Derivatives Service Bureau

Follow up Proposals on the Principles Underlying the Fee Model for the Unique Product Identifier (UPI) Service - based on Industry Feedback to First Consultation Paper

Consultation Paper 2

10th May 2021

Contents

1 Executive Summary

The Association of National Numbering Agencies ("ANNA") founded the Derivatives Service Bureau (DSB) for the allocation and maintenance of International Securities Identification Numbers (ISINs), Classification of Financial Instrument (CFI) codes and Financial Instrument Short Names (FISNs) for OTC derivatives.

The Financial Stability Board (FSB) announced on May 2, 2019 the designation of the DSB as the sole service provider for the future Unique Product Identifier (UPI) system[1], performing the function of issuer of UPIs as well as operator of the UPI reference data library. The DSB is working towards providing UPIs for OTC derivatives in the second half of 2022, which will help enable users, such as banks, strengthen risk data aggregation capabilities and internal risk reporting practices and assist regulatory authorities to aggregate data on OTC derivatives transactions to help assess systemic risk as outlined in the 2014 FSB feasibility study on approaches to aggregate OTC derivatives data[2].

The DSB seeks to design, deploy, and operate an efficient UPI service that leverages the capabilities of the existing services (e.g., CFI and OTC ISIN provision) to the extent practicable. As such the UPI fee model proposals set out in this paper are intended to build on the existing framework whilst also recognising that the UPI service will have specific and distinct needs.

Market feedback in the course of the UPI consultation process will determine the target operating model required for the UPI service launch, which in turn has a direct impact on the overall build and operational costs of the UPI service. The consultation process therefore aims to get user views on key service provision elements, which together with Industry Representation Group[3] feedback in relation to the un-costed elements, such as underlying reference data mapping provider(s)[4], will determine the estimate UPI cost for determination of user fees.

The first of two UPI consultation papers on principles that impact the UPI fee structure was published on 11th January 2021 and shared with approximately 2,600 individuals (including at trade associations) as well as widely circulated in the trade press across Asia, Europe and the US. The DSB also sent two reminders to all interested parties highlighting the goal of the consultation and the deadline for responses. The DSB sought to obtain feedback from as broad a spectrum of participants as possible - both in terms of geographic diversity as well as from a range of differing market structure participants.

The DSB received a number of queries in response to this awareness generation campaign – from a mix of regional institutions located in Asia and globally active institutions some of whom are currently engaged in an examination of their derivatives data lake structures. To the extent practicable the DSB has responded directly to incoming queries (via both calls and emails), and has compiled a FAQ document that is available on its website[5] so that market participants are directed to a single point of information in a scalable manner. In addition, the DSB has published all responses received to the first fee model consultation on its website, as is standard practice for all DSB industry consultations.

[1] https://www.fsb.org/2019/05/fsb-designates-dsb-as-unique-product-identifier-upi-service-provider/
[2] https://www.fsb.org/wp-content/uploads/r_140919.pdf
[3] Please refer to section 5.2.1 of this paper
[4] Please refer to section 4.6 of this paper
[5] https://www.anna-dsb.com/download/upi-faq/

The DSB continues to seek direct feedback from market participants and is conscious that awareness of the UPI System and regulatory requirements surrounding the need for obtaining and reporting the UPI remains relatively nascent at this time. This includes limited awareness of the DSB's role as UPI Service Provider for provision of UPIs and associated data, evidenced by the fact that the DSB received a total of nine responses representing twelve institutions, although almost 360 participants representing 81 institutions attended the introductory webinars. Although the overall number of responses was relatively low, those that did respond represented a diverse cross-section of industry perspectives representing key UPI creator and consumer categories as set out in the table below.

Respondent Category	# of Respondents
Data Vendor	2
Execution Platform	3
Sell Side	1
Trade Association - Buy-side	2
Trade Association - Energy Corporates	2
Trade Association - Sell-side	1
Trade Repository	1
Grand Total	**12**

The first consultation focused on key assumptions, which included expectations of UPI adoption timelines, UPI creation estimates, expectations of alignment with other international data standards that are applicable to OTC derivatives, implementation efficiency drivers, and ongoing work by the DSB Product Committee (PC) and DSB Technology Advisory Committee (TAC).

The purpose of this second consultation is to solicit further industry feedback on additional detail provided following the responses received as part of first round of industry consultation which closed on 5th March 2021. Feedback provided in response to this consultation will be collated and incorporated into the Final UPI Fee Model Consultation Report to be published on 27th September 2021, as set out in section 2 of this paper.

This paper commences by providing a summary of industry responses to the assumptions made and questions posed in the previous consultation paper, and follows with additional questions for further industry feedback. It should also be noted that no feedback was received on the assumptions set out in the prior paper, and the DSB is proceeding on the basis of the items documented in section 5.3 of this paper. Briefly, the assumptions are:

(i) that the DSB will leverage the DSB's existing service to reduce both the UPI user fee burden by minimizing implementation and run costs for the DSB, and minimize user's own technology burden so institutions already connected to the DSB can overlay their UPI related workflows in a manner that is more integrated with their other OTC derivative reference data needs[6].

(ii) align the UPI with other internationally recognised data standards to allow both the DSB and DSB users to maintain a clear data hierarchy when utilizing each of the CFI, UPI, OTC ISIN, and FISN more easily and consistently[7].

[6] Please refer to section 5.3.1 of this paper
[7] Please refer to section 5.3.2 of this paper

(iii) that the definition of UPI product templates will be the purview of the DSB PC, in addition to the definition of the OTC ISIN. Market practitioners will therefore continue to be provided with product documentation and supporting insight to ensure data quality and consistency (where necessary) into how product definitions are created, reviewed, in accordance with the recommendations of the DSB PC[8].

(iv) that the UPI creation estimates provided in the paper – for both the initial UPI creation rate, and the longer-term flow rate - are to be used as a basis to provide feedback on the principles set out in the consultation section of this document[9].

Where relevant, each section has been augmented to include questions posed by potential UPI consumers. Each question is supported by analytical context and where the proposed next steps have a cost impact, the key cost drivers have been detailed to allow industry to make a determination about whether they concur with the assumptions and principles set out in the document, or propose alternate evidence driven considerations that they believe should be utilized instead and/or alongside the proposals set out in this paper. Respondents are also invited to provide any general comments in the final section of the response form provided at the end of this paper.

Last but not least, this paper also provides a reminder of UPI governance arrangements and the UPI purpose in sections 5.1 and 5.2. In summary, the key governance criteria were specified by the FSB and are outlined in the FSB Governance arrangements for the UPI[10]. The governance criteria have been referenced within this paper where related to the UPI fee model principles, and note that governance arrangements should be in the public interest, lean, change only as needed, include a consultative change process, ensure the economic sustainability of the UPI System over time, ensure open access, target fair cost allocation to stakeholders, ensure that the UPI standard and the use of any UPI Code should be free of licensing restrictions, have policies that reasonably detect and effectively manage any potential conflict of interest, be fit for purpose, take into consideration other governance frameworks, and ensure the operational viability and continuity of UPI Service Provider operations.

The DSB works to ensure the broad views and needs of the stakeholders lead the direction of development of the service. By working collaboratively, the DSB has historically been able to ensure all views are considered, and it is hoped that a representative set of firms will seek to respond to this consultation. All responses will be published on the DSB's website, with respondents able to indicate in the response form if they wish the name of their institution to remain anonymous at the point of publication.

All responses should be submitted using the form provided in section 6 of this paper, and sent to industry_consultation@anna-dsb.com no later than 5pm UTC on 9th July 2021.

[8] Please refer to section 5.3.3 of this paper
[9] Please refer to section 5.3.4 of this paper
[10] Please refer to section 5.2.2 of this paper and https://www.fsb.org/2019/10/governance-arrangements-for-the-upi/

2 DSB's UPI Implementation Timeline

A number of global market participants requiring the UPI have in recent weeks been highly focused on the timeline by which the DSB will make the UPI available, including key milestones that will drive market readiness and adoption. The DSB has therefore sought to provide additional information about key implementation milestones in the period through to July 2022 – the target date for DSB UPI go-live. Highlights are provided below, with further information to be made available here on the UPI website[11] in due course.

As part of its Governance arrangements for the UPI , the FSB outlined high-level expectations for global UPI implementation planning. It was recognised that jurisdictional implementation is likely to be staggered, occurring at varying speeds because of the independent decision-making processes and prioritisation of initiatives.

Allowing for legal changes to be made and for TRs and reporting entities to adapt, the FSB recommendation is that jurisdictions undertake the necessary actions relevant to their situation to implement the UPI technical guidance no later than the third quarter of 2022.

In preparation for UPI adoption and implementation by supervisory authorities, the DSB continues to work with ROC, and industry stakeholders to refine the requirements and framework for the UPI.

Readers wishing to stay abreast of key UPI updates are encouraged to subscribe to the DSB's UPI notifications either by emailing otc.data@anna-dsb.com and requesting UPI updates, or by clicking on the link here[12] and selecting their preferences.

#	UPI Implementation Milestones	Date(s)
1	1st UPI Fee Model Consultation period	11th Jan – 5th Mar 2021
2	List of Product Templates published for user information	30th Apr 2021
3	Draft API and Connectivity Specifications (rules of engagement) published	30th Apr 2021
4	2nd UPI Fee Model Consultation paper published	10th May – 9th Jul 2021
5	Final API and Connectivity Specifications (rules of engagement) + draft UPI Product Template documentation published	30th Jun 2021
6	Industry Feedback window closes for 2nd UPI Fee Model Consultation	9th Jul 2021
7	Responses to the 2nd UPI Fee Model Consultation published	By 30th July 2021
8	UPI Fee Model Consultation Final Report published	27th Sep 2021

[11] https://www.anna-dsb.com/upi/
[12] https://www.anna-dsb.com/subscribe-to-notifications/

#	UPI Implementation Milestones	Date(s)
9	UPI Product Templates finalised and published (provisional date)	30th Nov 2021
10	UPI Legal Terms and Conditions Consultation (dates to be confirmed)	Q4 2021
11	Legal Consultation Conclusions published (date to be confirmed)	Q1 2022
12	Internal DSB Quality Assurance Testing of UPI Platform (date to be confirmed)	Q1 2022
13	UPI User Acceptance and Integration Testing Commences + User on-boarding commences (date to be confirmed)	End Q1 2022
14	**UPI Production system available – live UPIs can be created and searched** (date to be confirmed)	**July 2022**

3 UPI Adoption Expectations

This section serves as a reminder of regulatory adoption expectations, and was also presented in the previous consultation paper. The DSB has revised the data presented in the previous consultation paper to reflect the most current information, as the subject remains of interest to most industry participants.

Regulatory insight from thirteen G20 jurisdictions - including those that dominate the capital markets landscape across North America, Europe, Africa, and Asia - indicates that rules to support UPI reporting are either already in place or expected to be in place by mid to late 2022, with final adoption timelines subject to availability of the UPI service by the DSB, and market consultation. Regulators, in the main, note their expectation that all asset classes will be reportable via a "big bang" approach.

Several regulators have noted that they intend to consult with the market in terms of the specific timing of implementation, as well as whether UPI adoption should be phased by size of the reporting institution, such that larger institutions are in the first phase. In addition, some jurisdictions are in the processes of finalising their trade reporting infrastructure, while others have noted their intention to proceed with introduction of the UPI in a manner that aligns with other regional regulators.

Reporting timelines largely converge around T+1 expectations, with the spectrum spanning from as soon as technologically practicable following trade execution, to T+2. In addition, it is expected that several jurisdictions rely on dual-sided reporting, such that both parties in the transaction would /may need access to the UPI reference data record generated by the DSB (either directly from the DSB or via a data or technology vendor).

The DSB is aware that the CFTC, ASIC, and ESMA have each publicly consulted on and/or published final rules setting out their expectations regarding the reporting of the UPI, UTI and Critical Data

Elements (CDE). Additional regulatory consultations are expected to be published in Q2 2021 and beyond.

4 Consultation Considerations

Responses should be objective, and where users believe that the DSB's proposals should be amended and/or augmented, alternate solutions should be proposed, with responses listing specific and actionable alternative solution(s) that would be acceptable to the respondent to ensure that the DSB can work to reflect the best target solution sought by industry and within the governance framework of the utility.

4.1 User Estimates

Summary: The DSB has revised the estimated number of paid users as a result of industry feedback on a query about the target service model, specifically about the timing of free-to-use downloadable delta files, which have been requested at an earlier point in time. The anticipated number of organizations expected to use the DSB's UPI service is expected to lie in the range between those previously forecast, and a lower range that more closely mirrors existing user interaction patterns.

The lower threshold therefore shows:

- 511 organizations representing 3.4k legal entities will pay to connect programmatically to create and/or search for UPI records
- 2,437 organizations representing 16.3k legal entities will pay to connect manually to create UPI records
- 17,200 organizations representing 115k legal entities will connect free of cost to search for and/or download UPI records

i.e. approximately 20,200 entity groups representing 135,000 organizations that currently report data to trade repositories

The upper bound of user estimates as in line with the proposal set out in the earlier prior consultation paper, and with which industry appears to be comfortable:

- 12,000 organizations representing 80.5k legal entities will pay to connect programmatically
- 8,000 organizations representing 53k legal entities will pay to connect manually
- 20,000 organizations representing 133.5k legal entities will connect free of cost

Question 1a: Do you concur with the projected user estimates?

Question 1b: If not, what specific alternate approach do you recommend? Please provide a clear rationale and cite publicly available sources for any additional data points you believe should be incorporated into the DSB's assumptions.

Summary of Responses:

The prior consultation paper set out assumptions about the number of DSB users, including the underlying rationale. Respondents were asked if they concurred with the data points presented and where they disagreed to propose specific alternate proposals supported by information in the public domain.

Where respondents provided feedback to the question of estimated number of users expected to pay the DSB for access to the UPI (60% of all respondents), respondents noted that the conclusions appeared sound based on respondents' market expertise, and were also dependent on the final regulatory requirements as some were still subject to consultation. Some users noted their

expectation that while they saw the proposed data points as reasonable, this was on the basis that there would be both fee-paying and free-to-use UPI data services made available by the DSB, as is the case for existing DSB services. There were no responses indicating or stating that respondents had concerns with the proposition put forward by the DSB.

Forecast UPI user numbers have been revised following feedback from the market in response to industry feedback to the first of two UPI fee model related consultations (the Industry Consultation), as well as more nuanced information made available by the regulatory community.

The largest driver for the evolution of the model is confirmation from 83% of respondents to the Industry Consultation that respondents want access to free-to-use UPI files on the same timeline as that currently made available for the OTC ISIN (ref. item 4.4 below). The DSB's previous user estimate model was aligned with the proposal set out in the consultation paper, which was to provide free to use files on a delayed timeline – thus driving the utilization towards a pay-to-play model that was equitable for the majority of market participants and did not place an undue burden on the largest firms.

Notably, given the lower anticipated UPI volumes (compared to the existing OTC ISIN service), the DSB foresaw a risk that a larger proportion of the UPI user base (compared to the OTC ISIN service) may rely exclusively on the DSB's free service, which includes daily generated machine-readable download files. In this circumstance, the cost for each fee-paying user would be higher than otherwise, and the DSB proposed access to the daily data files with a two day time-delay.

The timing of free-to-use UPI data files was the only topic on which every respondent (from each category of the UPI user base) provided feedback, with 83% of respondents disagreeing or strongly disagreeing with the DSB's proposal to provide free to use files on a T+2 basis (citing a variety of reasons) and noted that free-to-use files should be provided on the same basis as that for the OTC ISIN today. The request for files to be made on the same basis as the OTC ISIN was independently received from each respondent.

DSB Proposal:

Incorporating this feedback into projected UPI users resulted in a rebalancing of fee paying user projections, such that the ratio now more closely mirrors that for the OTC ISIN service today as the majority of users will no longer have to pay to access UPI data in a timely manner. It is interesting to note market feedback from associations that heavily represent the Sell-side (the institutions most likely to connect on a programmatic basis based on the DSB's experience thus far[13]) noting that the incremental cost saving for the highest fee-paying user category is not sufficient to justify the market disruption that would result if there was misalignment between the core approaches across the UPI and the OTC ISIN services.

Other changes that resulted in model evolution include more nuanced regulatory data where regulators were able to provide detailed insight. Model updates allow for refined market concentration data, and deeper insight into the types of market participants. Where no further market structure insights were available, the DSB has revised the data on the basis of lessons learned through provision of the OTC ISIN service, with provisions made to mirror the prevailing steady state ratio of

[13] https://www.anna-dsb.com/2021/03/15/monthly-dsb-metrics-february-2021/

free users to paid users. Further, within the paid user category, the DSB has applied the consistently held model of users seeking to manually create data vs. those seeking access on a programmatic basis.

The revised model approach seeks to evolve projections from centering around a worst case scenario, to a user feedback driven more realistic scenario, while acknowledging that regulatory guidance continues to evolve.

As a reminder, in light of the DSB's current EU and UK focused service offering, DSB expects to onboard a significant number of new users to accommodate the transition from a European to a global service. In addition, with confirmation that for institutions reporting in the EU, ESMA's "…preliminary view is that the UPI could be considered as an alternative to the ISIN required in the transaction and reference data reports only in the event that the scope of MiFIR reporting was extended beyond ToTV instruments traded via an SI as recommended in section 5.2 of this Final Report. Importantly, ESMA considers that the choice of the ID to be used should not be left to the reporting entities. In order to ensure full alignment with the EMIR reporting requirements that are currently under review, the conditions under which UPI should be used instead of ISIN should be further determined by ESMA. However, ESMA acknowledges that these views are subject to the final implementation of the UPI."[14]

A similar scenario may occur in the UK, with on-venue (ToTV and uToTV[15]) OTC derivative trades expected to be reported with an OTC ISIN, and off-venue OTC derivative trades expected to be reported using a UPI.

These assumptions have an impact on the estimated number of organizations that will need to consume the UPI – either directly from the DSB, or via a third party as part of downstream data distribution initiatives by industry.

The DSB utilized four approaches in arriving at estimated numbers of legal entities that may need to connect directly to the service. These included:

- leverage the lessons learned in the three years since the OTC ISIN was launched,
- identify publicly available and validated data points and citations
- solicit regulatory feedback
- obtain anecdotal market feedback

As regulatory feedback is predicated on current user reporting practice and is thus deemed to be the most accurate data source currently available, the DSB proposes to move forward with operational readiness predicated on an estimated range of organizations expected to use the DSB's UPI service is expected to lie in the range between those previously forecast, and a lower range that more closely mirrors existing user interaction patterns.

The lower threshold therefore would be predicated on the following assumptions based on the assumption of 3,000 entity groups may become paid users of the DSB's UPI service:

The lower threshold therefore shows:

[14] https://www.esma.europa.eu/sites/default/files/library/esma74-362-1013_final_report_mifir_review_-_data_reporting.pdf (Published 31 March 2021)

[15] Traded on a Trading Venue (ToTV) and underlying Traded on a Trading Venue (uToTV) as defined by MiFID and MiFIR

- 511 organizations representing 3.4k legal entities will pay to connect programmatically to create and/or search for UPI records
- 2,437 organizations representing 16.3k legal entities will pay to connect manually to create UPI records
- 17,200 organizations representing 115k legal entities will connect free of cost to search for and/or download UPI records

i.e. approximately 20,200 entity groups representing 135,000 organizations that currently report data to trade repositories in at least 13 jurisdictions

The upper bound of user estimates as in line with the proposal set out in the earlier prior consultation paper, and with which industry appears to be comfortable:

- 12,000 organizations representing 80.5k legal entities will pay to connect programmatically
- 8,000 organizations representing 53k legal entities will pay to connect manually
- 20,000 organizations representing 133.5k legal entities will connect free of cost

4.2 Forecast Workflow Support for Users

Summary: The DSB anticipates that users will require support for three types of workflows, subject to their regulatory needs. Some users will only require the ability to create, search for and/or download the UPI reference data record, whilst a second category may only require the ability to create, search for and/or download the OTC ISIN, and a third set of (likely global) participants are likely to have reporting needs that require either the UPI or the OTC ISIN, subject to their reporting jurisdiction.

Feedback from industry confirmed the DSB's expectation, via both the consultation process and an additional user survey conducted in late March 2021. The DSB will therefore proceed with the provision of services on the basis set out above.

For questions on the proposal that that every OTC ISIN record would contain the UPI code (but not the UPI reference data), please see section 4.5, question 4.

Summary of Responses:

The prior consultation paper presented three different data requirement scenarios, subject to users' regulatory needs - (i) UPI only, (ii) OTC ISIN/CFI only, and (iii) OTC ISIN/UPI/CFI in a single data set. 67% of respondents concurred with the DSB's proposal in its existing form noting that the proposal to support all three requirements offered all market participants sufficient flexibility to be self-deterministic in their approach.

One respondent noted that while (i) and (ii) above would serve a total of 50% of the eventual DSB user base, the firm expected that (iii) would be required by 100% of DSB users, while others noted that they believe each of the three scenarios must be catered for to meet users' individual needs. There were no responses indicating or stating that respondents had concerns with the proposition put forward by the DSB.

DSB Proposal:

In the prior consultation, the DSB anticipated that following launch of the UPI service, users will connect to the DSB service to support one of three needs:

- Organizations that only require access to the UPI code and the UPI reference data record (in the remainder of the paper referred to as "UPI record") containing all input and derived data elements associated with the UPI
- Organizations that only require access to the OTC ISIN, CFI and FISN and the OTC ISIN reference data record (the current DSB service) (in the remainder of the paper referred to as "OTC ISIN record") containing all input and derived data elements associated with the OTC ISIN
- Organizations that require access to the full suite of UPI, (code and record) CFI, FISN, and OTC ISIN in light of their global footprint and the commensurate diversity of reporting needs , that would obtain all the input and derived data elements that define each of the UPI, CFI and OTC ISIN

Given the strict data hierarchy that is expected to prevail across the CFI, UPI and OTC ISIN, the DSB proposed that every OTC ISIN record would contain the UPI code as part of the OTC ISIN record itself, where the user requested the CFI, UPI and OTC ISIN as part of a single message. Similarly, the UPI record is proposed to contain a FISN and a CFI code. Details regarding the cost allocation methodology for the service are set out in section 5.5.

In addition, the DSB acknowledges the associated feedback provided regarding the impact of such a structure on future data licensing agreements and related fees for the UPI so that users only pay for the identifiers they require. A further update will be provided in the final consultation report following a discussion with the TAC regarding the impact on the proposed workflow structure, as well as during the course of the legal agreement consultation to be held in Q4 2021.

The DSB has acknowledged the feedback regarding the need for provision of an 'OTC ISIN/CFI only' service, in addition to a UPI only, and a combined OTC ISIN/CFI and UPI service. In determining the content of the end of day file for the OTC ISIN/CFI service, several of the factors outlined above have to be balanced.

For the content of the OTC ISIN/CFI end of day file, the decision to propose including the UPI code within the ISIN record required several factors to be weighed up and balanced, some of which are outlined below:

- The number of entities which might leverage the UPI code for free as part of the OTC ISIN record (and therefore avoid having to pay for the UPI record service) is deemed to be low, in that it will likely be a subset of the existing OTC ISIN service user-base (i.e. subset of ~130 users)
- The user fee levels (estimates detailed in section 4.4) are projected to be significantly lower than for the OTC ISIN service, and as such would provide a lower bar to paid user access (i.e. less incentive to try a manual workaround to avoid paid UPI access)
- The UPI code and OTC ISIN record combined are not anticipated to contain all of the elements required to build a timely UPI record (i.e. maintaining demand for the UPI record)
- The UPI record is anticipated to be enriched versus the OTC ISIN record, again maintaining demand for the (paid) UPI record service

- Having access to the UPI code (but not to the whole UPI "record") within the OTC ISIN record at 23.55hrs UTC, T+0 attempts to balance the respondents' preference for accessing (free) UPI data as soon as possible, while supporting the financial sustainability of the UPI service and maintaining fair access across the UPI user base irrespective of jurisdiction.

In terms of timing for the various data elements to be made available (which will be discussed in further detail in section 4.5) it is proposed that the OTC ISIN / CFI end of day file (containing the OTC ISIN record and UPI code) will continue to be made available 23.55hrs UTC, T+0.

Per above, this will include the UPI code but not the UPI reference data, in accordance with respondents' feedback requesting free availability of UPI code on T+0 (i.e. 23.55hrs UTC, T+0). The full UPI record (UPI code and UPI reference data) would be made freely available at T+1 23.55hrs UTC, with the primary goals of operating a structure which will be supportive of the financial sustainability of the UPI service, providing a fair service for all jurisdictions, and ensuring adequate demand for the three user scenarios laid out above.

4.3 User Access

Summary: The DSB is evaluating the additional data access mechanisms requested by respondents to the first consultation and proposes to follow up with feedback from the DSB Technology Advisory Committee (TAC) once their review has completed, with an update to be provided in the UPI Consultation Final Report.

At this time the DSB believes that users will be able to access the UPI service using one or more of the following mechanisms:

Fee Paying:

i. Power User - Full Programmatic Access - Programmatically connect to create, search for and download data
ii. Search-only API User - Limited Programmatic Access - Programmatically connect to search at a lower volume threshold than permitted for a Power User
iii. Standard User - Manual Access - Manually connect to create, search for and download data
iv. Infrequent User - Manual Access - Manually connect to create, search for and download data, at a lower volume threshold than permitted for a Standard User

Non-Fee Paying:

v. Registered User - Manually connect to search for and download data
vi. Registered User - Manually or programmatically connect to download data from the file download service

Question 2a: Do you concur with the approach related to user access including any additional services to be introduced at the discretion of the TAC?

Question 2b: ***If not, what specific alternate approach do you recommend? Please provide a clear and objective rationale for each alternate approach you recommend.***

Summary of Responses:

The prior consultation sought feedback on the proposal to facilitate access to the UPI service and the UPI reference data library on a programmatic basis, via a web front end, and via a file download service, with records available in a machine-readable format i.e. consistent with the approach currently utilized for the OTC ISIN service. 58% of respondents concurred with the proposal, with one respondent noting that the DSB's proposal offered market participants with sufficient flexibility to self-determine their DSB integration model(s). There were no responses indicating or stating that respondents had concerns with the proposition put forward by the DSB.

In addition, two respondents requested that the following additional services be included at the point of initial (day one) UPI implementation:

- A mechanism to request, "all related UPIs" based on a criteria e.g. a request to return all UPIs for a specific legal entity affiliated with the underlying identifier

- Publication of daily UPI "full files" containing all active UPIs for that day i.e. beyond the DSB's proposal which is to provide information about changes since the last file publication date
- A programmatic mechanism allowing the user (in particular for trade repositories) to pull all applicable UPIs in bulk e.g. a file download service on an intraday basis so that changes, updates, and newly created UPIs are appropriately captured for onward dissemination to the appropriate regulatory agency.
- A control mechanism to programmatically verify that UPI generation for a given date has completed and that UPI generation processes have moved on to the next date (based on UTC). Seen as necessary functionality to provide trade repositories with confirmation that the industry record of UPIs for a given date will not change after that business day has concluded.
- For API based access to the UPI data, the ability to GET all UPIs created and/or modified between two timestamps

DSB Proposal:

The DSB proposes to ensure that UPI users have access to the full suite of access mechanisms that are currently available to DSB users through the existing service as well as those that are expected to be introduced in 2022 following industry feedback in 2020. In addition, the DSB remains committed to open access to all. As such access to the DSB archive for consumption of UPIs and associated reference data will be freely available to all organizations and users.

Specifically, those seeking to access the DSB will be (at minimum) able to use one of the following mechanisms:

Fee Paying:

i. Power User - Full Programmatic Access - Programmatically connect to create, search for and download data
ii. Search-only API User - Limited Programmatic Access - Programmatically connect to search at a lower volume threshold than permitted for a Power User
iii. Standard User - Manual Access - Manually connect to create, search for and download data
iv. Infrequent User - Manual Access - Manually connect to create, search for and download data, at a lower volume threshold than permitted for a Standard User

Non-Fee Paying:

v. Registered User - Manually connect to search for and download data
vi. Registered User - Manually or programmatically connect to download data from the file download service

Additionally, the DSB is currently evaluating the request for complementary data distribution channels to be introduced at the launch of the UPI service and is liaising with the DSB TAC for a recommendation on whether and how these additional mechanisms should be introduced. An update will be provided in the final UPI consultation paper following the DSB TAC's review of the proposals.

4.4 Registered User File Download Timing

Summary: The DSB is proposing to make the OTC ISIN record including the UPI code freely available at T+0 23.55hrs UTC and the full UPI record on T+1 23.55hrs UTC with the primary goals of ensuring financial sustainability and providing a fair service for all jurisdictions.

Question 3a: Do you concur with this approach to the Registered user file download timing?

Question 3b: If not, what specific alternate approach do you recommend? Please provide a clear rationale and any additional details you believe should be incorporated into the DSB's approach.

Summary of Responses:

Given the lower anticipated UPI volumes (compared to the existing OTC ISIN service), the DSB foresees a risk that a larger proportion of the UPI user base (compared to the OTC ISIN service) may rely exclusively on the DSB's free service, which includes the daily generated machine-readable download files. In this circumstance, the cost for each fee-paying user would be higher than otherwise, and the DSB proposed access to the daily data files with a two day time-delay.

All organizations that responded to the prior consultation had a view on this topic, with 83% of respondents disagreeing or strongly disagreeing with the DSB's proposal to provide free to use files on a T+2 basis (citing a variety of reasons) and noted that free-to-use files should be provided on a on the same basis as that currently available for the OTC ISIN instead; whilst 8% agreed with the DSB's proposal.

A highlight of the reasons cited by respondents requesting that free-to-use UPI files be available on the same basis of as currently in place for free-to-use files for the OTC ISIN included, but were not limited to the following:

- Concerns about the application of the proposed T+2 time delay to market infrastructure providers, including trade repositories. While respondents understood that absent such a time delay, fee-paying users may carry a larger proportion of the cost burden than those users seeking to rely exclusively upon DSB's free service, application of this delay would not allow trade repositories and many market participants "to timely and accurately meet their regulatory requirements".
- Some respondents noted that "as the UPI is global in nature, there are practical difficulties with implementing a two-day delay when dealing with multiple time-zones."
- Concerns that introduction of a T+2 service for free-to-use files "would effectively force users to engage in the paid for service to meet reporting requirements. UPI will presumably be a mandatory regulatory reporting requirement in multiple jurisdictions, and resultantly very important for a firm's own data management."
- Some respondents noted that "the UPI library should be accessible in the same way the LEI database is made available today."

- A respondent proposed that UPI users be presented with the option to get the UPI data more frequently than T+2 for a fee, if needed.
- Some other respondents noted that "Global derivatives markets are highly concentrated amongst a few large global dealers. To varying degrees, those dealers are reporting counterparties to the vast majority of OTC derivatives transactions across asset classes. The UPI Fee Model should reflect that concentration and impose a commensurate amount of the cost burden on such dealers. Efforts should be made to avoid imposing material costs on other market participants as such costs may cause them to stop acting as reporting counterparties, which is an anti-competitive result."
- A respondent noted that publication of free-to-use UPI files on a T+2 basis may "damage the perception of the DSB" for smaller firms, in particular on the "rare occasions when a buy-side firm does need a very recently created UPI and can't get it from the counterparty, they will either delay reporting until they have it or report without (to demonstrate that they tried), let it reject and then resubmit once it's available - they are likely to then complain about the DSB service (ignoring all the really good work that they don't really see or appreciate)."

DSB Proposal:

The proposal has attempted to balance respondents' preference for free-to-use-files available as soon as possible, with the financial sustainability of the UPI service, and the fairness (in terms of timing of availability) for all global jurisdictions. The proposal attempts to limit the possibility of users in some jurisdictions being able to leverage free-to-use-files for their reporting requirements, whilst users in other jurisdictions are potentially penalised by needing to pay for the data to satisfy similar reporting requirements, simply because of the time-zone they are required to report from.

The DSB has incorporated feedback from respondents into the proposal for the timing for the various data elements to be made available for the OTC ISIN and UPI services. It is proposed that the OTC ISIN record will be made available at 23.55hrs UTC, T+0. Per above, this will include the UPI code, as a means to support respondents' feedback requesting free availability of the UPI at the same time as the OTC ISIN service.

The full UPI record (UPI code and UPI reference data) would be made freely available at 23.55hrs UTC, T+1, with the primary goals of supporting the financial sustainability of the UPI service, by ensuring adequate demand for the three user access levels outlined in section 4.3, and providing a fair service for all jurisdictions.

As a worked example of this proposal, on Thursday, April 14th, at 23.55hrs UTC, the following data files would be made freely available:

- OTC ISIN / CFI Record (including UPI Code) for Apr 14th
- UPI Record for Apr 13th

As outlined in section 4.2 there is significant inter-dependency between user access level (through the three services of UPI Only, OTC ISIN / CFI only, or combined UPI and OTC ISIN / CFI) Services. The content and timing (of the availability) of data files are also expected to have significant bearing on user numbers for each service type. As such the proposal has attempted to strike an appropriate

balance between early provision of data, financial sustainability of the UPI service, and fairness for all global users of the service.

Various permutations of content and timing are possible, including 2 other options outlined below which the DSB has discounted for the reasons given:

Alternate Proposals

i. Making UPI Record available at 23.55hrs UTC, T+0

Consideration was given to making the UPI record file freely available at 23.55hrs UTC, T+0. However, this would mean that relatively fewer users would need to pay for the UPI service, potentially resulting in the UPI service being financially unsustainable. The cost recovery of the service would be dependent on significantly fewer fee paying users, with a high percentage of the user base accessing the service free of charge.

The proposed model envisages making the UPI code available as an inherent component of the OTC ISIN record, and as such the UPI code would be available at 23.55hrs UTC, T+0, but not the full UPI record, which would be available freely 24 hours later at 23.55hrs UTC, T+1. This is in response to respondents' feedback for UPI data to be available early on T+1, but also attempts to balance the requirement to support the financial sustainability of the UPI service, and the principle of fairness for all participants.

ii. Excluding the UPI code from the OTC ISIN Record

An additional alternative option considered was to not include the UPI code from the OTC ISIN record when it is transmitted 23.55hrs UTC, T+0. This would remove the risk of users leveraging the OTC ISIN record file to access the UPI data, which as described above might reduce the numbers of fee paying UPI service users to an unsustainable level. This option was discounted for several reasons:

- Ignoring respondents' feedback requesting UPI data be available early on T+0
- Contradicting the principle of preserving the data hierarchy between ISIN and UPI
- Introducing additional technical complexity to solve unrelated issues (i.e. financial sustainability / fairness)

4.5 User Fee Structure

Summary: The UPI fee model will be based on cost recovery, as aligned with the governance criteria, and is proposed to adopt a substantially similar fee model structure to that of the existing OTC ISIN service. The proposed fee model is expected to be applied to four fee-paying user types, which are divided into the UPI total estimated cost, with the fee level varying according to user access type and user numbers.

Question 4a: Do you concur with this approach to the User Fee Structure?

Question 4b: If not, what specific alternate approach do you recommend? Please provide a clear rationale and any additional details you believe should be incorporated into the DSB's approach.

DSB Proposal:

The workflows and associated user access levels proposed in Section 4.3 correspond to the three user access levels currently utilised by the DSB's existing OTC ISIN service (Power User, Standard User and Infrequent User). 'User' in this context refers to a fee-paying organization. As stated in Section 4.3 above, there will be a fourth 'Search Only API User' access level, which is currently under development. Due to this, the projected volumes for demand of the 'Search Only API User' access type are not yet available and therefore are not included in the below estimates.

The proposed fee model structure for the UPI service would be substantially similar in principle to that currently utilised by the DSB's OTC ISIN service and would differentiate between the four user access levels, with four corresponding fee levels.

Fees would be calculated on annually in advance and would be exclusive of VAT (where applicable) with the initial invoice to be calculated in accordance with the proposal in Section 4.9 below.

In creating the proposed UPI service user fee model structure, the ratio of user types from the DSB's existing OTC ISIN service fee model has been used as a proxy. The ratio (as percentages) for each fee-paying user type is projected to be as follows:

- Power User fee: 60%
- Standard User fee: 10%
- Infrequent User Fee: 30%

As mentioned above, the projected volumes for demand of the new 'Search Only API User' access type are not yet available, hence this user type is not included in these percentage splits.

UPI user fees will be charged on a cost recovery basis, as outlined in Section 4.6, with fee model variables used to determine the user fee per access level. Based on the existing fee model structure, the variables to calculate the user fees comprise the UPI total estimate cost and user numbers per fee paying access level. Based on this model, the higher the number of users, the lower the fee per user.

In order to determine the annual fees, the first element is to set the Infrequent User fee as a fixed amount. The rationale for a fixed fee that it is high enough not to disadvantage those Standard or Power Users but low enough to be acceptable to Infrequent and small volume UPI creators.

Following determination of the Infrequent User fee, the Power and Standard User fees are calculated using a ratio which includes user numbers by type (see calculation below).

As with the existing OTC ISIN service fee model, the Standard Users fee is set to reflect the fact that such users are substantially cheaper for the DSB to support as the lack of a programmatic interface results in lower data throughput as well as lower infrastructure requirements.

The Power User fee is proposed to be three times greater than the Standard User fee which is consistent with the existing service provision, based on the respective functionality and connectivity. The calculation is represented as follows:

$$\text{Standard User Fee} = \frac{\textit{Estimated Total UPI Cost} - (\textit{\# of Infrequent Users} * \textit{set Fee for Infrequent Users})}{(\textit{\# of Standard Users} + (3 * \textit{\# of Power Users}))}$$

In an example using 3,000 fee-paying organizations ('users') where the Total UPI Cost is estimated as €8,322k, and the Infrequent User fee is set at €135, the calculation is performed as follows:

$$\text{Standard User Fee} = \frac{\textit{€8,322k} - (900 * \textit{€135})}{(300 + (3 * 1{,}800))}$$

Resulting in the Standard User Fee = €1.4k per annum.

The Power User fee is 3 x Standard User Fee, resulting in = €4.3k per annum.

To provide indicative user fees for a variety of different user number levels, the below table shows four scenarios. These are illustrative only, with final fees being contingent on user numbers and UPI total estimated cost:

Users	20,000	3,000	1,000	300
Estimated Total UPI Cost	€ 10,360,143	€ 8,322,209	€ 7,348,158	€ 6,495,456
Power User Fee	€ 786	€ 4,316	€ 11,534	€ 34,116
Standard User Fee	€ 262	€ 1,439	€ 3,845	€ 11,372
Infrequent User Fee	€ 50	€ 135	€ 145	€ 150

The Estimated Total UPI Cost increases in line with a higher number of organizations onboarded, due to the higher operational expenditure (opex) to support the service provision.

Once the new 'Search Only API User' access type is introduced, this will lead to an adjustment of the user fee calculation. Indicatively, the fee for the 'Search Only API User' access type is proposed to be 50% of the Standard User fee.

In order to ensure that the fee model is fit-for-purpose, the DSB plans to conduct a further industry consultation two years after the service Go Live which will allow for user interactions to be factored into the approach to be taken forward.

4.6 UPI Cost Basis

Summary: Current estimates of the UPI service costs are broken down as Estimate Capital Expenditure (Capex) – Build Costs for the period 2020-H1 2022, Estimate Time-Limited Costs and Estimate Operating Expenditure (Opex) based on an estimate of 3,000 fee-paying users. Costs include the application of a Financial Sustainability Margin, to help to ensure the economic sustainability of the service, and a contingency fund to address unplanned costs during the implementation and first few years of the service.

The contingency is proposed at 20% of Capex and Opex costs and cannot be used without the consent of the DSB Board.

Question 5a: Do you concur with the proposal to apply a 20% contingency fund?

Question 5b: If not, what specific alternate approach do you recommend? Please provide a clear rationale and any additional details you believe should be incorporated into the DSB's approach.

DSB Proposal

The DSB will provide UPI services on a cost recovery basis. This means that the revenues must be sufficient to ensure that the DSB has the financial viability to meet its continuing obligation to provide these services.

The DSB requires a funding model that helps to ensure the economic sustainability of the UPI System over time, as per the UPI governance criteria[16], which includes efficiency, reliability and prudent financial management. As such, consistent with existing DSB practice, a 'Financial Sustainability Margin' (FSM) of 20% is added to the total Capex and Opex costs before the annual user fees are calculated on a cost recovery basis. The purpose of the FSM is, in order of prioritization, to cover the costs of the current and forthcoming business plan in order to meet both regulatory and ongoing user expectations, ensure adequate financial reserves, reinvest in the business and provide a reduction in costs for users.

The key cost drivers for the UPI Total Estimated Cost are provided below, and are indicative at this time as these remain subject to change pending ongoing business and technical analysis with the DSB PC and TAC groups as well as with the CDIDE[17] (for example, the operational costs of manual exception handling and the sourcing and integration of underlier reference data).

[16] See footnote 8

[17] Please refer to section 5.2.1 of this paper for information about the roles of these stakeholder groups

The UPI Total Estimated Costs include a 20% contingency fund to cover unplanned expenditure during the implementation of the service, in keeping with industry practice for projects of this scale and complexity. The contingency is proposed to apply only in the first few years of operation whilst utilization patterns and the cost base is stabilizing, and will be discontinued thereafter. This provides the flexibility to respond to developments without needing to amend user fees in the course of any given subscription period or seek additional external funding. With a number of regulators still in the consultation phase of the UPI adoption process, this flexibility to respond to market demand – particularly with respect to user onboarding - in a consistent and reliable manner will be key to the DSB's ability to deliver a successful UPI service. Furthermore, the contingency fund can only be used with approval from the DSB Board.

The following tables show the breakdown of the 1. Estimated Capital Expenditure (Capex) – Build Costs for the period 2020-H1 2022, 2. Estimated Time-Limited Costs and 3. Estimated Operating Expenditure (Opex) based on an estimate of 3,000 fee-paying users.

The Time-Limited Costs and Opex are combined to establish the annual UPI Total Estimate Cost. The figures provided include the Financial Sustainability Margin of 20%.

Table 1: Estimated Capital Expenditure (Capex) – Build Costs for the period 2020 - H1 2022

Capital Expenditure (Capex) – Build Costs	Description	Amount
Technology and Operations	Operation of the UPI Service through the DSB platform including technical and asset-class support	€5,370k
Management	Senior management team including MD, Managed Service Provider* management team and CFO	€1,105k
Administration	Administrative costs and overheads such as office space, and administrative support functions	€403k
External Consultants	External oversight and legal, professional and communication	€377k
Third-party data**	Provision of third-party reference data	TBC
Contingency***	20% contingency to cover unplanned costs during the implementation of the service	€1,814k
Total Estimated Capex		**€9,069k**

Notes:

* The Managed Service Provider is the organization engaged by the DSB to build and run the UPI service.

** The DSB is currently undertaking an RFI process in relation to third-party reference data (https://www.anna-dsb.com/2021/03/29/the-dsb-opens-rfi-on-reference-data-provider/). On this basis third-party data costs are currently unknown and consequently are included with a placeholder while the RFI process is concluded. The DSB UPI Fee Model Final Report will provide a summary of these costs once known.

*** Contingency cannot be used without the approval of the DSB Board.

Table 2: Estimated Time-Limited Costs

Category (Time Limited)	Description	Amount
Capex – Build Costs	Amortization of Capex over the first 4 complete years (2023 - 2026) including 20% contingency (to cover unplanned costs during the implementation of the service)	€2,267k (annualized)
Financing costs[+]	Costs of financing the Capex (Build Costs), to be repaid over 3 years (2022 – 2024)	€2,128k

Notes:

[+] The source of funding for the UPI Service Capex (Build Costs) is equity investment from DSB shareholders. The compensation for the capital at risk is to be via a compound annual percentage rate of 16% to reflect the risks of the investment being akin to venture capital. Financing costs will be returned to shareholders in the form of an equity distribution. Key investment risks include:

- No regulatory mandate in place to guarantee revenue to recover costs.
- No certainty of user numbers to underwrite the costs of building a scalable service provision.
- No guarantee of the DSB being the sole provider of the UPI before costs are fully recovered.

Table 3: Estimated Operating Expenditure (Opex)

Operating Expenditure (Opex)	Description	Amount
Technology and Operations	Operation of the UPI Service through the DSB platform including technical and asset-class support	€2,440k
Management	Senior management team including MD, Managed Service Provider[#] management team and CFO	€33k
Administration	Administrative costs and overheads such as office space, and administrative support functions	€202k
External Consultants	External oversight and legal, professional and communication	€645k

Operating Expenditure (Opex)	Description	Amount
Third-party data[##]	Provision of third-party reference data	TBC
Contingency[###]	20% contingency to cover unplanned costs to support the service once rolled out	€664k
Total Estimated Opex		**€3,983k**

Notes:

[#] The Managed Service Provider is the organization engaged by the DSB to build and run the UPI service.

[##] The DSB is currently undertaking an RFI process in relation to third-party reference data (https://www.anna-dsb.com/2021/03/29/the-dsb-opens-rfi-on-reference-data-provider/). On this basis third-party data costs are currently unknown and consequently are included with a placeholder while the RFI process is concluded. The DSB UPI Fee Model Final Report will provide a summary of these costs once known.

[###] Contingency cannot be used without the approval of the DSB Board.

4.7 UPI – OTC ISIN cost allocation policy

Summary: The DSB expects the costs for the services it provides to be recovered from the user base of the respective services.

Given the high volume of forecast demand for the UPI service as outlined in section 4.1, a dedicated onboarding platform and operating model for the UPI service has been scoped and costed to allow the DSB to provide a scalable UPI service provision. The costs outlined in the previous section all relate solely to the UPI service.

Once the UPI service is live and the level of demand is confirmed, there will be the opportunity to conduct analysis on the expected scope for synergies and shared costs between the UPI service and the OTC ISIN service, and what an appropriate cost allocation policy would be.

Specifically, the DSB proposes that 100% of the synergies available by leveraging the existing DSB platform are allocated to UPI users in 2022 and 2023, after which there will be determination of the expected synergies to be shared between both OTC ISIN users and UPI users. The shared costs will be apportioned via an allocation policy that the DSB will propose and consult with stakeholders in 2023.

Question 6a: Do you concur with this approach to the cost allocation policy?

Question 6b: If not, what specific alternate approach do you recommend? Please provide a clear rationale and any additional details you believe should be incorporated into the DSB's approach.

Summary of Responses:

In the DSB UPI Fee Model Consultation Paper 1, the DSB sought industry's views on the proposed cost allocation policy (across the UPI and OTC ISIN/CFI business lines) for the DSB's costs.

At that stage, the DSB's expectation was that the UPI platform would be similar to the OTC ISIN/CFI platform in terms of the onboarding process and operating model. As such, the DSB planned to re-use its existing staff, systems and processes wherever appropriate, resulting in shared costs between the DSB's existing services and UPI services, and thereby requiring a policy for allocating such shared costs fairly across the services. 17% of respondents concurred with the DSB's proposal, with one citing an expectation that shared costs would reduce by 2023 for users of all DSB services. A further 25% of respondents disagreed with the DSB's proposal and noted that they required additional transparency into the cost drivers of the UPI service vis-à-vis the existing OTC ISIN service. 58% of respondents remained silent on the topic.

DSB Proposal

Given the high volume of forecast demand for the UPI service as outlined in section 4.1, a dedicated onboarding platform and operating model has been scoped and costed to allow the DSB to provide a scalable service provision.

The service is designed and built to significantly reduce manual processes, allowing it to handle increasingly large numbers of users without needing to add corresponding numbers of staff to resource the processes. The costs outlined in section 4.6 relate solely to the UPI service.

Once the UPI service is live, there will be analysis conducted on the expected scope for synergies and shared costs between the UPI service and the OTC ISIN service, and what an appropriate cost allocation policy would be.

The DSB proposes to phase in a gradual increase in costs allocated to the UPI user base from 2022 to 2024 as described below:

2022 Q3-Q4

- UPI users only pay the DSB's incremental operating expenditure cost uplift
- No allocation of UPI build costs in 2022 (working capital is provided by DSB shareholders)
- No allocation of DSB shared costs to UPI users

2023

- UPI users only pay the DSB's incremental operating expenditure cost uplift
- Plus the amortisation of UPI capex as per DSB capital expenditure rules[18]
- No allocation of DSB shared costs to UPI users

2024

- UPI users only pay the DSB's incremental operating expenditure cost uplift
- Plus the amortisation of UPI capex as per DSB capital expenditure rules
- Plus a portion of shared costs (shared cost allocation policy to be determined based on Industry Consultation to occur in 2023).

[18] The DSB is proposing a 4 year amortisation period for the UPI capex as explained in 4.10 Capital Expenditure Amortisation Approach. This means the amoritisation will occur in the years 2023-2026.

4.8 Duration of UPI User Agreement

Summary: In order to provide clarity on the commitments and responsibilities of UPI users and the DSB to each other, the DSB expects all UPI creators and API users to sign a common User Agreement. Based on feedback from the DSB's existing user base, the DSB believes the most appropriate period for the UPI User Agreement is the Gregorian calendar year.

The DSB anticipates launching its production UPI service at the end of June 2022. Given the intra-year start to the service, the DSB proposed (in the prior consultation) that the duration of the first UPI User Agreement to be shorter than the standard 12 months in subsequent years, in order to align all subsequent User Agreements (UA) with the Gregorian calendar year. This is expected to result in a proportional reduction in the initial fee to compensate for the shorter duration.

Feedback from industry suggests that industry is largely comfortable with the DSB's proposal, subject to a few refinements, which will be progressed as part of the legal agreement consultation process to follow in Q4 2021.

Summary of Responses:

The DSB sought views on its proposal to proceed with a short duration User Agreement for UPI users in 2022 that ends on 31 December 2022, followed by annual contracts that cover a full Gregorian calendar year. 25% of respondents concurred with the DSB's proposal as set out in the supporting information contained in the first consultation paper. 45% of respondents were silent on the matter. Last but not least, 33% of respondents concurred with the DSB's proposal and on the basis of the following caveats:

- That terms and conditions did not change substantively from year to year i.e. the current DSB process can continue to apply
- Some respondents were unclear on the rationale requiring UPI users to have a separate agreement entirely, from that they may already have in place for the OTC ISIN. These respondents proposed that the terms and conditions for the UPI service should be incorporated into the existing DSB agreement for the OTC ISIN, with a licensing entity able to check off the specific services they are subscribing to, and fees set accordingly, based on a single user agreement.

DSB Proposal:

The DSB had proposed in the first consultation to align the UPI license agreement period with the Gregorian calendar. Given the intra-year start to the service, the DSB proposed that the duration of the first UA to be shorter than the standard 12 months, in order to align all subsequent UAs with the Gregorian calendar year. This is expected to result in a proportional reduction in the initial fee to compensate for the shorter duration. Users who wish to continue to utilise UPI services at the end of the initial UA period will roll into a renewal period of a full Gregorian calendar year.

The DSB is evaluating the specific above mentioned comments put forward by respondents in response to the proposal set out in the prior consultation, and will progress these as part of the legal agreement consultation later in the year.

4.9 Invoicing Approach

Summary: The DSB proposal remains that fees should be paid in advance, as with the existing service provision. Whilst acknowledging the preference for free data and payment in arrears, the DSB proposes that a payment in advance structure is necessary for effectively supporting the financial sustainability of the UPI service.

Question 7a: Do you concur with this approach to invoicing?

Question 7b: If not, what specific alternate approach do you recommend? Please provide a clear rationale and any additional details you believe should be incorporated into the DSB's approach.

Summary of Responses:

Respondents were asked to provide feedback on the DSB's proposed invoicing approach, specifically that the DSB would invoice UPI users a single fixed amount on, or shortly in advance of, the User Agreement (UA) period to cover the entire UA period. This would occur alongside a proposed adjustment mechanism to reconcile any differences where any differences between the DSB's actual costs and the revenues received in the UA period will be reconciled after the DSB's accounts for that period have been audited, with any surplus / deficit applied as an adjustment to the user fees for the year subsequent to the audited accounts being finalised.

25% of respondents agreed with the DSB's proposal, 33% disagreed with the proposal and 42% remained silent. Of those that disagreed with the DSB's proposal, the following alternate solutions were put forward:

- Trade repositories should have free access to all UPI data they require
- A preference for charges to be incurred and billed in arrears instead

DSB Proposal:

Whilst acknowledging the understandable preferences for free data, and payment in arrears, the DSB proposal remains that fees should be paid in advance and should be allocated among stakeholders fairly, as currently implemented for the OTC ISIN service .

Of most materiality in terms of the rationale for payment in advance, the DSB will have incurred costs for the full design, build, and implementation of the UPI service, including the upscaling of a significant number of process to onboard and manage the anticipated number of entities and individuals projected to use the service. Payment in arrears could impede the DSB's financial sustainability, including the ability to invest in other user approved requirements.

Additionally, an underlying principle of the OTC ISIN Fee Model has been Payment in Advance, which has several key advantages for financial sustainability, over payment in arrears.

This advanced yearly commitment offers the DSB more clarity in aligning fee levels with cost recovery whilst ensuring the economic sustainability of the UPI service with establishment of financial reserves, and for users, it provides improved ability to forecast their costs for utilising UPI services.

4.10 Capital Expenditure Amortisation Approach

Summary: The DSB's proposal for treatment of the repayment of capital expenditure (Capex) is to remain consistent with standard industry practice for projects of this size and nature, which is a repayment period of four years. This approach is consistent with the DSB's existing practice for existing services.

Question 8a: Do you concur with this approach to amortisation of capital expenditure?

Question 8b: If not, what specific alternate approach do you recommend? Please provide a clear rationale and any additional details you believe should be incorporated into the DSB's approach.

Summary of Responses:

Respondents were asked for feedback on the DSB's proposal to amortise its capital expenditure over 4 years, starting from the first full year when the service benefits from the capital expenditure. 42% of respondents agreed, most seeking additional transparency on cost drivers (in line with the DSB's commitment to provide in this second round of consultation), and one respondent suggesting that the DSB utilize either the stated 4-year approach or extend the capitalization period to 6 years instead.

DSB Proposal:

As a reminder, the DSB had proposed to treat the cost of the initial build and any subsequent investment in system enhancements as capital expenditure and will amortize these costs over a number of years, as per generally accepted accounting principles.

Specifically, the DSB had (in the prior consultation paper) proposed to amortize the capital expenditures over 4 years, starting from the first full year when the service benefits from the capital expenditure. This approach is consistent with the DSB's existing capital expenditure policy.

4.11 Additional Feedback Received

Respondents were encouraged to provide any additional commentary should they wish. 42% of respondents provided additional comments and 58% of respondents were silent. Feedback (where provided) was wide ranging and included the following highlights:

- That the API call (made by DSB UPI users) include an identifier for a paying user so their license level can be validated by DSB. This would be preferable to the requirement of using each clients' credentials. It would also ensure that the client's license level is managed by DSB.
- That access to the latest UPI reference library should be open to all on a timely basis and free from fee related delays. The DSB should look to offer UPI on a similar basis to the availability of LEI data. Charging, if needed at all for the UPI, should be focused on issuance and on the provision of added value services and/or advanced connectivity options.
- Some respondents sought greater user oversight of DSB commercial and contractual terms.

The DSB is evaluating such industry feedback and will provide an update in the next consultation paper, with items put forward to the TAC where relevant. Notably, the DSB has already announced its intention to conduct a separate round of consultation focusing on the access and usage terms for the UPI.

4.12 Any other comments

This section is an opportunity for respondents to provide feedback and commentary on any other aspects they believe should be considered.

5 Appendices

5.1 Appendix 1 - UPI Overview

5.1.1 Purpose of the UPI

Group of 20 national leaders (G20) agreed at the 2009 Pittsburgh Summit that all OTC derivatives transactions should be reported to trade repositories (TRs) as part of a package of reforms to the OTC derivatives markets. The key driver for establishing the UPI, ISO/WD 4914[19] – which is under development, Unique Transaction Identifiers (UTI), ISO 23897[20], Critical Data Elements (CDE) which will be included in ISO 20022[21], and Legal Entity Identifier (LEI), ISO 17442[22], was to increase transparency in financial markets, mitigate systemic risk, and protect against market abuse following the financial crisis that began in 2007–08. The development of standards for these data elements was in response to a request from the G20 to achieve these objectives.

The Committee on Payments and Market Infrastructures (CPMI) and the International Organization of Securities Commissions (IOSCO) published their finalised UPI technical guidance[23] in September 2017. Under the guidance, a unique UPI code would be assigned to each distinct OTC derivatives product and be mapped to reference data elements with specific values that describe the product. The collection of reference data elements and their values for each product would reside in a UPI reference data library administered by the UPI service provider.

UPIs are being introduced as a mechanism to identify OTC derivatives products to strengthen banks' risk data aggregation capabilities and internal risk reporting practices and assist G20 regulators to aggregate global OTC derivatives data by either product or UPI reference data element, together with the CDE and UTI. This will provide users, such as banks, with their risk analysis and assist regulators with an improved, consistent view and common understanding of systemic OTC derivative risks.

In the first instance, the role of the UPI is to uniquely identify the product involved in an OTC derivatives transaction and to identify the product in reports that an authority requires, or may require in the future, to be reported to a TR. The UPI will work in conjunction with UTIs and CDEs, which are also expected to be reportable to regulatory authorities.

Working alongside the UPI and CDE, the UTI is intended to uniquely identify individual OTC derivatives transactions and when required by authorities to be reported to TRs. The UTI will enable aggregation and analysis of these transactions by users, such as banks, and so authorities can use reported information to fulfil their legal obligations and prudential requirements. Further details about the UTI can be found in the UTI technical guidance document[24] published in February 2017.

CPMI and IOSCO also published a guidance document on the harmonisation of critical OTC derivatives data elements other than those in the UPI and UTI. The CDE technical guidance document[25], published in April 2018, provides information about the definition, format and allowable values of CDEs, other

[19] https://www.iso.org/standard/80506.html
[20] https://www.iso.org/standard/77308.html
[21] https://www.iso20022.org/
[22] https://www.iso.org/standard/78829.html
[23] http://www.bis.org/cpmi/publ/d169.htm
[24] https://www.bis.org/cpmi/publ/d158.pdf
[25] https://www.bis.org/cpmi/publ/d175.pdf

than UTI and UPI, reported to TRs that are important to facilitate consistent global aggregation by authorities.

Although the UPI has been developed with this core purpose, it is recognised the UPI could also serve other purposes, such as other forms of regulatory reporting and market transparency specific to particular jurisdictions or pre- and post-trade processes, with primary use of the UPI contemplated for strengthening banks' risk aggregation capabilities and practices and for the reporting of OTC derivatives transactions to a TR or for regulatory use. It is anticipated that broader use cases for the UPI system – especially in relation to internal business functions – could increase its adoption and usefulness.

5.2 Appendix 2 - Governance Arrangements

5.2.1 UPI Governance Components

The FSB, an international body that monitors and makes recommendations about the global financial system, has been responsible for defining the governance arrangements for the UPI. To that end, the FSB designated the DSB as the sole service provider for the future UPI system. The term 'UPI system' refers to the UPI code, the UPI reference data library, and the process of assigning a UPI to a set of reference data elements. Accordingly, the DSB will perform the functions of issuance of UPI and maintenance of their associated reference data consistent with the CPMI-IOSCO UPI technical guidance. This is a key step in completing the governance framework for the UPI.

In October 2019, the FSB published the Governance arrangements for the UPI [26], outlining its conclusions, implementation plan and next steps to establish the International Governance Body (IGB). In co-ordination with CPMI and IOSCO, the FSB identified the Regulatory Oversight Committee[27] (ROC) of the Global Legal Entity Identifier System as best positioned to become the future IGB for the UPI, UTI and CDE in addition to its existing oversight of LEI, provided it made the necessary adjustments to its existing governance to be fit for purpose for these additional identifiers. In September 2020, the FSB announced the transfer of all governance and oversight responsibilities[28] in relation to the harmonised derivatives identifiers and data elements to the ROC as of October 1, 2020. On the same date, ROC announced and published its revised Charter[29].

Furthermore, the FSB has determined that the UPI Code and the UPI Reference Data Elements should be set as international data standards and has identified ISO as the International Standardisation Body for the development of the UPI standard.[30]

In addition to oversight functions, the governance arrangements also include the need for ongoing coordination between the IGB, the UPI service provider and industry stakeholders. On this basis, the DSB Product Committee [31] and Technology Advisory Committee [32] will function as industry

[26] https://www.fsb.org/2019/10/governance-arrangements-for-the-upi/
[27] https://www.leiroc.org/publications/gls/roc_20201001-2.pdf
[28] https://www.fsb.org/2020/09/lei-roc-to-become-governance-body-for-otc-derivatives-identifiers/
[29] https://www.leiroc.org/publications/gls/roc_20201001-1.pdf
[30] It shall be note that the FSB has no authority over the ISO, so that development of the UPI standard is subject to the usual ISO process (https://committee.iso.org/sites/tc68/home/news/content-left-area/news-and-updates/unique-product-identifier-upi-ba.html)
[31] https://www.anna-dsb.com/product-committee/
[32] https://www.anna-dsb.com/technology-advisory-committee/

representation groups comprising reporting entities, derivatives infrastructure providers and market data providers.

The UPI service and reference data library operated by the DSB is founded on interactions with five major parties, as set out in the diagram below. Taking each in turn, these comprise the:

- **IGB:** an international regulatory oversight body that should provide overall oversight and coordinate between the UPI Service Provider(s), the International Standardisation Body, and other elements of the UPI Governance Arrangements, as well as to coordinate among the various stakeholders, and other international standard-setting bodies (including the CPMI, IOSCO and FSB).[33]

  The ROC is a group of 67 public authorities with full membership and 18 observers from more than 50 countries.[34] The ROC was set up to oversee the Legal Entity Identifier (LEI) and recently announced an expanded mandate to become the IGB of the globally harmonised UTI, the UPI and the CDE. As IGB of the UTI, UPI and CDE, the ROC becomes the overseer of the designated UPI service provider, The Derivatives Service Bureau (DSB).
  The Committee on Derivative Identifiers and Data Elements (CDIDE) is a sub-committee of the ROC with the purpose of supporting the ROC on the ROC's oversight of the implementation of the UPI service and the UPI Reference Data Library by the DSB. CDIDE co-chairs may participate in each of the DSB Product Committee and DSB Technology Advisory Committee (see below) which committees are the Industry Representation Groups described below.

- **Authorities (as members of the ROC) and standard-setting bodies:** will continue to work on implementation, in coordination with the IGB. Authorities of each jurisdiction where the UPI will be reportable (as members of the ROC), and standard setting bodies such as the CPMI and IOSCO also may choose to participate in the Industry Representation Groups described below.

- **Industry Representation Group (IRG):** with representatives of, inter alia, reporting entities, derivatives infrastructure providers, and/or market data providers, to consult with other parts of the Governance Arrangements, including the IGB and the UPI Service Provider. The functions of an IRG are expected to be carried out by two existing DSB advisory committees, whose charters have been expanded to encompass the UPI initiative.

  Within the DSB, the two existing advisory committees of the DSB Board of Directors are the Product Committee[35] (PC), and the Technology Advisory Committee[36] (TAC). Both committees comprise a broad range of representatives of entity types and geographical representation.
  The DSB PC is an industry group that supports the DSB Board through continuing the work of the ISO study group tasked with defining the ISIN for OTC derivatives. The PC oversees the definitions of a broad range of OTC derivatives and how they translate into data requirements for allocation of these identifiers. They also support the development and inclusion of descriptive taxonomies used to identify OTC derivatives.

[33] The IGB provides oversight over the UPI Service providers and other elements of the UPI Governance Arrangements, as well coordinate with various stakeholders and other international standard-setting bodies (including CPMI, IOSCO, FSB and ISO).
[34] https://www.leiroc.org/about/membersandobservers/index.htm
[35] See footnote 13
[36] See footnote 14

The DSB TAC is an industry group that supports the DSB Board on technology issues to ensure that the DSB's technology strategy is aligned with the needs of the markets it serves. The TAC oversees proposed technology changes related to the DSB's services which includes any technical changes identified during the stakeholder consultation process as well as consideration of the workflows and integration needs of the UPI service provision.

- **International Standardisation Body:** The ISO has been nominated as the International Standardisation Body for the UPI. ISO's work on development of the UPI standard began in June 2020 with the aim of publishing a final ISO standard in early 2022. The standard will include the format and computation of the UPI code, as well as the minimum data elements driven by the UPI Technical Guidance.

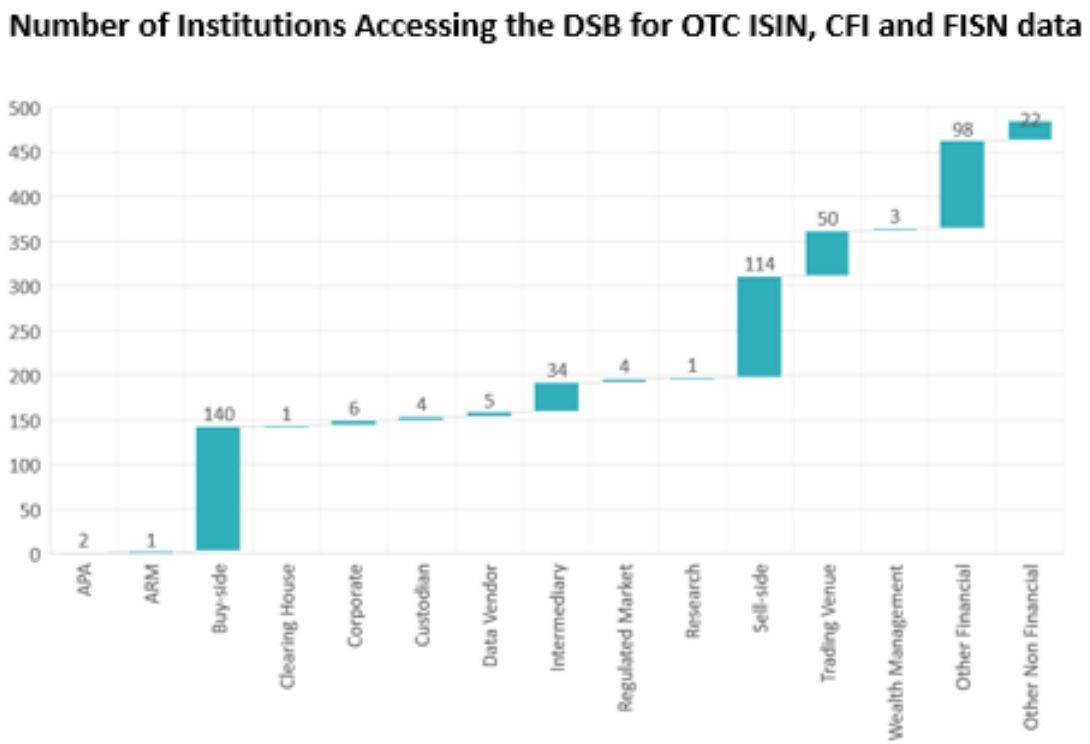
  ISO provides the framework allowing for a unique UPI Code to be assigned to each distinct OTC derivative product that is reportable to trade repositories. The standard defines the UPI code structure and the minimum set of reference data elements that will describe the product. Reference data element values as well as possible reference data elements in addition to the ISO standard will be determined by the DSB Product Committee working in conjunction with the ISB.

- **UPI Users:** UPI users comprise organizations that will connect to the DSB to create, search for, or download files – on either a fee paying or non-fee-paying basis. Based on the DSB's experience with the OTC ISIN service, in the three-year period since the service was launched, the DSB expects to continue to see a marked difference between the number and types of firms that will create OTC derivatives reference data records in the DSB (be they for OTC ISIN, UPI, CFI or FISN purposes), and those that consume the data.

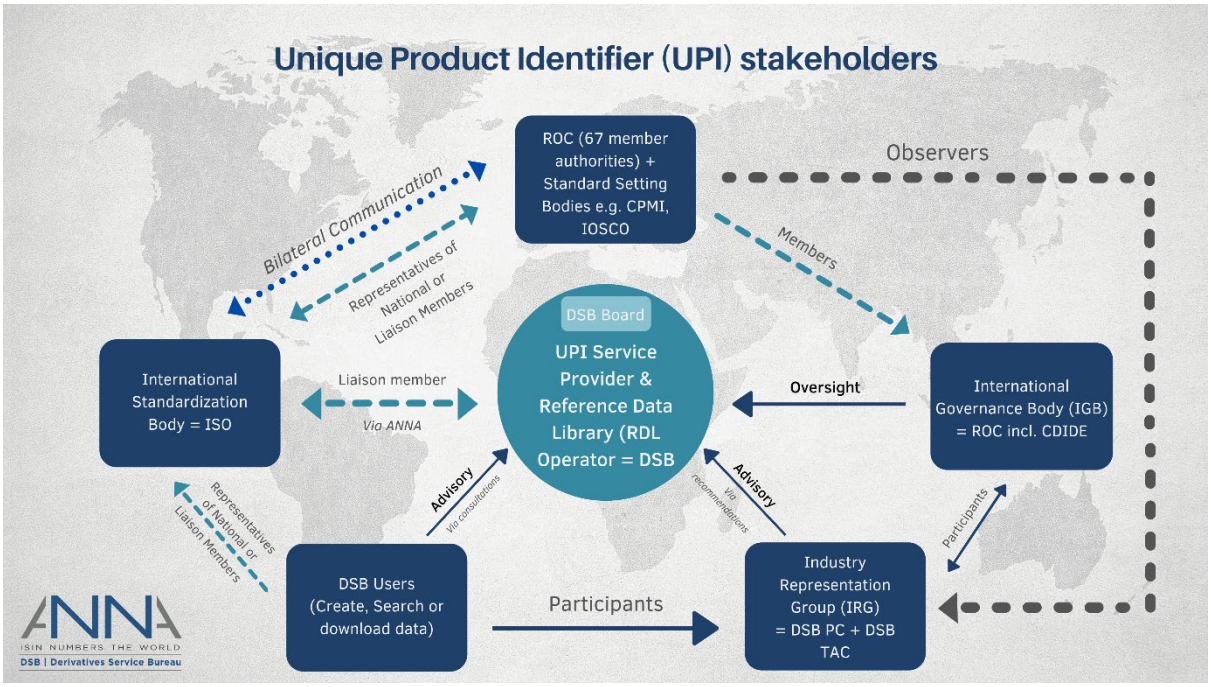
  A review of current activity levels shows that an at aggregate level, the sell-side has created 75% of all OTC derivative records in the DSB, with execution platforms, the larger buy-side and some data vendors responsible for creating the remainder. In total, 124 entities pay the DSB to create data and/or search for records, with 60% of this group accessing the DSB in a programmatic manner.

  When looking at the full list of organizations that access the DSB today across both fee paying and free of cost users, 470 organizations, almost 70% do so free of cost to download free to use data files. A further 25% access the DSB to create records, search for records, and download data files, with 3% exclusively creating data, and a further 3% exclusively searching for data.

  In addition, the data of DSB existing users to date shows that in contrast to the creation of data which is driven by the sell-side and execution platforms, consumers of the OTC derivative reference data generated at the DSB represent a substantively broader composition as set out in the following diagram. It is a reasonable expectation that while the specific numbers of each type of organisation that accesses the DSB for UPI data will vary from current practice, the overall composition of each organisation type is likely to continue given the divergent reasons that users cite in discussions with the DSB.



- **UPI Service Provider(s):** This entity or these entities should provide for timely issuance of UPI Codes and maintenance of their associated reference data consistent with the UPI Technical Guidance.
- **Operator of the UPI Reference Data Library (RDL):** an entity that should record all existing UPI Codes and their associated UPI Reference Data. Most respondents to the FSB's UPI governance consultations did not favour a split between the UPI Service Provider and the Operator of the UPI RDL. On this basis, the DSB is both the UPI Service Provider and the UPI Reference Data Library operator.



5.2.2 UPI Governance Criteria

In relation to the governance arrangements, key criteria have been specified by the FSB to guide the choices made. These governance criteria, detailed throughout the FSB governance arrangements consultation process and outlined in the FSB Governance arrangements for the UPI[37], are provided below.

The governance criteria have been referenced within this paper where related to the UPI fee model principles.

- **Public interest**

Governance should be driven by the public and regulatory interest.

- **Lean**

The UPI Governance Arrangements should not be unnecessarily complex or costly.

- **Change only as needed**

Revisions to the UPI Governance Arrangements, the UPI Technical Guidance and UPI System should be managed on a need-only basis and consider benefits and costs of such revisions to minimise impacts on various stakeholders.

- **Consultative change process**

Changes to the UPI Governance Arrangements, UPI Technical Guidance, and UPI System (except for the day-to-day process of updating the data held in the UPI Reference Data Library) should allow for direct or indirect involvement of stakeholders and should be made after public consultation where appropriate.

- **Economic sustainability**

The UPI Governance Arrangements should be consistent with the need to help ensure the economic sustainability of the UPI System over time.

- **Open access**

Access to, and use of, UPI Codes and the UPI Data Standard should be unrestricted. Authorities should have access to, and use of, the UPI Reference Data Library that is similarly unrestricted. Entities with reporting obligations and TRs should have access to, and use of, the UPI Reference Data Library in a manner that is sufficient to at least allow them to associate a specific OTC derivative product to its UPI Code in a timely manner and facilitate the discharge of reporting obligations for OTC derivatives transactions.

- **Cost**

Any fees charged by the UPI Service Provider(s) should be based on cost recovery and should be allocated among stakeholders fairly. For Authorities, use of the UPI System should be free.

- **Intellectual property**

The UPI Data Standard should not be subject to any intellectual property restriction. Consistent with this, the use of any UPI Code should be free of licensing restrictions. As to the UPI Reference Data

[37] See footnote 9

Library, intellectual property restrictions should be applied in a manner consistent with the rules applicable in a given jurisdiction.

- **Conflicts of interest**

The UPI Service Provider(s) should have policies and procedures that are reasonably designed to detect and effectively manage any potential conflict of interest. Access to the UPI should not be tied or bundled with any other services offered by a UPI Service Provider.

- **Fit for purpose**

UPI Governance Arrangements should be able to perform the relevant functions identified in a timely and efficient manner and should have reasonable access to the necessary resources and information to do this. UPI Governance Arrangements should maintain the fitness of the UPI System and UPI Technical Guidance for the needs of Authorities.

- **Consideration of other Governance Frameworks**

Governance Frameworks for the UPI should take into consideration other Governance Frameworks that impact other data elements, such as the LEI, the UTI, and other critical data elements for OTC derivatives.

- **Operational viability and continuity of UPI Service Provider operations**

Governance of the UPI System should be such that any UPI Service Provider should be required to have adequate resources, legal authorities, and reasonable policies and procedures in place designated or adequate to ensure operational viability, system security, and business and system continuity and succession, so as to enable it to operate securely and effectively as a UPI Service Provider.

5.3 Appendix 4 – Assumptions

The DSB assumptions set out below underpin the core approach for the UPI service implementation, and thus impact user fees, which are used for cost recovery[38]. Estimated costs will be included in the next consultation, including a breakdown of the key cost components subject to the feedback received in this paper.

This section includes DSB expectations about jurisdictions' existing or proposed regulatory adoption of rules implementing UPI as a product identifier, the estimated number of UPIs to be created (based on the data elements specified in the UPI Technical Guidance document and available to the DSB via an existing service, the OTC ISIN service provision), DSB expectations regarding alignment of the UPI with other international standards, and the existing service model that the DSB seeks to leverage in application of the Lean governance criteria, described in section *5.2.2UPI Governance Criteria*, in order to minimize delivery and implementation costs accrued by clients.

With respect to the fee model related considerations set out in this paper, the DSB recognises the need for revaluation following initial adoption of the UPI service to ensure that that the UPI model

[38] Cost recovery, which incorporates the DSB's financial sustainability margin, includes both recurring costs such as technology & operations, management, administration and external consultants as well as time-limited costs such as amortisation of the build costs.

remains fit for purpose. As such, the DSB intends to consult on the key aspects underlying the fee model 2 years after launch of the UPI service.

5.3.1 Leveraging the DSB's Existing Service Provision

Leveraging the DSB's existing service provision seeks to provide two primary benefits – the first is a reduction of the UPI user fee burden by minimizing implementation and run costs for the DSB, and the second is a reduction of the user's own technology burden so that the several hundred institutions already connected to the DSB can overlay their UPI related workflows in a manner that is more integrated with their other OTC derivative reference data needs.

The DSB is the golden source of the OTC ISIN, CFI and FISN for OTC derivative instruments, for institutions located in or trading with counterparties in the European Union (EU) and the United Kingdom (UK).

The allocation of ISINs, CFI and FISNs for OTC derivatives as well as the provision of access to the OTC ISIN archive and associated reference data, comprise the numbering agency function of the DSB. This function is overseen by ANNA as the Registration Authority for ISIN and FISN standards under contract with the ISO requiring strict adherence to principles over business and technical operations. This includes limiting user fees to cost recovery and requiring reasonable and non-discriminatory (RAND) access to data.

Implementation of OTC ISIN, FISN and CFI codes for OTC derivatives has been achieved through ongoing, collaborative work with market participants, regulators and other standards bodies. The DSB utilises a consultative change process, also specified within the UPI governance criteria described in section *5.2.2 UPI Governance Criteria*, to allow for stakeholder input to shape the evolution of the service.

In addition to the application of the cost recovery and RAND (unrestricted data and open access) principles, the DSB also ensures equal treatment of all users through utilisation of a common agreement, and the levy of user fees through annual contracts that require payment in advance. These principles aim to secure the financial sustainability of the DSB as well as provide parity and efficiency in delivery of service.

The current level of OTC ISIN, CFI and FISN generated by the DSB is designed to enable users to satisfy obligations under the European Regulations MiFID[39] II and MiFIR[40], with the capability of an identification hierarchy to be introduced as required by industry, such as UPI. This hierarchical framework, with specific consideration of the UPI, was developed as part of the DSB core design following the recommendations from an ISO study group when defining the OTC ISIN. In addition, the CFI codes for OTC derivatives generated by the DSB assist industry's regulatory reporting needs, demonstrating the value of consistently generated identifiers and classification codes that can be efficiently consumed by all users of DSB data.

The DSB currently facilitates access for a broad spectrum of users, including credit institutions, small brokerages, private wealth management firms, boutique asset managers, large, multi-segment and/or

[39] Markets in Financial Instruments Directive (MiFID)
[40] Markets in Financial Instruments (MiFIR)

multi-market trading venues, derivatives houses from across the buy and sell-sides and universal-bank style sell-side institutions with multiple business segments within a single group holding structure.

This consultation requesting feedback to help shape the DSB's service development has been made publicly available on the DSB website[41] and promoted globally via press release, as well as sent to the DSB's existing user community, comprising more than 4,100 individuals across 470 organizations. In addition, it has been shared with the regulatory community for onward distribution to each jurisdiction's market participants that will be required to submit UPIs as part of their regulatory reporting requirements. The DSB has also worked with major trade associations and participants in each of its industry forums to raise awareness of the consultation, its purpose and intended timelines.

Within the DSB existing service provision, access is provided to users on the following basis:

- Power User: programmatic connectivity for high volume creation and search services (paid usage)[42]
- Standard User: manual creation and search services for lower volume users, using a web-front end (paid usage)
- Infrequent User: manual creation and limited search services using a web-front end – targeted towards very low volume users, with a limit on the number of search results returned and an unlimited number of searches[43] (paid usage)
- Registered User: manual search services using a web-front end, with a limit on the number of search results returned and an unlimited number of searches (free to use)

Irrespective of user type, all DSB users can search for OTC derivative data in near real-time by logging on to the DSB's web front end, conducting a manual search, and downloading the specific record of interest in machine readable format. Market participants are also able to obtain the OTC derivative identifier from their counterparty, or from their trade execution platform and use the identifier as part of their trading workflows.

In addition, to the user services listed above, all DSB users of the CFI, FISN and OTC ISIN service are able to download machine readable records and have free of cost access to (London) end of day files containing a list of all new OTC ISIN records created or updated that day.

Following DSB user feedback in response to the OTC ISIN service industry consultation conducted in 2020[44], the DSB will also be introducing two additional user services in 2021, the search-only Application Programming Interface (API) user to enable lower volume users requiring systematic access for search-only on a paid basis, and a snapshot user where an existing user of the DSB can

[41] https://www.anna-dsb.com/upi-fee-model-consultation-2021/

[42] For UPI users, the fees to be charged for the differing categories of users will be the subject of a subsequent consultation. The DSB's charges policies for its existing service illustrates how the existing service recovers costs across the differing user categories: https://www.anna-dsb.com/download/dsb-charges-policy_v5_2021_final/. The actual fee values are shown here: https://www.anna-dsb.com/fees-rules-2021/

[43] Following user consultation the DSB has implemented a model where up to 5 results are returned in response to a search by Registered Users and Infrequent Users when using the DSB's web-interface, and the full compendium of search results are returned to other types of DSB users. Note that all DSB users are able to access the full suite of DSB data by downloading the free to use files and subsequently utilizing the data in the users' own systems.

[44] https://www.anna-dsb.com/download/2021-industry-consultation-paper/

request access to stand-alone data snapshots for any/all asset classes over a specified time horizon to mitigate any internal technology constraints in downloading and consolidating the data.

The DSB's TAC set up a TAC Strategy Sub-Committee (TAC SSC) which reviews workflow and infrastructure related elements of the DSB's UPI implementation. The TAC SSC (which is comprised of both DSB and external stakeholders) has produced an interim report that made recommendations to the broader TAC on a range of UPI technology integration related topics, to enable broader discussion of the subject.

The interim report and associated proposals and assumptions will be discussed at a series of TAC SSC meetings in 2021, to enable the TAC SSC membership to review progress with respect to the findings of the interim report, the assumptions, recommendations, and questions that were raised in the document. The findings of the TAC SSC will be presented to the broader TAC and the final recommendations and any associated cost implications will be taken forward for review by the DSB Board for final review and decision making.

The DSB serves 70% of its users at no charge, and the remainder on a cost recovery basis, with user numbers having direct input into the primary fee variables. All DSB users can contribute directly to the service evolution via both an annual consultation process and two industry driven user forums – the PC and TAC.

DSB users can obtain the required OTC derivative identifier via several channels and use the record as part of their trade workflow, with more sophisticated users obtaining data via several means and others focusing on a single channel as best suited to the organization's commercial, strategic and tactical needs.

Some ways in which users will obtain the OTC derivative CFI, UPI and/or OTC ISIN include:

- from their counterparty
- from the execution platform on which the trade was done
- connect directly to the DSB (via an API, the web-front end, or download data)
- from an intermediary – either a data or technology vendor

Experience with the OTC ISIN thus far indicates that many users have over time sought to connect directly to the DSB to supplement their reference data workflows for a variety of reasons, which include but are not limited to timeliness, efficiency, cost, etc.

Given the synergies between the DSB's existing service and the forthcoming UPI service, leveraging the existing staff, systems and processes as far as practicable, allows for strong application of the Lean governance criteria, described in section *5.2.2 UPI Governance Criteria*.

5.3.2 Alignment of the UPI with other internationally recognised data standards

The aim of seeking alignment is to allow both the DSB and DSB users to maintain a clear data hierarchy when utilizing each of the CFI, UPI, OTC ISIN, and FISN more easily and consistently.

The DSB is responsible for serving the needs of OTC derivatives market participants through the allocation and distribution of OTC ISINs, the CFI code, and the FISN – all globally recognised and adopted ISO standards. Each standard has an individual purpose and complements each of the other

standards. They are each respectively used for identifying, classifying, and describing financial instruments.

The UPI, currently being developed as an ISO standard (ISO/WD 4914), will sit within the suite of ISO standards provided by the DSB as a product level identifier, reflecting a subset of the data elements required for OTC ISIN. This means the UPI is anticipated to sit between the CFI and OTC ISIN representing an identification framework for OTC derivatives.

The UPI must therefore be fully consistent with the principles set out in the UPI Technical Guidance, which sets out technical requirements for a UPI Code and related reference data, and any further guidance provided by the ROC.

A key assumption is therefore that the data elements contained in each of the CFI, UPI, and OTC ISIN will remain aligned. The PC will work with the ROC to resolve any concerns with respect to alignment of the CFI, UPI and OTC ISIN. An overview of the expected alignment of each is set out below.

Note (a) that the CFI and ISIN exist for both OTC derivatives and other types of financial instruments, whilst the UPI applies only to OTC derivatives at this time, and (b) that the OTC ISIN is the most granular of the three standards in terms of the number and type of data elements that describe the identifier. The data elements describing the UPI can be considered to be mid-way between the granularity of the CFI and the OTC ISIN, with the UPI accompanied by CDE for some regulatory reporting purposes.

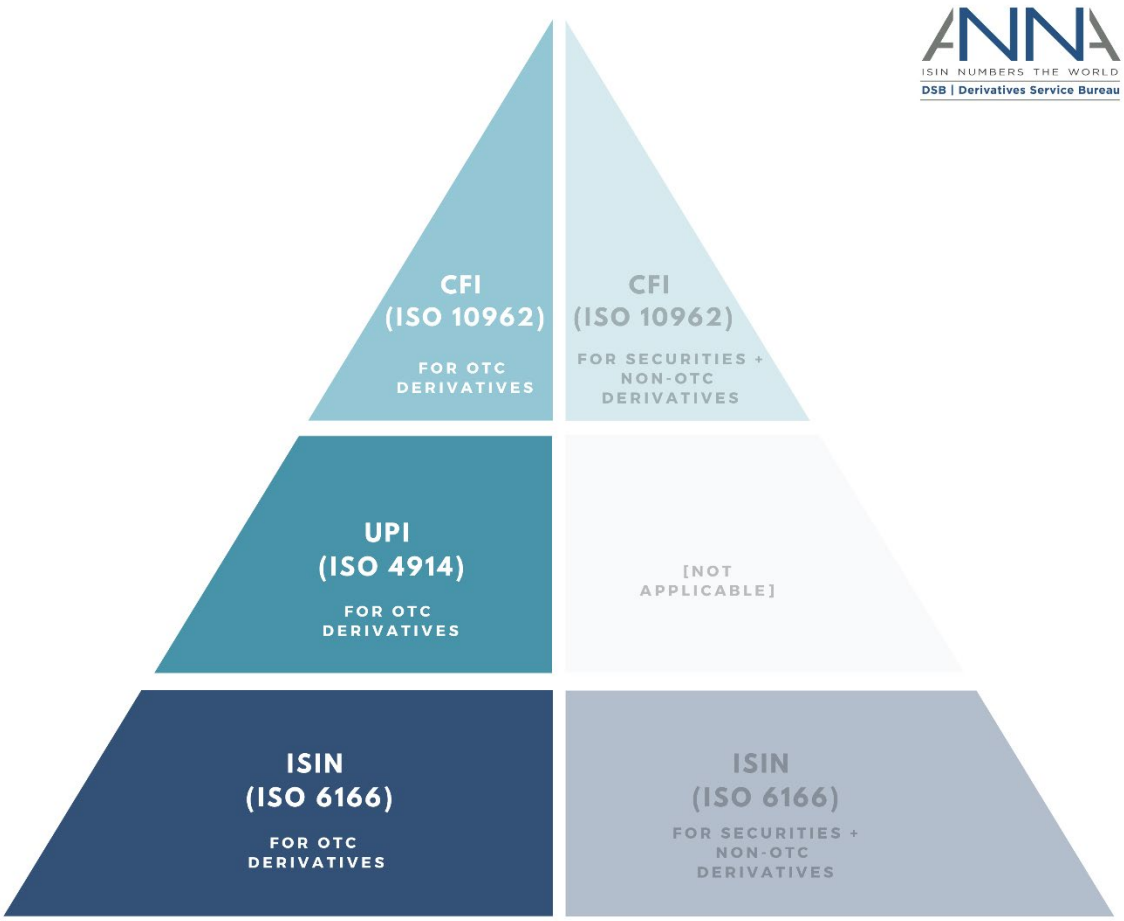


Chart 1: CFI – UPI – OTC ISIN Alignement

It is expected that all OTC derivatives that are reportable to regulators could have one or more of the CFI, UPI and OTC ISIN. The DSB's product scope ensures that all traded OTC derivative instruments can have any combination of CFI, UPI and OTC ISINs required by the industry. Users will determine the specific identifiers that are created and therefore available for search and download.

More details on the definition of each of the CFI, UPI and OTC ISIN and the relationship between them, including a worked example setting out the differences between each can be found here[45] and here[46].

5.3.3 Product definitions for the UPI

This assumption aims to build on the DSB's existing practice and provide UPI users with insight into how product definitions are created, reviewed, and finalised by the DSB's Product Committee (PC).

The DSB PC comprising a diverse spectrum of industry practitioners and regulators commenced a review of the alignment between the data elements contained in the OTC ISIN and the UPI as set out in the Technical Guidance Document published by CPMI-IOSCO. The aim of the preliminary review was to evaluate the data needs of the UPI and determine to what extent these were already held by the DSB when users were requesting an OTC ISIN and/or CFI code.

The PC has subsequently been engaged in communications first with the FSB and now the ROC as part of its ongoing UPI related work and will undertake a detailed review of the full suite of UPI product definitions (for both input and derived values) so that implementation aspects can be finalised. The PC is also examining any additional data sources that might be required to ensure global applicability of the identifier such as a sufficiently broad set of indices (across a range of asset classes, etc.). As with the TAC, any final recommendations will be made to the DSB Board for final review and decision making.

5.3.4 UPI Creation Estimates

This assumption aims to provide users with insight into the estimates of both the initial UPI creation rate, and the longer-term flow rate so that readers are able to use these as a basis to provide feedback on the principles set out in section 4 of this document.

The DSB estimates the number of UPIs required, as part of a series of inputs to determine the functional and non-functional requirements of the UPI service. Estimates are based on the minimum criteria set out in the UPI Technical Guidance document referenced earlier, in conjunction with the data elements used to define the OTC ISIN.

DSB estimates are based on an extract that uses the OTC ISIN records held by the DSB, with a sample of 27 products included, representing approximately 88% of the total number of OTC ISINs in the DSB database. The product templates[47] selected for this process focused on the 25 products with the most

[45] https://www.anna-dsb.com/2020/04/27/so-whats-in-the-cfi-upi-and-otc-isin/
[46] https://www.anna-dsb.com/upi-qa/
[47] A product template is the definition of the OTC derivative identifier and contains the list of input and derived fields agreed by the DSB PC as being the most appropriate and consistent description of the instrument or product being identified.

OTC ISINs however, to demonstrate breadth of coverage, the sample was extended to include at least 4 entries for each asset class.

The data provided in this section should be treated as a general guideline as utilisation of OTC ISIN on which the estimates below are based is a key but single indicator of UPI creation volumes. Eventual creation of the UPI will be determined by users' specific regulatory reporting requirements, and the precise UPI product templates that are agreed.

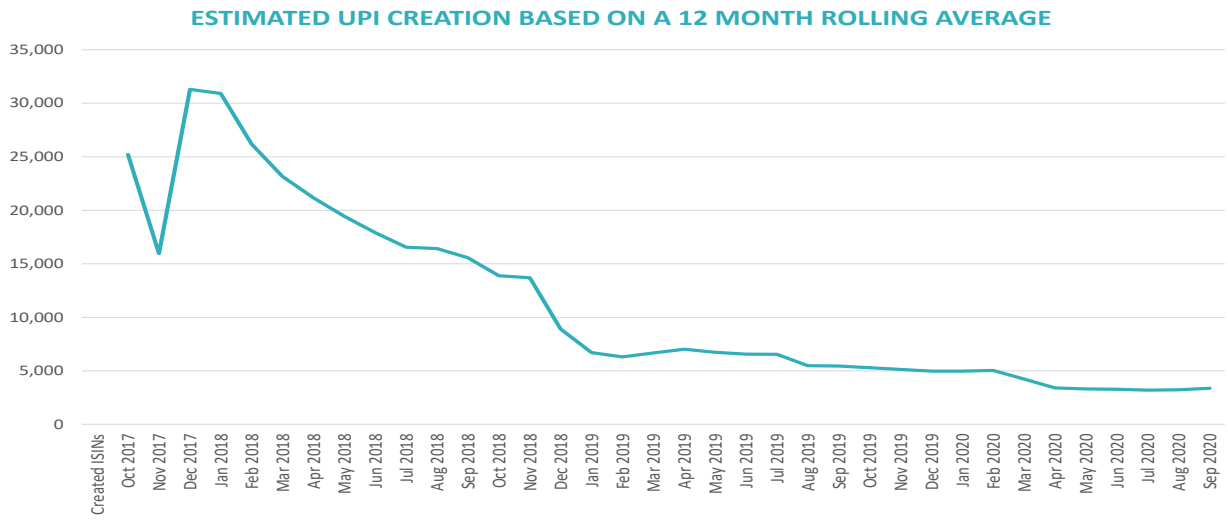
The following methodology was used to estimate the possible number of new UPIs each month:

i. Define an assumed UPI attribute definition for each OTC ISIN template. For example: the FX Swap UPI is made up of Product Name, CFI Code, Notional Currency and Other Notional Currency.
ii. Find the first creation date of any OTC ISIN with only those attributes. All other occurrences of that combination of attributes are ignored[48]. All additional OTC ISIN attributes (e.g. Expiry Date, Price Multiplier) are ignored.
iii. Add each returned record to the total for that template/month.

It should be noted that Non-Standard and Basket templates were not included in the sample because the UPI equivalence for these products has yet to be determined – for example, OTC ISINs for products with a basket of underliers are based on individual basket entries, whereas UPIs may be based on a classification of the underlying – which would lead to a significantly reduced population. It is expected that as the specific UPI product definitions of each of these types of products are finalized, the DSB will be better positioned to evaluate the precise impact on UPI creation activities. It is worth noting at this time, such products do not constitute a substantive majority of instrument identifiers.

The chart below highlights the 12-month rolling average based on the methodology set out above. The date range starts at the point at which OTC ISIN generation commenced and shows the subsequent three-year period. As mentioned above, the OTC ISIN is being used as a working proxy in this instance as the instrument templates currently available to users covers the full range of OTC derivatives CFI codes used by the market.

[48] Such occurrences arise because of the higher granularity of OTC ISIN compared to the UPI due to the additional data elements that define the OTC ISIN including, but not limited to, the tenor and expiry date.



DSB estimates are based on an extract that uses the OTC ISIN records held by the DSB, with a sample of 27 products included, representing approximately 88% of the total number of OTC ISINs in the DSB database. The templates selected for this process focused on the 25 products with the most OTC ISINs however, to demonstrate breadth of coverage, the sample was extended to include at least 4 entries for each asset class.

The data provided in this section should be treated as a general guideline as utilisation of OTC ISIN on which the estimates below are based is a key but single indicator of UPI creation volumes. Eventual creation of the UPI will be determined by users' specific regulatory reporting requirements, and as such not all OTC ISINs may result in an equivalent UPI being created, and similarly not all UPIs may result in the creation of an associated OTC ISIN. Estimates in this section are for the period from 2 Oct 2017 (when the OTC ISIN service was launched) up to and including 30 September 2020.

Instrument	OTC ISINs Created	Estimated UPIs Created	UPI as % of OTC ISIN
Commodities			
Commodities.Forward.Forward	217,492	642	0.30%
Commodities.Option.Option	68,284	1,534	2.25%
Commodities.Swap.Swap	96,292	1,135	1.18%
Commodities.Multi_Exotic_Swap.Swap	20,584	690	3.35%
Credit			
Credit.Corporate.Swap	417,592	17,089	4.09%
Credit.Index.Swap	31,821	11,168	35.10%
Credit.Sovereign.Swap	32,098	1,689	5.26%
Credit.Total_Return_Swap.Swap	21,278	5,126	24.09%
Equity			
Equity.Portfolio_Swap.Swap	745,316	49,162	6.60%
Equity.Portfolio_Swap_Single_Name.Swap	1,084,430	34,833	3.21%
Equity.Price_Return_Basic_Performance_Single_Index.Swap	1,170,023	11,620	0.99%
Equity.Price_Return_Basic_Performance_Single_Name.Swap	12,481,763	93,705	0.75%

Instrument	OTC ISINs Created	Estimated UPIs Created	UPI as % of OTC ISIN
Equity.Single_Index.Option	1,009,643	2,325	0.23%
Equity.Single_Name.Option	1,916,011	28,830	1.50%
FX			
Foreign_Exchange.Barrier_Option.Option	294,840	1,798	0.61%
Foreign_Exchange.Forward.Forward	4,009,620	5,157	0.13%
Foreign_Exchange.FX_Swap.Swap	6,930,027	995	0.01%
Foreign_Exchange.NDF.Forward	700,208	1,371	0.20%
Foreign_Exchange.NDO.Option	327,944	1,241	0.38%
Foreign_Exchange.Vanilla_Option.Option	1,289,203	1,637	0.13%
Rates			
Rates.Basis.Swap	1,440,422	2,963	0.21%
Rates.Cross_Currency_Basis.Swap	684,919	4,567	0.67%
Rates.Cross_Currency_Fixed_Float.Swap	233,638	3,350	1.43%
Rates.Fixed_Float.Swap	4,680,244	4,586	0.10%
Rates.Fixed_Float_OIS.Swap	1,161,524	2,875	0.25%
Rates.FRA_Index.Forward	395,601	1,330	0.34%
Rates.Inflation_Swap.Swap	293,466	1,173	0.40%
TOTAL	**41,754,283**	**292,591**	**0.70%**

6 Feedback Form - Summary of Questions for Industry Response

Proposed Format for Industry Responses to the DSB Consultations:

- Consultation responses should be completed using the form below and emailed to industry_consultation@anna-dsb.com
- An option is provided for respondents to stipulate whether the response is to be treated as anonymous. Note that all responses are published on the DSB website and are not anonymized unless a specific request is made.
- Respondents are requested to state whether they concur with the assumptions and principles set out in the document, or propose alternate evidence driven considerations that they believe should be utilized instead and/or alongside the proposals set out in this paper.
- Respondents also can also provide any general comments in the final section of the response form provided at the end of this paper.
- The consultation enables the DSB to ensure that the DSB can work to reflect the best target solution sought by industry (within the governance framework of the utility).
- As with prior consultations, each organization is permitted a single response.
- Responses should include details of the type of organization responding to the consultation and its current user category to enable the DSB to analyse client needs in more detail and include anonymized statistics as part of the second consultation report.
- Responses must be received by 5pm UTC on Friday 9th July 2021.

Respondent Details

Name	Jennifer Cole
Email Address	datacontract@bloomberg.net
Company	Bloomberg Finance L.P.
Country	United States
Company Type	Data Vendor
User Type	Power
Select if response should be anonymous	☐
Company	Bloomberg Trading Facility B.V.
Country	Amsterdam

Company Type	Multilateral Trading Facility (MTF)
User Type	Power
Company	Bloomberg Trading Facility Limited
Country	United Kingdom
Company Type	Multilateral Trading Facility (MTF)
User Type	Power

Q#	Question	Response
1	**Summary:** The DSB has revised the estimated number of paid users as a result of industry feedback on a query about the target service model, specifically about the timing of free-to-use downloadable delta files, which have been requested at an earlier point in time. The anticipated number of organizations expected to use the DSB's UPI service is expected to lie in the range between those previously forecast, and a lower range that more closely mirrors existing user interaction patterns. The lower threshold therefore shows: • 511 organizations representing 3.4k legal entities will pay to connect programmatically to create and/or search for UPI records • 2,437 organizations representing 16.3k legal entities will pay to connect manually to create UPI records • 17,200 organizations representing 115k legal entities will connect free of cost to search for and/or download UPI records	The estimations seem sound, but again our position is that it will ultimately be dependent on whether the UPI will be required for regulatory reporting and in which jurisdictions.

Q#	Question	Response
	i.e. approximately 20,200 entity groups representing 135,000 organizations that currently report data to trade repositories The upper bound of user estimates as in line with the proposal set out in the earlier prior consultation paper, and with which industry appears to be comfortable: • 12,000 organizations representing 80.5k legal entities will pay to connect programmatically • 8,000 organizations representing 53k legal entities will pay to connect manually • 20,000 organizations representing 133.5k legal entities will connect free of cost ***Question 1a: Do you concur with the projected user estimates?*** ***Question 1b: If not, what specific alternate approach do you recommend? Please provide a clear rationale and cite publicly available sources for any additional data points you believe should be incorporated into the DSB's assumptions.***	
2	**Summary:** The DSB is evaluating the additional data access mechanisms requested by respondents to the first consultation and proposes to follow up with feedback from the DSB Technology Advisory Committee (TAC) once their review has completed, with an update to be provided in the UPI Consultation Final Report. At this time the DSB believes that users will be able to access the UPI service	Yes

Q#	Question	Response
	using one or more of the following mechanisms: Fee Paying: i. Power User - Full Programmatic Access - Programmatically connect to create, search for and download data ii. Search-only API User - Limited Programmatic Access - Programmatically connect to search at a lower volume threshold than permitted for a Power User iii. Standard User - Manual Access - Manually connect to create, search for and download data iv. Infrequent User - Manual Access - Manually connect to create, search for and download data, at a lower volume threshold than permitted for a Standard User Non-Fee Paying: v. Registered User - Manually connect to search for and download data vi. Registered User - Manually or programmatically connect to download data from the file download service ***Question 2a: Do you concur with the approach related to user access including any additional services to be introduced at the discretion of the TAC?*** **Question 2b:** ***If not, what specific alternate approach do you recommend? Please provide a clear and objective rationale for each alternate approach you recommend.***	
3	**Summary:** The DSB is proposing to make the OTC ISIN record including the UPI	Yes, making the UPI part of the OTC ISIN record initially and offering full UPI reference data for no charge at T+1 addresses some of

Q#	Question	Response
	code freely available at T+0 23.55hrs UTC and the full UPI record on T+1 23.55hrs UTC with the primary goals of ensuring financial sustainability and providing a fair service for all jurisdictions. ***Question 3a: Do you concur with this approach to the Registered user file download timing?*** ***Question 3b: If not, what specific alternate approach do you recommend? Please provide a clear rationale and any additional details you believe should be incorporated into the DSB's approach***	the concerns that were raised with having UPI available on a T+2 delay. A further check with potential users in various time-zones should be made in order to ensure that this approach works in all jurisdictions which require the UPI. Our preference remains for the availability of the UPI and associated data to be available with the minimum of restrictions and with cost minimized.
4	**Summary:** The UPI fee model will be based on cost recovery, as aligned with the governance criteria, and is proposed to adopt a substantially similar fee model structure to that of the existing OTC ISIN service. The proposed fee model is expected to be applied to four fee-paying user types, which are divided into the UPI total estimated cost, with the fee level varying according to user access type and user numbers. ***Question 4a: Do you concur with this approach to the User Fee Structure?*** ***Question 4b: If not, what specific alternate approach do you recommend? Please provide a clear rationale and any additional details you believe should be incorporated into the DSB's approach***	The methodology seems sound and aligns with how the OTC ISIN services is structured so from an administrative perspective that is helpful. However, it is still difficult to assess fully until we know the actual user numbers and the user type breakdowns per those numbers. We also would prefer to have assurances that costs are being robustly monitored by a neutral third party, similar to how the LEI-ROC oversees costs within the Legal Entity Identifier system.
5	***Summary:*** Current estimates of the UPI service costs are broken down as Estimate Capital Expenditure (Capex) – Build Costs for the period 2020-H1 2022, Estimate Time-Limited Costs and Estimate Operating Expenditure (Opex) based on an estimate of 3,000 fee-paying users. Costs include the	Yes, we understand the contingency fund is necessary in order to facilitate implementation of the UPI at this stage, as there are many variables and unknowns. However, in the event those funds are not utilized there should be a plan to use that money to offset the costs for fee paying users.

Q#	Question	Response
	application of a Financial Sustainability Margin, to help to ensure the economic sustainability of the service, and a contingency fund to address unplanned costs during the implementation and first few years of the service. The contingency is proposed at 20% of Capex and Opex costs and cannot be used without the consent of the DSB Board. ***Question 5a: Do you concur with the proposal to apply a 20% contingency fund?*** ***Question 5b: If not, what specific alternate approach do you recommend? Please provide a clear rationale and any additional details you believe should be incorporated into the DSB's approach.***	
6	***Summary:*** The DSB expects the costs for the services it provides to be recovered from the user base of the respective services. Given the high volume of forecast demand for the UPI service as outlined in section 4.1, a dedicated onboarding platform and operating model for the UPI service has been scoped and costed to allow the DSB to provide a scalable UPI service provision. The costs outlined in the previous section all relate solely to the UPI service. Once the UPI service is live and the level of demand is confirmed, there will be the opportunity to conduct analysis on the expected scope for synergies and shared costs between the UPI service and the OTC ISIN service, and what an appropriate cost allocation policy would be.	Yes. However, there are still many variables that will impact the final breakdowns so we suggest periodic updates once more information becomes available.

Q#	Question	Response
	Specifically, the DSB proposes that 100% of the synergies available by leveraging the existing DSB platform are allocated to UPI users in 2022 and 2023, after which there will be determination of the expected synergies to be shared between both OTC ISIN users and UPI users. The shared costs will be apportioned via an allocation policy that the DSB will propose and consult with stakeholders in 2023. ***Question 6a: Do you concur with this approach to the cost allocation policy?*** ***Question 6b: If not, what specific alternate approach do you recommend? Please provide a clear rationale and any additional details you believe should be incorporated into the DSB's approach.***	
7	***Summary:*** The DSB proposal remains that fees should be paid in advance, as with the existing service provision. Whilst acknowledging the preference for free data and payment in arrears, the DSB proposes that a payment in advance structure is necessary for effectively supporting the financial sustainability of the UPI service. ***Question 7a: Do you concur with this approach to invoicing?*** ***Question 7b: If not, what specific alternate approach do you recommend? Please provide a clear rationale and any additional details you believe should be incorporated into the DSB's approach.***	The UPI contractual and invoicing dates should align with the OTC ISIN agreement. It is preferable if both the OTC ISIN and UPI fall under one agreement and users are able to subscribe to whichever services they need to which fees are set accordingly.
8	**Summary:** The DSB's proposal for treatment of the repayment of capital	We reiterate our position from the prior consultation. While this aligns with how the DSB has dealt with the OTC ISIN space, it does

Q#	Question	Response
	expenditure (Capex) is to remain consistent with standard industry practice for projects of this size and nature, which is a repayment period of four years. This approach is consistent with the DSB's existing practice for existing services. ***Question 8a: Do you concur with this approach to amortisation of capital expenditure?*** ***Question 8b: If not, what specific alternate approach do you recommend? Please provide a clear rationale and any additional details you believe should be incorporated into the DSB's approach.***	not offer transparency and consistency in terms of anticipating year over year costs.
9	Please use this space for any other comments you wish to provide.	