



Derivatives Service Bureau

UPI Fee Model Final Report – Update 2023

March 2023

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1 Executive Summary

The DSB will launch the UPI Service for User Acceptance Testing (UAT) on 17 April 2023 and the Production environment on 16 October 2023.

The [DSB UPI Fee Model Consultation Final Report](#)¹ was published in September 2021 following two rounds of industry consultation seeking feedback on the assumptions and proposals underpinning the UPI Fee Model. The Final Report included the then current view of the two Fee Model Variables:

- UPI Forecast Total DSB Cost
- Number of Users per User Type²

The [DSB UPI Legal Terms and Conditions Consultation](#)³ also included a question related to the Fee Model Variables for the UPI. The [DSB Legal Terms and Conditions Final Report](#)⁴ was published in April 2022.

Building on the conclusions from the prior consultations, this paper serves to provide an update on the Invoicing Periods and the Fee Model Variables used for UPI user fees determination, as well as outlining Indicative UPI user fees for the 2023-24 period published on 17 April 2023. Publication of Indicative UPI user fees is to enable firms to address budgetary planning requirements, in advance of the final UPI user fees being published on 4 September.

Additionally, this paper provides a detailed breakdown of the forecast capital expenditure and forecast operational expenditure including an explanation of any delta against previously published forecasts.

¹ <https://www.anna-dsb.com/download/dsb-upi-fee-model-final-report/>

² Details of the UPI User Types can be found [here](#).

³ https://www.anna-dsb.com/download/dsb-legal-tc-consultation_final-report-vfinal/

⁴ See footnote 1

2 UPI User Fee Model structure

The cost recovery fee model structure for the UPI Service is substantially similar in principle to that currently utilised by the DSB's OTC ISIN Service and will differentiate between the five fee-paying User Types with corresponding fee levels.

To ensure that the fee model remains fit-for-purpose, the DSB has committed to conducting a further industry consultation approximately two years after the UPI Service launch which will allow for user interactions to be factored into the approach to be taken forward.

2.1 Invoicing Periods

The standard contractual Invoicing Period⁵ follows the Gregorian calendar year running from 1 January to 31 December each year. User fees are calculated annually in advance and are published exclusive of VAT (where applicable). Based on each User Type, annual user fees are applied as follows:

- Infrequent users are applied a fixed fee for each Invoicing Period.
- Standard, UAT-only, Search Only API and Power users are applied a pro-rated user fee for the Invoicing Period based on the quarter in which they subscribe to the UPI Service as outlined in the [DSB Charges Policy](#)⁶.

Users can access the UAT environment for 6 months free of charge with the UAT environment available from 17 April 2023.

User fees will only apply to users in the UPI Production environment from 16 October 2023, or those users wishing to remain in UAT-only for beyond 6 months.

Given the end of year launch of the UPI Service in Production on 16 October 2023, the Initial Invoicing Period will run from UPI Production launch to 31 December 2024, equating to 14.5 months.

Following the Initial Invoicing Period, ending 31 December 2024, contract terms will revert to the calendar year with the first annual Invoicing Period being 1 January 2025 to 31 December 2025.

2.2 UPI Fee Model Variables

The Fee Model Variables used to determine the user fees comprise the

- UPI Forecast Total DSB Cost and
- Projected number of users per fee paying User Type.

Based on this model, the higher the number of users, the lower the fee per user.

The following two sections provide the detail behind the Fee Model Variables.

2.2.1 UPI Forecast Total DSB Cost

The UPI Forecast Total DSB Cost is established in the same manner as for the OTC ISIN Service, outlined in the [DSB Charges Policy](#). It is the forecast (estimate) of the costs for each invoicing period taking into account:

- a) Any adjustment related to the audited financial accounts from the previous years' UPI Actual Total DSB Cost including Excess Fee Income. Note: An adjustment is not applicable for the Initial Invoicing Period due to it being the launch of a new service, but details of the adjustment mechanism are included below in this section for reference.

⁵ 'Invoicing Period' and 'Initial Invoicing Period' definitions are defined in the [DSB Charges Policy](#). Refer to footnote 6.

⁶ https://www.anna-dsb.com/download/dsb-charges-policy-v7_2023_final_clean/

- b) The amortization of capital expenditure (Capex) over 4 years commencing the year after the charge has been incurred (a Time-Limited Cost)
- c) Financing costs (a Time-Limited Cost)
- d) Forecast Annualised Operating Expenditure (Opex)

For the Initial Invoicing Period, the amortization of operational expenditure (Opex) incurred up to 31 December 2023 is also included in the UPI Forecast Total DSB Cost, for the same amortization period as for Capex (2024-2027). This is to ensure a fair distribution of cost across the broadest user base, and not disadvantage early adopters.

As stated above, the fees are based on an estimation of costs. In line with the DSB's standard approach, following the end of 2024, based on the DSB's annual statutory audited financial accounts, the UPI Actual Total DSB Cost will be established. A reconciliation between the UPI Forecast Total DSB Cost and UPI Actual Total DSB Cost will identify the need for any adjustment related to operational savings or overspend for the Invoicing Period.

UPI user fees received within the scope of the cost recovery service that are in excess of the UPI Forecast Total DSB Cost, referred to as Excess Fee Income, will be used to reduce the UPI Forecast Total DSB Cost for the year following the audited financial accounts. Conversely, where the level of UPI User fees does not allow full cost recovery for the period, this will also be reflected in the UPI Forecast Total DSB Cost for the year following the audited financial accounts.

2.2.1.1 Financial Sustainability Margin

The DSB uses a funding model that helps to ensure the economic sustainability of the UPI System over time, as per the [UPI governance criteria](#)⁷, which includes efficiency, reliability and prudent financial management. As such, a Financial Sustainability Margin (FSM) of 20% is added to the total Capex and Opex costs before the fees are calculated on a cost recovery basis. The purpose of the FSM is to cover the costs of the current and forthcoming business plan to meet both regulatory and ongoing user expectations, ensure adequate financial reserves, reinvest in the business, and provide a reduction in costs for users where possible.

2.2.1.2 Contingency

The UPI Forecast Total DSB Cost also includes a 20% contingency fund to cover unplanned expenditure during the implementation and operation of the service, in keeping with industry practice for projects of this scale and complexity. Any use of contingency requires prior approval from the DSB Board. Some contingency has been used during the Build phase, with Table 1 in section 2.2.1.3 showing the remaining contingency in March 2023. Any unused UPI contingency funds will feed into the cost adjustment mechanism as it falls within the UPI Forecast Total DSB Cost and will be audited as part of the annual statutory financial accounts.

2.2.1.3 Breakdown of the UPI Forecast Total DSB Cost

The following tables show the cost breakdown, of the following:

1. Forecast Capital Expenditure (Capex) – UPI Build Costs for the period 2020-2023,
2. Forecast Time-Limited Costs (amortization of Capex, 2022-2023 Opex and Financing costs),
3. 2022 and 2023 Operating Expenditure (Opex) and,
4. Forecast Annualised Operating Expenditure (Opex).

⁷ <https://www.fsb.org/wp-content/uploads/P091019.pdf>

Table 1: Forecast Capital Expenditure (Capex) – UPI Build Costs for the period 2020-2023.

Forecast Capex represents the expected build cost for the UPI Service which commenced in 2020.

The material changes in Capex since August 2021 can be categorized as follows:

1. Costs related to the 15-month delay in launch of the Production Service from July 2022 to October 2023 due to delayed regulatory mandates.
2. Costs to build the reference data solution (including reference data vendor costs, infrastructure costs) which were unknown in August 2021.
3. New requirements from Industry Representation Groups (IRGs).
4. New requirements from Authorities.

The table includes a high-level reconciliation and narrative on how costs have evolved since the figures that fed into the [DSB UPI Final Fee Model Report](#)⁸.

All costs include the Financial Sustainability Margin (FSM) of 20%.

Forecast Capex	Description	Amount (Aug '21)	Amount (March '23)	Delta	Explanation of Delta
Technology and Operations	Design, build & test of the DSB UPI Service platform and Onboarding system (COSP), infra and software license costs	€5,989k	€8,948k	€2,960k	<ul style="list-style-type: none"> A detailed breakdown of the material changes in Capex since August 2021 is shown in Appendix 1 – Forecast Capex
Management	Senior management team including MD, Managed Service Provider management team and CFO	€1,168k	€1,375k	€208k	<ul style="list-style-type: none"> Additional management time spent on project in line with 15-month delay
Administration	Administrative costs and overheads such as office space, and administrative support functions	€444k	€558k	€114k	<ul style="list-style-type: none"> Increased office cost aligned to the increased resource cost in Technology and Operations
External Consultants	External oversight and legal, professional and communication	€393k	€577k	€184k	<ul style="list-style-type: none"> Increased legal fees to determine Additional Terms for Authority Users, and advice related to reference data vendor contracts
Third-party data	Provision of third-party reference data	Unknown	€400k	€400k	<ul style="list-style-type: none"> Includes Reference Data vendor costs and infrastructure costs for data storage
Contingency	Contingency to cover unplanned costs during the build & test of the service	€879k	€509k	€-370k	<ul style="list-style-type: none"> Details on Contingency use is in Appendix 3 – Contingency.
Forecast Total Capex		€8,872k	€12,368k	€3,497k	

⁸ Refer to footnote 1

Table 2: Forecast Time-Limited Costs (amortization of Capex, 2022-2023 Opex and Financing costs)

Time-limited costs are those that are not incurred for the lifetime of the UPI Service (unlike the annualised operating expenditure in Table 4) but are time-bound for a defined period. These costs include the amortization over four years of the build costs (Capex) as itemised in Table 1, the associated financing costs and the amortization over the same period as the Capex (2024-2027) of operational expenditure (Opex) incurred up to 31 December 2023. This is to ensure a fair distribution of cost across the broadest user base, and not disadvantage early adopters.

Table 2 includes a high-level reconciliation and narrative on how time-limited costs have evolved since the publication of the [DSB UPI Final Fee Model Report⁹](#) in September 2021.

Capex and Opex costs that are amortised include the Financial Sustainability Margin (FSM) of 20%.

Forecast Time Limited Costs	Description	Amount (Aug '21)	Amount (March '23)	Explanation of Delta
Forecast Capex	Amortization of Capex over the first 4 complete years (2024 – 2027) including remaining contingency (to cover unplanned costs as Build is finalized in 2023)	€2,218k (annualised)	€3,093k (annualised)	<ul style="list-style-type: none"> Reflects Forecast Capex as detailed in Table 1.
Opex incurred in 2022/23	Amortisation of Operational Expenditure incurred in 2022/23 (including contingency) over the first 4 complete years (2024 – 2027)	N/A	€1,020K (annualised)	<ul style="list-style-type: none"> Opex incurred in 2022 and 2023 forecast as detailed in Table 3
Financing costs	Costs of financing the Capex (Build Costs), to be repaid over 4 years (2024 – 2027)	€2,128k (€887k annualised, including FSM)	€3,586k (€983k annualised, including FSM)	<ul style="list-style-type: none"> Annualised interest represents the total interest from the start of build phase to the date these costs are fully repaid (2027). The total has been split over 4 years, consistent with the DSB amortization policy. A detailed description of the financing costs is in Appendix 4 – Financing Costs

⁹ Refer to footnote 1

Table 3: 2022 and 2023 Operating Expenditure (Opex) for 300 users

The Opex incurred in 2022/23 includes costs to ensure operational readiness of the Client Onboarding and Support Platform (COSP) from 1 December 2022, support costs for the COSP from UPI Service launch in UAT on 17 April 2023 and UPI Service support costs in Production from 16 October 2023.

Forecast Annualised Opex	Description	2022 Opex in preparation for 300 users	2023 Opex in preparation for 300 users	Explanation of costs
Technology and Operations	Operation of the UPI Service through the DSB platform including technical and asset-class support	€91k	€2,297k	<ul style="list-style-type: none"> Support costs to ensure operational readiness of the service, including the support costs of new requirements
Management	Senior management team including MD, Managed Service Provider management team and CFO	-	€155k	<ul style="list-style-type: none"> Management costs to cover the period of production go live date
Administration	Administrative costs and overheads such as office space, and administrative support functions	-	€156k	<ul style="list-style-type: none"> Increased office cost aligned to the increased resource cost in Technology and Operations
External Consultants	External oversight and legal, professional and communication	-	€85k	<ul style="list-style-type: none">
Third-party data	Provision of third-party reference data	-	€594k	<ul style="list-style-type: none"> Includes Reference Data vendor costs and infrastructure for data storage and processing
Contingency	Contingency to cover unplanned costs to support the service once rolled out	-	€703k	<ul style="list-style-type: none"> Details on Contingency use is in Appendix 3 – Contingency.
Forecast Total 2022/2023 Opex		€91K	€3,990k	

Table 4: Forecast Annualised Operating Expenditure (Opex) (from 2024)

Forecast Annualised Opex represents the expected cost for operating the UPI Service on an annual basis. Since the publication of the Forecast Annualised Opex as of August 2021 in the [DSB UPI Fee Model Consultation Final Report¹⁰](#), the DSB has revised the expected operating expenditure to run and support UPI Service, including the Client Onboarding and Support Platform.

DSB estimates the number of users who will subscribe to the UPI Service globally to range between 300 to 3000 fee-paying users. The forecast Opex breakdown in August 2021 was based on supporting 3000 users.

Given that uncertainty remains over the number of users who will subscribe to the UPI Service, a conservative 300 fee-paying users has been used to determine the Indicative UPI user fees.

Table 4 provides a reconciliation between the following sets of Forecast Annualised Opex figures:

1. Forecast Annualised Opex as of August 2021 and the Forecast Annualised Opex costs as of March 2023 – supporting 3000 users.
2. Forecast Annualised Opex as of March 2023 relating to 3000 users, and the Forecast Annualised Opex costs as of March 2023 relating to 300 users.

Forecast Annualised Opex	Description	Amount (Aug '21) 3000 users	Amount (March '23) 3000 users	Amount (March '23) 300 users	Explanation of Delta
Technology and Operations	Operation of the UPI Service through the DSB platform including technical and asset-class support	€4,508k	€5,374k	€3,731	<ul style="list-style-type: none"> A detailed breakdown of the material changes in Opex since August 2021 is shown in Appendix 2 - Annualised Opex for 3000 users.
Management	Senior management team including MD, Managed Service Provider management team and CFO	€369k	€369k	€369k	<ul style="list-style-type: none"> No change
Administration	Administrative costs and overheads such as office space, and administrative support functions	€567k	€642k	€476k	<ul style="list-style-type: none"> Increased office cost aligned to the increased resource cost in Technology and Operations
External Consultants	External oversight and legal, professional and communication	€288k	€288k	€288k	<ul style="list-style-type: none"> No change
Third-party data	Provision of third-party reference data	Unknown	€1,250k	€1,189k	<ul style="list-style-type: none"> Includes Reference Data vendor costs and infrastructure for data storage and processing
Contingency	Contingency to cover unplanned costs to support the service once rolled out	€1,134k	€1,583k	€1,209k	<ul style="list-style-type: none"> Details on Contingency use is in Appendix 3 – Contingency.
Forecast Total Annualised Opex		€6,866k	€9,504k	€7,261k	

¹⁰ Refer to footnote 1

Appendix 2 - Annualised Opex for 3000 users

2.2.2 Number of Users per User Type

DSB analysis leading to the publication of the [DSB UPI Fee Model Consultation Final Report¹¹](#) estimated the total number of users who would subscribe to the UPI Service globally was a lower range of 3,000 fee-paying users. Given the UPI is a new initiative, there is no definitive set of data points available which allows the DSB to precisely pinpoint the projected user numbers.

In advance of the final UPI user fee determination, given the increasing demand for the publication of UPI user fees to feed into firms' budgetary preparations, coupled with the uncertainty over the number of users who will subscribe to the UPI Service, a conservative 300 fee-paying users has been used to calculate support costs and to determine Indicative UPI user fees. In the [DSB UPI Fee Model Consultation Final Report¹²](#), section 4.5, indicative UPI user fees for 300 fee-paying users was previously provided.

As of 1 March 2023, the European Union, United States, United Kingdom, and Australia have confirmed UPI reporting mandates, with the first compliance date of 29 January 2024 being for the United States. As a result, market participants are expected to be finalising their adoption plans, and the DSB will continue stakeholder outreach and analysis to validate projected user numbers for final UPI user fees for 2023-2024 to be published on 4 September 2023.

The DSB anticipates a significantly higher number of UPI fee-paying users compared to the number of OTC ISIN fee-paying users and further analysis of user numbers will be undertaken during the UAT phase. If the DSB can more precisely project the user numbers, the final UPI user fees for 2023-2024 will reflect those revised user numbers.

Whilst a higher number of users would mean that costs to be recovered are shared across a broader user base, there would also be an increase in operational cost to support the larger user base, despite the cost-effective scalability of the platform. Should the DSB determine the need to update the values of the Fee Model Variables to be published on 4 September 2023 prior to Production Go Live due to an increased user base, an adjusted Forecast Annualised Opex would be required, which would be in part shaped by analysis of user behaviour and support requirements during UAT. In this scenario, a breakdown of that adjustment would be provided.

The breakdown of user numbers per User Type has been estimated using the current split of OTC ISIN users as a guide, combined with data points from ESMA related to trade volume concentration to guide the total number of Power Users.

¹¹ Refer to footnote 1

¹² Refer to footnote 1

2.3 Indicative UPI Fee levels for Initial Invoicing Period

In order to determine the annual UPI Indicative user fees, the Infrequent User has been set as €1,000. The rationale for this fixed fee level is that it is high enough not to disadvantage Standard or Power Users but low enough to be acceptable to infrequent and small volume UPI creators. Infrequent Users will be required to pre-pay these fees in full via debit or credit card in the Client Onboarding & Support Platform (COSP) before use of the UPI Service in Production. Pre-payment functionality will be available in the COSP prior to UPI Service launch in Production. Details of the rationale behind pre-payment can be found in the [DSB UPI Fee Model Consultation Final Report¹³](#) but in essence it relates to operational cost efficiencies for securing payment of fees below a certain level. All other fee-paying users will be invoiced with 30 days payment terms, as per the [DSB Charges policy¹⁴](#).

User fees are calculated using a ratio which includes user numbers by user type as per the [DSB Charges policy¹⁵](#).

Table 5: Indicative UPI User Fees based on 300 Users

Based on 300 users, the table below shows firstly the indicative annual fees for the period 1 January 2024 to 31 December 2024, and secondly the indicative fees for the period from UPI production launch on 16 October 2023 to 31 December 2024 (i.e., the indicative fees for those users accessing Production from Q4 2023):

Estimated User numbers	User Type	Indicative Annual User Fee 1 Jan 2024 – 31 Dec 2024	Indicative User Fee 16 Oct 2023 – 31 Dec 2024
120	Power	€ 66,660	€ 83,324
60	Standard	€ 22,220	€ 27,775
102	Infrequent	€ 1,000	€ 1,250
3	UAT only	€ 22,220	€ 27,775
15	Search only	€ 11,110	€ 13,887
300	Total cost (Incl. FSM)	€ 9,667,642	€ 12,084,552

Table 6: Indicative UPI User Fees based on 3000 Users

The table below shows the resulting indicative fee model if the UPI service has 3000 users in the first year of service:

Estimated User numbers	User Type	Indicative Annual User Fee 1 Jan 2024 – 31 Dec 2024	Indicative User Fee 16 Oct 2023 – 31 Dec 2024
1200	Power	€ 7,990	€ 9,987
600	Standard	€ 2,663	€ 3,329
1020	Infrequent	€ 160	€ 200
30	UAT only	€ 2,663	€ 3,329
150	Search only	€ 1,332	€ 1,665
3000	Total cost (Incl FSM)	€ 11,628,600	€ 14,535,751

¹³ Refer to footnote 1

¹⁴ Refer to footnote 6

¹⁵ Refer to footnote 6

3 Appendices

3.1 Appendix 1 – Forecast Capex

3.1.1 Summary breakdown of delta of Forecast Capex

This table is a summary breakdown of the delta of Forecast Capex – UPI Build Costs for the period 2020-2023 with additional detail of the Reference Data and the New Requirements deltas in the tables in section 3.1.2 and 3.1.3 respectively below.

Table 7

	August 2021 costs	March 2023 costs	Delta Total	Explanation of Delta				
				UPI Mandate Delay	Reference Data See 3.1.2	DSB requirements See 3.1.3	IRG requirements See 3.1.3	Authorities Requirements See 3.1.3
Technology and Operations	€5,989 k	€8,948 k	€2,960 k	€460 k	€1,348 k	€397 k	€188 k	€568 k
Management	€1,168 k	€1,375 k	€208 k	€208 k	€0 k	€0 k	€0 k	€0 k
Administration	€444 k	€558 k	€114 k	€24 k	€58 k	€7 k	€3 k	€23 k
External Consultants	€393 k	€577 k	€184 k	€185 k	€0 k	€0 k	€0 k	€0 k
Third-party data	€0 k	€400 k	€400 k	€0 k	€400 k	€0 k	€0 k	€0 k
Contingency	€879 k	€509 k	-€370 k	-€370 k	€0 k	€0 k	€0 k	€0 k
Total (Incl FSM 20% margin)	€8,872 k	€12,368 k	€3,497 k	€506 k	€1,806 k	€403 k	€191 k	€591 k

3.1.2 Detailed breakdown of delta of Forecast Capex - Reference Data

Reference Data vendor costs and infrastructure costs for data storage were unknown at the time of the DSB UPI Fee Model Final Report, as the Request for Information process was ongoing. There are two primary drivers of the requirements:

1. To provide mapping functionality for the generation of unique UPIs using multiple IDs (as per CPMI-IOSCO Technical Guidance)
2. Availability of an IP free identifier within the UPI data record (in line with [FSB’s Governance arrangements for the UPI¹⁶](#)).

Table 8

Reference Data	Total
Reference Data solution build (including product definition updates to support alternate underliers, DSB interface development and testing of solution)	€768 k
Ref Data MIS/SLA automation	€188 k
Vendor reference data costs	€133 k
Infrastructure costs (lower environments, UAT, prod)	€97 k
Design spend proof of concept	€62 k
Indices work	€150 k
Primary underliers build	€170 k
Alternate underliers response (GUI, ReST, FIX, FDL)	€82 k
File Download with Alternate Identifiers	€62 k
Reference Data Permissioning	€94 k
Grand Total incl FSM (20% margin)	€1,806 k

¹⁶ Refer to footnote 7

3.1.3 Detailed breakdown of delta of Forecast Capex - New Requirements

Table 9

New Requirements	DSB requirements	IRG requirements	Authorities' requirements	Total
Notifications protocol			€93 k	€93 k
Authority Access User Type			€80 k	€80 k
File Download T+1 (permissioned folder requirement)	€94 k			€94 k
Monitoring of obsolescence of underliers			€64 k	€64 k
Combined OTC ISIN and UPI workflow		€45 k		€45 k
ROC/CDIDE governance support			€212 k	€212 k
UPI User Acceptance Testing environment infrastructure		€146 k		€146 k
RFI Process and analysis	€247 k			€247 k
7 Additional New templates			€142 k	€142 k
Initial design and proof of concept work of Unplanned work	€62 k			€62 k
Grand Total incl FSM (20% margin)	€403 k	€191 k	€591 k	€1,185 k

3.2 Appendix 2 - Annualised Opex for 3000 users

3.2.1 Summary breakdown of delta of Forecast Annualised Opex for 3000 users.

This table is a summary breakdown of the delta of Opex Capex – UPI Build Costs for the period 2020-2023 with additional detail of the Reference Data and the New Requirements deltas below.

Table 10

	August 2021 costs	March 2023 costs	Delta Total	Explanation of Delta			
				Reference Data See 3.2.2	DSB requirements See 3.2.3	IRG requirements See 3.2.3	Authorities' Requirements See 3.2.3
Technology and Operations	€4,508 k	€5,374 k	€927 k	€0 k	€592 k	€47 k	€288 k
Management	€369 k	€369 k	€0 k	€0 k	€0 k	€0 k	€0 k
Administration	€567 k	€642 k	€74 k	€0 k	€45 k	€4 k	€26 k
External Consultants	€288 k	€288 k	€0 k	€0 k	€0 k	€0 k	€0 k
Third-party data	€0 k	€1,250 k	€1,250 k	€1,250 k	€0 k	€0 k	€0 k
Contingency	€1,134 k	€1,583 k	€448 k	€248 k	€127 k	€10 k	€63 k
Total (20% margin)	€6,866 k	€9,504 k	€2,699 k	€1,498 k	€764 k	€60 k	€378 k

3.2.2 Description of annualised Opex for 3000 users - Reference Data

Reference Data vendor costs and infrastructure costs for data storage were unknown at the time of the DSB UPI Fee Model Final Report in September 2021, as the Request for Information process was ongoing. There are two primary drivers of the requirements:

1. To provide mapping functionality for the generation of unique UPIs using multiple IDs (as per CPMI-IOSCO Technical Guidance)
2. Availability of an IP free identifier within the UPI data record (in line with the [FSB's Governance arrangements for the UPI¹⁷](#)).

Third-party data comprises of costs for sourcing and integration of Reference Data and obtaining licenses for usage and distribution of primary and alternate identifiers e.g., SEDOL, RIC, CUSIP.

3.2.3 Detailed breakdown of delta of Forecast Annualised Opex for 3000 users - New Requirements

Table 11

New Requirements	DSB requirements	IRG requirements	Authorities' requirements	Total
Notifications protocol			€236 k	€236 k
New regulatory user type			€44 k	€44 k
File Download T+1 (permissioned folder requirement)	€53 k			€53 k
Monitoring of obsolescence of underliers			€35 k	€35 k
Combined OTC ISIN and UPI workflow		€50 k		€50 k
ROC/CDIDE governance support	€213 k			€213 k
Additional controls to support governance requirements	€371 k			€371 k
Total	€637 k	€50 k	€315 k	€1,002 k
Contingency	€127 k	€10 k	€63 k	€200 k
Grand Total incl FSM (20% margin)	€764 k	€60 k	€378 k	€1,202 k

¹⁷ Refer to footnote 7

3.3 Appendix 3 – Contingency

As part of the determination for final UPI User Fees, to be published on 4 September 2023, the amount of remaining contingency and future contingency needs will be revisited.

On the basis contingency is carried into the final UPI User Fee determination, any unused UPI contingency funds will feed into the cost adjustment mechanism for the next invoicing period, as detailed in section 2.2.1.

3.3.1 Capex Contingency

The Forecast Total Annualised Capex includes 20% contingency for unplanned costs. Some contingency has been used with DSB Board approval to fund the new requirements referenced in Technology and Operations in Table 1. This has been offset in part by return of unused contingency relating to build of the Client Onboarding and Support Platform (COSP). Remaining contingency is held for any further unplanned expenditure prior to end of the build of the UPI Service. Examples may include unexpected issues uncovered in the UAT Service which require resolution in both UAT and Production environments. The DSB considers this as relatively low risk.

3.3.2 Opex Contingency

Forecast Total Annualised Opex includes 20% contingency for unplanned costs. Contingency is held in the event of unexpected issues following the launch of the Client Onboarding and Support Platform (COSP) at the start of UAT and/or following the launch of the UPI Service in Production.

3.4 Appendix 4 – Financing Costs

Based on the original financing model, a rate of return of 16% was to be applied on the Capex costs until the Capex is fully repaid in 2027. The 16% rate was based on the risks and lack of certainty related to regulatory mandates at the time of the start of the build of the UPI Service and independently reviewed to confirm appropriateness by a third-party.

The DSB reviewed the risk profile of the UPI project following the first UPI mandate announcement in October 2022. As a result of this review, an adjusted rate of return of 4.59% will be applied from October 2022 until the end of the repayment period (2027). The DSB obtained an independent third-party view to confirm the appropriateness of this rate. Applying 4.59% from October 2022 (compound each month) results in a total interest charge of €3,586k (including FSM) which is split evenly over the 4-year repayment period. The Financing Cost is an approximation as the level of interest accrued will depend on the actual cost incurred per month until the initial Capex expenditure is repaid.