity.Swap.Price_Return_Basic_Performance_Single_Index.InstRefDataReporting.json								Y	Y	
Request.Equity.Swap.Price_Return_Basic_Performance_Single_Index_CFD.InstRefDataReporting.json								Y	Y	
Request.Equity.Swap.Price_Return_Basic_Performance_Single_Name.InstRefDataReporting.json									Y	

Release 2 – Existing Request Templates (56) – 4 of 5

Template Name	DSB-2175	DSB-2055	DSB-2064	DSB-2065	DSB-2066	DSB-1908	DSB-2480	DSB-2757*	UPI-1267	DSB-1331
Request.Equity.Swap.Price_Return_Basic_Performance_Single_Name_CFD.InstRefDataReporting.json								Y		
Request.Foreign_Exchange.Option.Barrier_Option.InstRefDataReporting.json										Y
Request.Foreign_Exchange.Option.Digital_Option.InstRefDataReporting.json										Y
Request.Foreign_Exchange.Option.Forward_Vol_Agreement.InstRefDataReporting.json										Y
Request.Foreign_Exchange.Option.NDO.InstRefDataReporting.json										Y
Request.Foreign_Exchange.Option.Non_Standard.InstRefDataReporting.json										Y
Request.Foreign_Exchange.Option.Target_Option.InstRefDataReporting.json										Y
Request.Foreign_Exchange.Option.Vanilla_Option.InstRefDataReporting.json										Y
Request.Other.Option.Non_Standard.InstRefDataReporting.json	Y							Y	Y	Y
Request.Other.Other.Non_Standard.InstRefDataReporting.json	Y							Y	Y	Y
Request.Other.Swap.Non_Standard.InstRefDataReporting.json	Y							Y	Y	Y
Request.Rates.Forward.FRA_Index.InstRefDataReporting.json	Y									
Request.Rates.Option.CapFloor.InstRefDataReporting.json	Y									

Release 2 – Existing Request Templates (56) – 5 of 5

Template Name	DSB-2175	DSB-2055	DSB-2064	DSB-2065	DSB-2066	DSB-1908	DSB-2480	DSB-2757*	UPI-1267	DSB-1331
Request.Rates.Option.Debt_Option.InstRefDataReporting.json										Y
Request.Rates.Option.Non_Standard.InstRefDataReporting.json	Y									Y
Request.Rates.Option.Swaption.InstRefDataReporting.json				Y						Y

Release 2 – Existing Record Templates (83) – I of 2

Commodities (7)	Credit (4)	Equity (35)
Commodities.Forward.Forward.InstRefDataReporting.VIM1.json Commodities.Forward.Multi_Exotic_Forward.InstRefDataReporting.VIM1.json Commodities.Forward.Single_Index.InstRefDataReporting.VIM1.json Commodities.Option.Multi_Exotic_Option.InstRefDataReporting.VIM1.json Commodities.Option.InstRefDataReporting.VIM1.json Commodities.Option.Single_Index.InstRefDataReporting.VIM1.json Commodities.Option.Swaption.InstRefDataReporting.VIM1.json	Credit.Option.Index_Swaption.InstRefDataReporting.VIM1.json Credit.Option.Non_Standard.InstRefDataReporting.VIM1.json Credit.Option.Non_Standard.InstRefDataReporting.V2M1.json Credit.Option.Single_Name_Swaption.InstRefDataReporting.VIM1.json	Equity.Forward.Non_Standard.InstRefDataReporting.VIM1.json Equity.Forward.Price_Return_Basic_Performance_Basket.InstRefDataReporting.VIM1.json Equity.Forward.Price_Return_Basic_Performance_Basket_CFD.InstRefDataReporting.VIM1.json Equity.Forward.Price_Return_Basic_Performance_Single_Index.InstRefDataReporting.VIM1.json Equity.Forward.Price_Return_Basic_Performance_Single_Index_CFD.InstRefDataReporting.VIM1.json Equity.Forward.Price_Return_Basic_Performance_Single_Name.InstRefDataReporting.VIM1.json Equity.Forward.Price_Return_Basic_Performance_Single_Name_CFD.InstRefDataReporting.VIM1.json Equity.Option.Basket.InstRefDataReporting.VIM1.json Equity.Option.Basket.InstRefDataReporting.V2M1.json Equity.Option.Non_Standard.InstRefDataReporting.VIM1.json Equity.Option.Non_Standard.InstRefDataReporting.V2M1.json Equity.Option.Single_Index.InstRefDataReporting.VIM1.json Equity.Option.Single_Index.InstRefDataReporting.V2M1.json Equity.Option.Single_Name.InstRefDataReporting.VIM1.json Equity.Option.Single_Name.InstRefDataReporting.V2M1.json Equity.Swap.Non_Standard.InstRefDataReporting.VIM1.json Equity.Swap.Parameter_Return_Dividend_Basket.InstRefDataReporting.VIM1.json Equity.Swap.Parameter_Return_Dividend_Single_Index.InstRefDataReporting.VIM1.json Equity.Swap.Parameter_Return_Dividend_Single_Name.InstRefDataReporting.VIM1.json Equity.Swap.Parameter_Return_Variance_Basket.InstRefDataReporting.VIM1.json Equity.Swap.Parameter_Return_Variance_Single_Index.InstRefDataReporting.VIM1.json Equity.Swap.Parameter_Return_Variance_Single_Name.InstRefDataReporting.VIM1.json Equity.Swap.Parameter_Return_Volatility_Basket.InstRefDataReporting.VIM1.json Equity.Swap.Parameter_Return_Volatility_Single_Index.InstRefDataReporting.VIM1.json Equity.Swap.Parameter_Return_Volatility_Single_Name.InstRefDataReporting.VIM1.json Equity.Swap.Portfolio_Swap.InstRefDataReporting.VIM1.json Equity.Swap.Portfolio_Swap_Other.InstRefDataReporting.VIM1.json Equity.Swap.Portfolio_Swap_Single_Index.InstRefDataReporting.VIM1.json Equity.Swap.Portfolio_Swap_Single_Name.InstRefDataReporting.VIM1.json Equity.Swap.Price_Return_Basic_Performance_Basket.InstRefDataReporting.VIM1.json Equity.Swap.Price_Return_Basic_Performance_Basket_CFD.InstRefDataReporting.VIM1.json Equity.Swap.Price_Return_Basic_Performance_Single_Index.InstRefDataReporting.VIM1.json Equity.Swap.Price_Return_Basic_Performance_Single_Index_CFD.InstRefDataReporting.VIM1.json Equity.Swap.Price_Return_Basic_Performance_Single_Name.InstRefDataReporting.VIM1.json Equity.Swap.Price_Return_Basic_Performance_Single_Name_CFD.InstRefDataReporting.VIM1.json

Release 2 – Existing Record Templates (83) – 2 of 2

Foreign Exchange (16)	Other (11)	Rates (10)
Foreign_Exchange.Forward.Contract_For_Difference.InstRefDataReporting.VIMI.json Foreign_Exchange.Forward.Forward.InstRefDataReporting.VIMI.json Foreign_Exchange.Forward.NDF.InstRefDataReporting.VIMI.json Foreign_Exchange.Forward.Non_Standard.InstRefDataReporting.VIMI.json Foreign_Exchange.Forward.Rolling_Spot.InstRefDataReporting.VIMI.json Foreign_Exchange.Forward.Spreadbet.InstRefDataReporting.VIMI.json Foreign_Exchange.Forward.Vol_Var.InstRefDataReporting.VIMI.json Foreign_Exchange.Option.Barrier_Option.InstRefDataReporting.VIMI.json Foreign_Exchange.Option.Digital_Option.InstRefDataReporting.VIMI.json Foreign_Exchange.Option.Forward_Vol_Agreement.InstRefDataReporting.VIMI.json Foreign_Exchange.Option.NDO.InstRefDataReporting.VIMI.json Foreign_Exchange.Option.Non_Standard.InstRefDataReporting.VIMI.json Foreign_Exchange.Option.Target_Option.InstRefDataReporting.VIMI.json Foreign_Exchange.Option.Vanilla_Option.InstRefDataReporting.VIMI.json Foreign_Exchange.Swap.FX_Swap.InstRefDataReporting.VIMI.json Foreign_Exchange.Swap.Non_Deliverable_FX_Swap.InstRefDataReporting.VIMI.json	Other.Option.Non_Standard.InstRefDataReporting.VIMI.json Other.Option.Non_Standard.InstRefDataReporting.V2M1.json Other.Option.Non_Standard.InstRefDataReporting.V3M1.json Other.Option.Non_Standard.InstRefDataReporting.V4M1.json Other.Other.Non_Standard.InstRefDataReporting.VIMI.json Other.Other.Non_Standard.InstRefDataReporting.V2M1.json Other.Other.Non_Standard.InstRefDataReporting.V3M1.json Other.Other.Non_Standard.InstRefDataReporting.V4M1.json Other.Swap.Non_Standard.InstRefDataReporting.VIMI.json Other.Swap.Non_Standard.InstRefDataReporting.V2M1.json Other.Swap.Non_Standard.InstRefDataReporting.V3M1.json	Rates.Forward.FRA_Index.InstRefDataReporting.VIMI.json Rates.Forward.FRA_Index.InstRefDataReporting.V2M1.json Rates.Forward.FRA_Other.InstRefDataReporting.VIMI.json Rates.Option.CapFloor.InstRefDataReporting.VIMI.json Rates.Option.CapFloor.InstRefDataReporting.V2M1.json Rates.Option.Debt_Option.InstRefDataReporting.VIMI.json Rates.Option.Inflation_CapFloor.InstRefDataReporting.VIMI.json Rates.Option.Non_Standard.InstRefDataReporting.VIMI.json Rates.Option.Non_Standard.InstRefDataReporting.V2M1.json Rates.Option.Swaption.InstRefDataReporting.VIMI.json

Change History

Date	Changes
25/07/2023	Slide 4 – Updated case description for case 1 Slide 8 – Added note re: Equity and FX Slide 11 – Correct two invalid values Slide 16 – Added the change history slide
26/07/2023	Slide 11 – Separated timeline for Active/Expired after client feedback & updated with the UAT volumes as at 15/07/2023
03/08/2023	Slide 11 – Updated after completion of the Swap processing
24/08/2023	Slides 16 – 26 – Added template release summary in response to user feedback
24/08/2023	Slide 18 – Updated template names from existing to the new version in line with slide 25 after user feedback
25/08/2023	Slides 17 & 20-24 – corrected DSB-1267 to UPI-1267 after user feedback.
31/08/2023	Slides 20-24, associated specific templates with tickets DSB-2055, DSB-2064, DSB-2065 & DSB-2066 after user feedback
04/09/2023	Added missing Y's to DBS-2480 on slides 23 & 24
05/09/2023	Included DSB-2175 to request templates for both Release 1 & 2. Sorted the request templates in Release 2. Update the Pre-Population timeline, including extending the non-swaps forecast end date.
27/09/2023	Slide 11 - Updated Production timeline forecast – moved pre-population UAT timeline slide to the end of the pack (slide 29)
03/10/2023	Slide 16 – Updated Request numbers for Release 1 & 2 after user feedback and removed tbc from 5/11/2023 date for Release 2
15/10/2023	Slide 11 – Copied to slide 30 – then updated with actual Swap production volumes observed on 15/10/2023
24/10/2023	Slide 11 – Updated the Active swap completion time and the start time of the expired swaps
27/10/2023	Slide 11 – Updated the Expired swap completion time
05/11/2023	Slide 11 – Updated the Non swap volumes and the final total
03/12/2023	Slide 11- Updated the Active non swap completion time, active and expired numbers and start time of Expired non swap processing
22/01/2024	Slide 11 – Added the actual completion time to the table

Pre-Population UAT Timeline

This slide shows the actual timeline for the Pre-Population process when it was run in UAT.

Action	UAT (~51,269,027 ¹)	
	Start	End
Load new Swap templates (57 templates)	00:30 AM UTC 15/07/2023	12:30 PM UTC 15/07/2023
Swap Pre-Processing (Active / Expired)	12:30 PM UTC 15/07/2023 (~15,250,989 ²)	17:30 PM UTC 02/08/2023
	08:30 PM UTC 28/07/2023	03:18 PM UTC 28/07/2023 17:30 PM UTC 02/08/2023
Load remaining new templates (83) UAT Batch 1 (60) UAT Batch 2 (23)	00:30 PM UTC 05/08/2023 00:30 PM UTC 19/08/2023	12:30 PM UTC 05/08/2023 12:30 PM UTC 19/08/2023
Remaining Template Processing (Active / Expired)	12:30 PM UTC 05/08/2023 (~36,018,038 ³)	12:30 PM UTC 19/09/2023
	12:30 PM UTC 16/08/2023	12:30 PM UTC 16/08/2023 13:55 PM UTC 19/09/2023

Key: Estimate/Actual; Active/Expired

¹Actual UAT volume as at 15/07/2023

²Total swaps counted in UAT on 15/07/2023

³Total non-swaps counted in UAT on 15/07/2023

⁴Forecast of the total number of OTC ISIN's created by 00:30 AM UTC 15/10/2023

⁵Estimated number of swaps based on current production levels (20.69%)

⁶Estimated number of non-swaps based on current production levels (79.31%)

Pre-Population Production Timeline (Estimated)

This slide shows an approximate timeline for the Pre-Population Production process. These timings have been based on the UAT experience and the current production ISIN volumes with forecasted growth but may change as the process progresses.

Action	Volume	Start	End
Complete Process:	~113,046,643 ¹	12:30PM UTC 15/10/2023	12:30 PM UTC 23/01/2024
Release 1 (57 templates) Load new Swap templates	N/A	00:30 AM UTC 15/10/2023	12:30 PM UTC 15/10/2023
Swap ISIN Processing:	Total: Active: Expired:	~23,381,835 ² ~17,263,003 ² ~6,118,832 ²	12:30 PM UTC 15/10/2023 12:30 PM UTC 15/10/2023 12:30 PM UTC 27/10/2023
Release 2 (83 templates) Load remaining new templates	N/A	00:30 AM UTC 05/11/2023	12:30 PM UTC 05/11/2023
Remaining ISIN Processing:	Total: Active: Expired:	~89,664,808 ³ 31,166,726 ³ 58,498,082 ³	00:30 AM UTC 23/01/2024 12:30 PM UTC 02/12/2023 00:30 AM UTC 23/01/2024

Key: Estimate/Actual; Active/Expired

Progress updates will be provided [via the website⁵](#) while the process is running in Production

¹Forecast of the total number of OTC ISIN's created by 00:30 AM UTC 15/10/2023, based on actual figures on 22/09/2023 plus forecasted swap growth to 15th October 2023 (23 days) and forecasted non-swap growth to 5th November (44 days)

²Estimated number of swaps based on actual figures on 22/09/2023 plus 23 days growth at 20% of monthly growth volume

³Estimated number of non-swaps based on current production levels on 22/09/2023 plus 44 days growth at (80%) of monthly growth volume

⁴<https://www.anna-dsb.com/otc-isin-pre-population/>