

The Unique Product Identifier (UPI): How to search for, and create, a UPI via the GUI

The Derivatives Service Bureau (DSB) is the sole service provider for the Unique Product Identifier – UPI (ISO 4914), an Over-The-Counter (OTC) derivatives identifier developed to help G20 regulators identify the build-up of systemic risks at a global level. The DSB issues UPI codes as well as operating the UPI reference data library.

This paper explains how to search for, and create, a UPI via the GUI using the example of a Single Currency Fixed Float Interest Rate Swap (IRS) with the attributes shown in Figure 1¹.

Users can access DSB's UPI Service:

- **Manually**, using the Graphical User Interface (GUI), where the User manually enters and searches through the website;
- **Programmatically**, using the Application Programming Interface (API), when the User has real time fixed connectivity to the data²; and
- **Via File Downloads**³ using daily delta or weekly files.

Single Currency Fixed Float Interest Rate Swap (IRS)

Attributes	Example Values
Asset Class	Rates
Instrument Type	Swap
Product [<i>Underlying asset type</i>]	Fixed-Float
Notional Schedule	Constant
Single/ Multi-currency	Single
Delivery Type	Physical
Notional Currency	EUR
Underlier ID [<i>Reference Rate</i>]	EUR-EURIBOR-Reuters
Reference Rate Term	3 MNTH

Figure 1: Example attributes for a Single Currency Fixed Float IRS.

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¹The examples in this document have been created in the standalone UAT UPI environment.

²DSB documents which explain the rules of engagement for the FIX API (www.anna-dsb.com/download/dsb-fix-api-with-upi-changes) and the ReST API (www.anna-dsb.com/download/dsb-rest-api-with-upi-changes) are available on the DSB website.

³The DSB File Download document which sets out how to perform File Downloads is available here: www.anna-dsb.com/download/dsb-file-download

DSB's 'COSP': How to access DSB's UPI Service

The DSB's Client Onboarding and Support Platform (COSP) is an online, self-service platform which enables Users⁴ to access and manage:

- The UPI Service User Acceptance Testing (UAT) environment - for prospective Users to test connectivity and access options free of charge for 6 months; and
- The UPI Service – for searching for and/ or creating UPIs depending on User Type.

To sign up to the COSP, follow this link: cosp.anna-dsb.com/home#upi-sign-up.

How to search for a UPI

All User Types are able to search for UPIs. Users can search the UPI reference data library by: UPI code, UPI attributes and Advanced functionality⁵.

1. Log on to the UPI Service

Go to the DSB's website⁶ and click on **Search/Create Identifiers** in the right hand corner of the homepage.

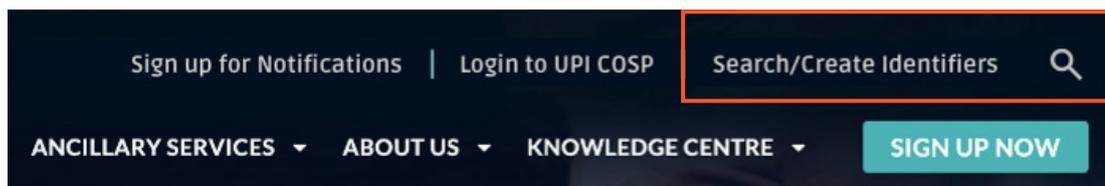


Figure 2: Screenshot of DSB homepage.

You will be asked to log on and then taken to the DSB's UPI Service (see Figure 3 below). If you have not subscribed to the UPI Service via the COSP, you will be asked to do so.

2. Search by the UPI code

You can search by the UPI code, if known.

- Click on 'Search'
- Click on 'BY UPI'
- Enter the UPI code

This search will return the values for the attributes associated with the UPI code.



Figure 3: Screenshot of UPI search screen for search by the UPI code.

⁴For further information on UPI User Types see cosp.anna-dsb.com/home#upi-service-plans

⁵The DSB Search User Guide provides further information on how DSB GUI users can search for UPIs: www.anna-dsb.com/download/dsb-search-with-upi-changes

⁶www.anna-dsb.com

3. Search by UPI attributes

You can search by the OTC derivatives' attributes to find UPIs:

- Click on 'Search'
- Click on 'BY ATTRIBUTES'
- Complete the tabs for
 - 'Asset Class',
 - 'Instrument type' and
 - 'Product'
- Click on 'SEARCH'

Figure 4: Screenshot of UPI search screen for search by UPI attributes.

Search results will return records of UPIs that match the attributes entered. Figure 5 below shows the search results for the following input attributes:

- Asset Class: *Rates*
- Instrument Type: *Swap*
- Product: *Fixed_Float*

The number of records returned varies depending on the User Type. For example, five records are returned per search for Registered Users and Infrequent Users; 50 records are returned per search for Standard Users.

Figure 5 shows five records returned for a Registered or Infrequent User, using the Single Currency Fixed Float IRS example.

UPI	Asset Class	Instrument Type	Product	CFI	Short Name	UPI Status
QZT6XRWJ722D	Rates	Swap	Fixed_Float	SRCDSC	NA/Swap Fxd Fit CAD	New
QZXKR05S3DL1	Rates	Swap	Fixed_Float	SRCCSP	NA/Swap Fxd Fit USD	New
QZM174M4JGBF	Rates	Swap	Fixed_Float	SRCCSC	NA/Swap Fxd Fit USD	New
QZZBWXD9QW48	Rates	Swap	Fixed_Float	SRCCSC	NA/Swap Fxd Fit EUR	New
QZNBH7B2BQ52	Rates	Swap	Fixed_Float	SRCYSC	NA/Swap Fxd Fit USD	New

Figure 5: Screenshot of the UPI records returned for a By Attributes search.

4. Search using the Advanced functionality

The Advanced search allows the User to retrieve required UPIs on the basis of more complex or specific criteria using the Lucerne Query Language. Lucerne is a powerful scripting language that enables the User to construct complex queries with specific criteria. Further information on this search functionality is available in the DSB Search User Guide⁷.

Figure 6 shows the records returned using Lucerne with some of the attributes from the single currency fixed float IRS example.

The screenshot displays the UPI search interface. At the top, a navigation bar includes 'Create', 'Search', 'Product Definitions', 'FAQ', 'Notifications', and 'DSB News'. The 'Search' tab is active. Below the navigation bar, there are tabs for 'UPI', 'BY UPI', 'BY ATTRIBUTES', and 'ADVANCED'. The 'ADVANCED' tab is selected. A search query is entered in the search bar: `/Header/UseCase:Fixed_Float && /Attributes/ReferenceRate:"EUR-EURIBOR-Reuters" && /Attributes/ReferenceRateTermValue:3 && /Attributes/ReferenceRateTermUnit:MNTM`. Below the search bar, there is a 'Search Guide' link and a 'Return Underlier ID Source' dropdown menu set to 'ISIN'. The results section is titled 'RESULTS' and shows '5 records found'. A 'DOWNLOAD' button is located to the right of the results. The table below contains the following data:

UPI	Asset Class	Instrument Type	Product	CFI	Short Name	UPI Status
QZMD4R9QJXR9	Rates	Swap	Fixed_Float	SRCCSC	NA/Swap Fxd Flt CAD	New
QZ1WC54XMGBX	Rates	Swap	Fixed_Float	SRCCSC	NA/Swap Fxd Flt GBP	New
QZT7L05N7HG3	Rates	Swap	Fixed_Float	SRCCSC	NA/Swap Fxd Flt AUD	New
QZZXJN1VVF60	Rates	Swap	Fixed_Float	SRCDSP	NA/Swap Fxd Flt EUR	New
QZRBG6ZTKS42	Rates	Swap	Fixed_Float	SRCCSP	NA/Swap Fxd Flt EUR	New

A second 'DOWNLOAD' button is located at the bottom right of the results section.

Figure 6: Screenshot of UPI search screen using the Advanced functionality.

⁷www.anna-dsb.com/download/dsb-search-with-upi-changes

How to create a UPI

The following User Types are able to create UPIs: Infrequent Users, Standard Users and Power Users.

1. Log on to the UPI Service

Go to the DSB's website⁸ and click on **Search/Create Identifiers** in the right hand corner of the homepage.

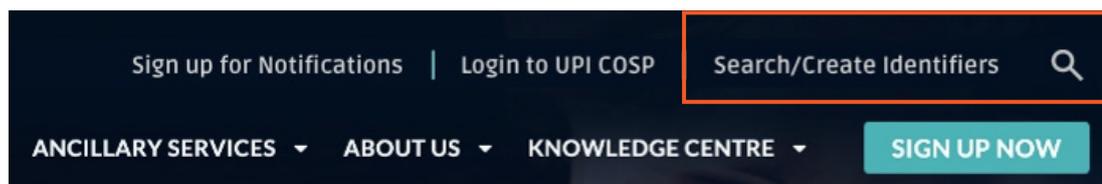


Figure 7: Screenshot of DSB homepage.

You will be asked to log on and then taken to the DSB's UPI Service. If you have not subscribed to the UPI Service via the COSP, you will be asked to do so.

2. Select the relevant product

Click on 'Create'.

Select the relevant product from the Asset Class, Instrument Type and Product options, as shown in Figure 8 below, and click on LOAD.

For the example of Single Currency Fixed Float IRS, the product selected is Request.Rates.Swap.Fixed_Float.UPI.

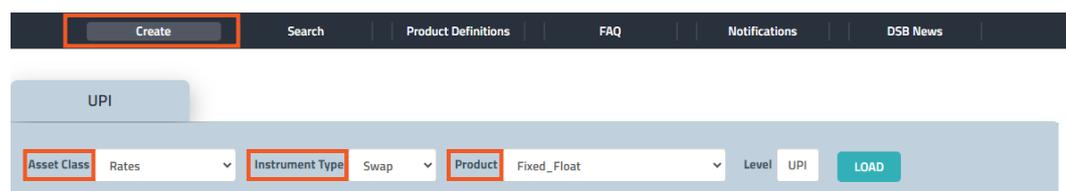


Figure 8: Screenshot of UPI create screen.

The selection of the product will:

- result in the population of the attributes in the **'Header'** Section of the record, shown in Figure 9 below, i.e. the population of the fields for asset class, instrument type, product, and level; and
- determine which additional fields you will be required to complete in the **'Attributes'** Section of the record.

⁸www.anna-dsb.com

3. Complete the 'Attributes' fields

Enter the required information about the product's attributes in the '**Attributes**' Section of the record and click on CREATE. (Please note that attributes vary by product⁹.)

Figure 9 shows the '**Attributes**' Section completed with information from the Single Currency Fixed Float IRS example.

The screenshot displays the UPI create interface. At the top, there is a navigation bar with 'Create', 'Search', 'Product Definitions', 'FAQ', 'Notifications', and 'DSB News'. Below this, a tab labeled 'UPI' is active. The main form area has a header with the following fields: 'Asset Class' (Rates), 'Instrument Type' (Swap), 'Product' (Fixed_Float), and 'Level' (UPI), with a 'LOAD' button to the right. Below the header, the 'Attributes' section is expanded, showing the following fields: 'Notional Currency' (EUR), 'Underlier ID' (EUR-EURIBOR-Reuters (2006)), 'Underlier ID Source' (FPML), 'Reference Rate Term Value' (3), 'Reference Rate Term Unit' (MNTH), 'Notional Schedule' (Constant), and 'Delivery Type' (Physical). At the bottom right of the form, there are 'CREATE' and 'X' buttons. Red boxes in the original image highlight the header and the 'Attributes' section.

Figure 9: Screenshot of UPI create screen using the Rates.Swap.Fixed_Float.UPI product template.

⁹For more information on product attributes see www.anna-dsb.com/download/the-otc-derivatives-identifier-framework-a-closer-look

4. Record returned by the UPI Service

The UPI Service will return a record, as shown in Figure 10 below, with fields populated in the 'Identifier' Section and the 'Derived' Section of the record. The record will include:

- the UPI code; and
- the corresponding Classification of Financial Instrument (CFI) code (see attribute "Classification Type").

The screenshot displays a web form with two main sections: 'Identifier' and 'Derived'. The 'Identifier' section contains the following fields:

UPI	QZRBG6ZTKS42
Status	New
Status Reason	
Last Update DateTime	2023-05-24T20:43:49

The 'Derived' section contains the following fields:

Classification Type	SRCCSP
Underlying Asset Type	Fixed - Floating
Single or Multi Currency	Single Currency
CFI Delivery Type	Physical
Short Name	NA/Swap Fxd Flt EUR
Underlier Name	EUR-EURIBOR-Reuters

Figure 10: Screenshot of UPI create screen using the Rates.Swap.Fixed_Float.UPI template showing the 'Identifier' and 'Derived' Sections of the record.

DSB's Product Definition Documents

When you create a UPI, you need to select the relevant product.

The DSB maintains a suite of over 100 different Product Definitions for the UPI which are available on the DSB's website¹⁰. The list of Product Definitions cover the following classes:

- Rates
- Credit
- Foreign Exchange (FX)
- Equities
- Commodities
- Non-Standard

For each asset class, the DSB publishes a list of Product Definition documents. These documents provide a detailed description of the UPI Product Definition content, such as attribute enumerations, validation, normalization, and derivation where applicable¹¹.

The example used throughout this paper is a Single Currency Fixed Float IRS: the Product Definition for this product is found under the list of product documents for Rates, shown in Figure 11 below.

UPI Rates

	All Documents	All Documents
RATES	Zipped File	Spreadsheet

Click on a link to view a Product Definition document.

Asset Class	Instrument Type	Product Name	Document
RATES	SWAP	Basis	Link
RATES	SWAP	Basis_OIS	Link
RATES	OPTION	CapFloor	Link
RATES	SWAP	Cross_Currency_Basis	Link
RATES	SWAP	Cross_Currency_Fixed_Fixed	Link
RATES	SWAP	Cross_Currency_Fixed_Float	Link
RATES	SWAP	Cross_Currency_Fixed_Float_NDS	Link
RATES	SWAP	Cross_Currency_Zero_Coupon	Link
RATES	SWAP	Cross_Currency_Inflation_Swap	Link
RATES	FORWARD	Debt	Link
RATES	SWAP	Fixed_Fixed	Link
RATES	SWAP	Fixed_Float	Link
RATES	SWAP	Fixed_Float_OIS	Link
RATES	SWAP	Fixed_Float_ZeroCoupon	Link
RATES	FORWARD	FRA_Index	Link

Figure 11: Screenshot of DSB's webpage for Product Definitions for UPI Rates¹².

¹⁰UPI Product Definitions – DSB: www.anna-dsb.com/product-definitions1/#upi-product-definitions

¹¹The DSB has published further UPI documents which complement the Product Definition documents on its website - www.anna-dsb.com/upi-other-documents

¹²www.anna-dsb.com/upi-rates