



DSB

Fee Model Consultation Paper

FINAL REPORT

28 February 2017

1 Executive Summary

- European legislation MiFID II/MiFIR & MAR have specified the use of ISINs for all the instruments in-scope of the regulation, including OTC derivatives tradeable on an EU trading venue or with an underlying tradeable on an EU trading venue.
- ANNA, after discussions with the industry and ISO, is setting up the Derivatives Service Bureau (DSB) to assign global, permanent and timely ISINs to OTC derivatives.
- This final report is focused on the proposed fee model for recovering the costs of the services the DSB provides as a numbering agency for ISIN allocations.
- The paper describes the various principles and original proposed fee model along with the analysis of the responses from the industry following the consultation between 09 January 2017 and 06 February 2017.
- Based on those responses, the DSB has decided to move forward on the basis of a simplified fee model that is focused on the timeliness of the data that the user wishes to access. There remains the option to refine the model at a point in the future should the usage patterns and cost basis require it.
- Intermediaries will be required to identify and categorize each of their users. Each of those users will sign the DSB user agreement and pay the appropriate fee.
- The DSB will publish a consultation paper in the future to address the potential of redistributing excess revenue to the user-base.
- Any other further details or responses on the Fee Model will be published as part of the DSB Questions and Answers

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2 Introduction

2.1 Background

The Association of National Numbering Agencies (“ANNA”), a corporation organized under the laws of Belgium, is founding the Derivatives Service Bureau (DSB) for the allocation and maintenance of International Securities Identification Numbers (ISINs) for OTC derivatives. The allocation of ISINs to these instruments, as well as the provision of access to the ISIN archive and associated reference data, comprise the numbering agency function of the DSB. This function is overseen by the International Organization for Standardization (ISO) through strict rules over business and technical operations, including limiting user fees to cost recovery. There is discretion regarding how the fees may be structured and applied to meet these rules, and this fee structure is the primary focus of this consultation.

The European Union’s MiFID II/MiFIR regulations mandate the use of ISINs to identify certain OTC derivatives, starting on 2 January 2018. The affected OTC derivatives include those tradeable on a European Trading Venue (ToTV) and those with underlying asset(s) Tradeable on a European Trading Venue (uToTV). The reporting obligations for these instruments affect Trading Venues and Systematic Internalizers (SIs).

2.2 DSB Consultation Approach

The DSB is consulting with the industry to provide transparency to its decision-making processes by sharing its considerations and inviting industry participation through feedback and commentary on its prospective decisions.

This industry consultation described the DSB’s proposal for a fee model for recovering the cost of the numbering agency services of the DSB. This model was based on predicative estimates of costs as well as volume and user distribution.

The consultation also outlined the fee models that were considered to arrive at the proposed fee model, which aimed to provide fair and reasonable terms to the different categories of DSB users whilst also ensuring the financial stability of the DSB.

2.3 Organization of this report and feedback to the consultation

This paper is organized in sections that address key aspects of the fee model of the DSB, along with the DSB’s analysis of responses and a final proposal that will form the basis on which the DSB moves forward:

- Section 3: Key principles of the fee model
- Section 4: Factors in the cost basis of the DSB
- Section 5: Governance aspects of the cost basis of the DSB
- Section 6: Proposed fee model for the numbering agency services
- Section 7: Fee models that have been considered by the DSB
- Section 8: Summary analysis of the models considered

When required the DSB will issue further clarifications through Q&A on its website.

3 Principles

3.1 Cost Recovery

In accordance with the Registration Authority Agreement (RAA) between ISO and ANNA, the ANNA-DSB will provide numbering agency services on a cost-recovery basis.

Cost-recovery means that the fees charged to the industry must reflect the costs incurred to provide numbering agency services. From the DSB's perspective, this means that the revenues must be sufficient to ensure that the numbering agency has the financial viability to meet its continuing obligation to provide these services. From the user perspective, it means that the payment for these services does not profit the owners of the utility beyond its maintenance as a financially viable entity. This principle is illustrated in the Annex B of the Statutes for the Global Legal Entity Identifier Foundation¹ on 'Sustainable Funding' – the funding system should be one that is efficient, non-profit cost-recovery based and reliable.

Details of what costs must be recovered are discussed at a high level in section 4. These include operational costs, costs of capital and emergency reserves.

3.2 Unrestricted Data

It is the intention of ANNA that no data associated with the definition of an ISIN issued by the DSB will have licensing restrictions dictating usage or distribution.

This principle is only possible if none of the attributes defining the ISIN for OTC derivatives require proprietary data licensed by third parties. If the DSB Product Committee (<http://www.anna-web.org/dsb-product-committee/>) determines that there is no viable alternative to the use of licensed or restricted data in a product definition, the DSB will review the impact to its Unrestricted Data policy at that time, taking into account the specific products and attributes that are impacted by the incorporation of licensed or restricted data in the product definitions.

3.3 Open Access

Access to the DSB archive for consumption of OTC derivative ISINs and associated reference data will be free and available to all organizations and users.

Registration will be required to use the DSB services. Registered users will be able to query the archive to retrieve an ISIN or data associated with an ISIN, or use the File Download Service (defined in the Technology and Operations Consultation Paper - <http://www.anna-web.org/dsb-consultation-paper-techops/>).

Analysis

There was general agreement that there should be no restriction regarding the types of organizations that can access ISINs. One respondent did mention a concern if operational overheads were significant then some restrictions should be enforced on intermediaries. The DSB is designing

¹ <https://www.gleif.org/en/about/governance/statutes#>

its technical and operational processes to ensure that the marginal cost of on-boarding is close to zero and doesn't consider this will be a significant factor once the utility is fully up and running.

The zero charge element of the 'Open Access' principle had less consensus. Respondents were concerned that usage of ISINs for OTC Derivatives is required for other elements of MiFID II and other EU regulations. As such, all users of ISINs should share the cost of creating and supporting the identifiers and their associated reference data. The tension for the DSB is providing open access to ISINs such that smaller and new participants do not face barriers to entry versus distributing the cost of the service evenly across the industry.

Proposal

Cost Recovery Principle – as described in section 3.1

Unrestricted Data Principle – as described in section 3.2

Open Access Principle

Access to the DSB archive for consumption of OTC derivative ISINs and associated reference data will be available to all organizations and users.

Registration will be required to use the DSB services.

All registered users will be able to use the website to search and retrieve ISINs on an individual basis and their associated reference data.

3.4 Payment in Advance

To the extent possible, the DSB will levy fees through annual contracts that require payment in advance.

This advance yearly commitment offers the DSB more clarity in aligning fee levels with cost recovery. For the users, it provides improved ability to forecast their costs for utilising ISIN services.

4 Cost Basis

This section describes the various costs that form the basis of the DSB cost recovery model. It also includes details on a set of variables expected to affect the cost basis of the DSB and the proposed fee model. As the numbering agency function is expected to be self-sustaining while operating on a non-profit basis, the total overhead of supporting services, technology and capital are included in this calculation.

While the absolute cost of this overhead can only be estimated at this time, the constituent factors can be listed. These include costs of management, technology (infrastructure, office and network), user support (help desk, documentation, communications, training), third-party services (legal, financial, management and technology support), cost of capital, and maintenance of prudent financial reserves.

It should be noted that the requirement for non-profit financial operation makes the need for prudent reserves particularly acute, because there is no natural funding mechanism to address emergency or short-term funding needs other than procurement of costly short-term capital or unscheduled changes to user fees. To avoid either of these exigencies, the inclusion of a prudent reserve in the cost basis is a form of risk management that benefits the users as well as protects the numbering utility.

4.1 DSB Costs

The current estimation for the total operational costs of the DSB is €6 million. Please note that this is an estimate that is subject to change as actual costs are tracked during 2017.

These costs relate exclusively to the services provided by the DSB in its numbering agency function. Any costs associated with DSB activities that fall outside this function will not be considered in the cost-recovery fee model.

It should be noted that these costs are expected to be insensitive to the volume of ISINs being generated, which means that greater volume of ISIN issuance will reduce the per-ISIN costs.

Analysis

Respondents were keen to understand a lower level of detail on the costs and how the governance of those costs is expected to operate. The DSB intends to be transparent with the industry whilst maintaining the necessary confidentiality regarding commercial contracts with its suppliers. Once the details on costs have been finalized, the DSB will publish more detail as is feasible.

To reiterate a point made elsewhere, the DSB is required to adhere to the strict rules imposed on ANNA as the Registration Authority for supervising ISIN issuance. These include publishing an annual report to ISO and ISO having the right to inspect the DSB's accounts and procedures on request. In addition, the DSB has appointed an external consultancy to supervise the DSB's approach and cost-base to ensure that it adheres to best practice without incurring unnecessary costs that must be borne by the industry.

Proposal

The current estimation for the total operational costs of the DSB is €6million. Please note that this estimate is subject to change as actual costs are finalized during 2017. The DSB intends to publish further detail as 2017 progresses to give the industry as much transparency as possible whilst maintaining the confidentiality of commercial contracts with its suppliers.

These costs relate exclusively to the services provided by the DSB in its numbering agency function. For clarity, any costs associated with DSB activities that fall outside this function will not be considered in the cost-recovery fee model.

It should be noted that these costs are expected to be insensitive to the volume of ISINs being generated or retrieved.

4.2 Expected Volumes

This section describes the relevant volumes and the distribution of usage across the different constituencies interacting with the DSB that may affect the fees paid by users.

The section first provides an explanation of different categories of users of the DSB and concludes with an estimation of actual volumes for these categories.

It should be emphasized that whilst the operational cost estimates of the DSB are reasonably well understood (but still subject to additional refinement), the volume estimates detailed within this document are subject to significantly greater uncertainty. Therefore, any per-ISIN cost figures discussed in this document must be interpreted within the context of such uncertainty.

4.2.1 Registered Users

These are entities that have registered to use the DSB. The category of Registered Users is also the super-set group that contains all the entities described below in sections 4.2.2 and 4.2.3.

Functionally, the currently proposed fee model enables the entities in this super set to interact with the DSB in the following ways:

- Retrieve existing ISINs given a set of attributes using the website;
- Retrieve the attributes of a given ISIN using the website;
- Use the File Download Service.

This group includes trading venues, systematic internalizers, buy-side firms, industry organizations and vendors.

It should be noted that neither the proposed fee model nor any of the fee models under consideration are dependent on this group for income. There is no anticipation of user charges for retrieval via the website or file download of ISIN data.

For the purposes of this consultation, the DSB is planning on >1,000 Registered Users.

Analysis

As mentioned in section 3.3, most respondents were comfortable with registration being open but there were some who objected to registrants not being charged for access to the data. The DSB will automate the process of registration to the extent that the marginal cost will be almost zero. Charging for access and use of ISINs has potential challenges, especially around the principle of open access.

There is potential for the DSB to configure the system so that market participants are incentivized to engage with the service – this could include restrictions on the number of ISIN requests available over the web over a specific time period or a reduced universe (maybe older) from the download service. As mentioned previously, the DSB needs to balance this with the requirement for open access to ISINs and their reference data.

Proposal

Registered Users are entities that have registered to use the DSB. Registered Users will be able to retrieve ISINs and their attributes from the DSB using the website, File Download, FIX or any future connectivity supported by the service.

4.2.2 ISIN Creators

These are organizations that will create ISINs. In addition to the services available to the group described in 4.2.1, users in this group will be able to create new ISINs using the website.

This group has two sub-categories:

- Regulated – those ISIN creators subject to the regulatory obligation to use ISINs as part of their MiFID II reporting
- Non-Regulated – those ISIN creators not subject to the regulatory obligation

To estimate the size of these groups, one source is the ESMA register (<https://registers.esma.europa.eu/>) from MiFID I, which shows the following:

- Number of Multi-Lateral Trading Facilities (MTFs) = 150
- Number of Registered Markets (RMs) = 102

It should be noted that many of these trading venues will not be trading OTC derivatives. However, as an offset to this reduction in number, further MTFs might be registered in addition to systematic internalizers that will need to create ISINs.

Another source of information is the number of major market participants in the OTC derivatives space:

- Number of ECNs across the main asset classes ~ 15
- Number of probable SIs based on major investment banks ~ 15

As indicated by the approximation signs, these numbers have no official standing and are simply a view of the potential number of significant market actors.

The difference between these two estimates is significant. In lieu of any definitive numbers, the DSB has chosen an initial estimate of 40 users for the ISIN Creator group. This conservative number is chosen to show the various fees model in a near-worst-case scenario, illustrating a realistic upper limit on the fees to be incurred. Should actual numbers be higher than the figure chosen by the DSB, then per-user fees will be lower than the worked examples shown in this consultation.

Analysis

Most respondents agreed with the DSB that the estimate was conservative and acknowledged the lack of certainty on the final number of trading venues and systematic internalizers that are required

to use ISINs. In addition, some respondents noted that where ISINs are required for other regulatory or industry use then this would likewise increase this number.

One respondent proposed that because of the uncertainty around the final fee, the DSB should guarantee a cap on an individual basis. Whilst it is the DSB's intention to adhere to a previously stated budget for a given year – which, as a cost-recovery utility will mimic the behaviour of a cap – this number is an upper bound for the entire set of users rather than for an individual.

Some respondents questioned the need for this category at all and felt that the DSB should focus instead on 'bulk' or 'power' users versus those wanting ISINs piecemeal or on an ad-hoc basis. The additional segregation between 'non-regulated' and 'regulated' ISIN creators also created some confusion. Since most financial firms are 'regulated', then, at a minimum, the DSB will need to change these labels. The purpose of introducing this separation was to provide focus on those users who have been mandated to use ISINs for their reporting. However, the DSB acknowledges the point made by some respondents of the growing use of the ISIN across regulations and business, which makes such a distinction less relevant.

Proposal

The DSB proposes removing this category altogether and therefore the estimation of its population is no longer relevant.

4.2.3 FIX Access

This is the number of organizations that will be connected to the DSB via the FIX network. The request and subscription methods for this connection are described in the Technology and Operations Consultation Paper (<http://www.anna-web.org/anna-launches-industry-consultation-dsb-techops/>).

In addition to the services available to the group described in 4.2.1, users in this group will be able to interact with the DSB in an automated mode over the FIX network.

Organizations that are also in ISIN Creators group can create new ISINs via the FIX Network. If they are not in the ISIN Creators group, then their access will be restricted to consumption of ISIN data.

Some ISIN Creators may not choose FIX Access because of their small volumes whilst other market participants and vendors may want automated bulk access to ISIN data via FIX. The DSB proposes to use 50 for the number of organizations that use the FIX network.

The rationale for the estimate of 50 users is the expectation that the majority of the ISIN Creators will opt for FIX access, plus some large data vendors and other large investment firms that do not have an ISIN reporting mandate. This estimate is intentionally conservative, thereby illustrating a realistic upper limit on the user fees for FIX access. Should number of users prove to be higher than this estimate, then per-user fees will be lower. The effect of a larger FIX user base is illustrated in the worked example in section 6.4 below.

Analysis

Respondents submitted mixed views on the estimate of 50 FIX users – from thinking it should be equal to the number of ISIN Creators to expecting hundreds of FIX users. This range is a good indicator of the uncertainty surrounding this estimate. One respondent, whilst appreciating the reasons for the DSB's conservative estimation, claimed that by not using a much higher number, the

DSB was driving potential users away: taking the FIX connection cost into the few thousands would encourage many more to connect and therefore allow the DSB to meet its costs.

Despite the stated need for multiple connections from some respondents, the DSB currently views this as not being a relevant factor for costs and therefore the consequent fees. One of the goals of the DSB's utility model is to ensure that users benefit from the commoditization of technology, meaning that one more connection does not automatically trigger another equivalent fee.

Elsewhere in the responses there was some discussion of the DSB moving away from focusing on FIX and, instead reorienting around 'power users' or timeliness of ISIN retrieval. This might allow the DSB to simplify its model and cover non-FIX systematic connectivity to the DSB as well as FIX.

Proposal

The DSB proposes removing this categorization of user and instead focus on volumes and timeliness of the data being retrieved.

4.2.4 Volume Estimate

ESMA, in the preliminary text for RTS 23, estimates the number of ISINs to be ~ 15m. This number reflects all instruments in scope for MiFID II, including bonds and equities among other financial instruments. In addition, this is the estimated total size of their data rather than the number of ISINs created in a given year.

A different metric is found in Swap Data Repository (SDR) data, suggesting that the number of transactions for rates, equity and credit derivatives over a 12-month period is ~ **20m**. However, this is US data and also does not include FX or Commodities. In addition, it is unlikely that the DSB Product Committee will define the ISIN at the transaction level. However, ISINs will be required for those instruments that are quoted on a trading venue or when the underlying asset is traded on a trading venue.

In order to provide per-ISIN fee illustrations in this consultation, the DSB proposes using an initial estimate of 2m ISINs per annum as a volume factor in the fee model. This figure is based on the assumption that the 15m ISINs in the quoted in the RTS23 text is created over a five-year period, and that two-thirds of the ISINs relate to OTC derivatives.

However, this figure is subject to high uncertainty as the product definitions have not yet been finalised by the DSB Product Committee, and therefore volume estimates will necessarily entail a high degree of uncertainty.

Given the insensitivity of DSB costs to the volume of ISIN generation, it should be noted that the total sum of user fees is not expected to be impacted by the volume assumptions being made in this consultation. Instead, the main impact is on illustrative per-ISIN fees.

For example, if actual ISIN volumes were to be 20 million per year rather than the 2 million assumption of this consultation, then the illustrative per-ISIN fees are expected to be reduced by a factor of 10 (barring any minor uptick in costs for disk storage etc).

Analysis

There was a mixed response to the accuracy of this estimate and this, again, demonstrates some of the uncertainty that exists in the industry regarding ISINs, their granularity and their use. Only one

respondent provided any kind of evidence, walking through maths that resulted in 3 trillion ISINs over a 30-year period – which, allocating that generation or use evenly over that period, implies a 100m ISINs being obtained every year.

One of the key aspects of the basis of their response was that ISINs are required for quotes as well as trades and therefore, no matter how crudely amended, any calculation based on trade reporting will omit a large part of the requirement. As the DSB Product Committee starts finalizing product definitions and the DSB moves into UAT, the DSB should be able to form a more accurate picture of the volumes involved for OTC Derivatives.

Proposal

The DSB proposes not to use the number of ISINs being created or retrieved a factor in the proposed fee model.

4.2.5 Additional Volume Metric

The specific European regulatory requirement for ISINs for trading venues and systematic internalizers is focused on those instruments which are tradeable on a trading venue (ToTV) or whose underlying is ToTV (uToTV).

In considering the most appropriate fee model, the DSB has taken into consideration the complexity introduced by the fact that the obligation to create any given ISIN may fall on more than one trading venue or systematic internalizer.

The following example illustrates this complexity: two trading venues trade a new financial instrument on the same day. In this scenario, a simple per-ISIN creation fee model would imply that the first trading venue to apply for the ISIN creation will pay a fee, and the second trading venue will be able to use the ISIN for free. The result is a financial disincentive to be the first requestor to create the ISIN.

In order to address this unfairness to trading venues who create ISINs promptly, the DSB proposes to allocate costs across the Regulated ISIN Creator user base by calculating for each trading venue / systematic internalizer, their share of OTC derivative instruments that fall within the ISIN generation mandate as a percentage of the total universe of OTC derivative instruments that fall within the ISIN generation mandate. This metric can then be used to provide a weighting per Regulated ISIN Creator for cost allocation across the user base.

The DSB proposes to use the number of OTC derivative instruments reported under RTS23 as the mechanism to calculate these numbers. The plan is to determine the subset of relevant instruments by reference to the CFI code supplied under RTS23 reporting.

The following example illustrates the approach: a Regulated ISIN Creator reports a total of 60K OTC derivative instruments under RTS23 over the course of a year. Additionally, assume that the sum of all Regulated ISIN Creators reports under RTS23 is 3m over the course of a year. In this scenario, the Regulated ISIN Creator will be allocated a weighting of $60K/3m = 2\%$ as their share of the overall fees to be paid by the Regulated ISIN Creators. It should be noted that this 2% figure is independent of the number of ISIN Creators.

Section 6 (Proposed Model) provides more details on the proposed use of this metric.

Analysis

Respondents agreed that the disincentive to create an ISIN first was not a significant disincentive unless a large proportion of the fees were to become the responsibility of the 'ISIN Creator' group. Since the proposed model described here, in addition to the general views of the respondents, doesn't allocate fees on the 'ISIN Creator' group then the DSB agrees that this is potentially an unnecessary complication.

Respondents also pointed out that the ISIN is used in other aspects of MiFID II and, indeed, in other European legislation such as Market Abuse Regulation and European Markets Infrastructure Regulation. Putting aside the operational challenges around monitoring the RTS 23 Reference Data, the fact that ISINs will be needed for other aspects of EU regulation means that utilising RTS23 isn't an appropriate proxy measurement for cost allocation across the user community.

Proposal

The DSB will not use ToTV or uToTV as a proxy for ISIN generation.

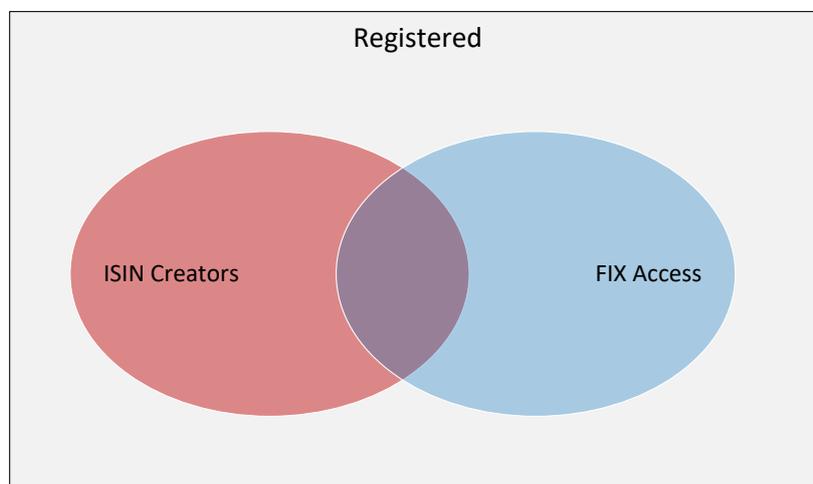
4.2.6 Estimates Summary

Please note the following:

- The definitions of the different variables in the table below are described in the previous sub-sections.
- These volumes are initial estimates, as explained in the previous sub-sections.

Variable Name	Number
Registered (web access to ISINs and data)	1,000+
ISIN Creators (+ web-based creation of ISINs)	40
FIX Access (+ automated interaction with Engine for ISIN creation and/or ISIN and data access at high volume)	50
Number of ISINs created over 12-months	2m

The different groups intersect as per the below diagram:



The red and blue areas indicate ISIN Creators and FIX Access organizations respectively (described in the sections above). The intersecting area, indicated by the purple colour, identifies those organizations who both connect to the DSB via the FIX network. This overlapping group will be able to create new ISINs through a fully automated process.

Analysis

Whilst not directly connected to the categorizations above, respondents did detail a number of other industry user groups that would want access to ISINs for various activities and obtain them through different means: From asset managers wanting to bulk download to organizations wanting real-time reference data to interpret post-trade transparency reporting. Given the DSB's proposals stated earlier in this document then this diagram and approach can be simplified further without creating reliance on potentially un-representative factors on ISIN use.

Proposal

Although the DSB expects the number of Registered Users to exceed this, for the purposes of the demonstration of the fee model, the DSB estimates the number of Registered Users to = 1,000.

The DSB will categorize Registered Users in the following ways:

Power Users

These users will be able to retrieve all ISINs on an intra-day basis via the website, file download or FIX.

Standard Users

These users will be able to retrieve all ISINs until the close of the previous business day via the website or file download. Standard Users will not be able to connect using FIX.

Registered Users

These users will be able to retrieve all ISINs until the close of business day one week previous via the website or file download. Registered Users will not be able to connect using FIX.

5 Cost Governance

ANNA's status as a Registration Authority requires provision of an annual report to ISO confirming NNAs are adhering to the obligations outlined in the RAA and this includes the cost recovery aspect of their operations. ISO is entitled to request an audit on services, including fees charged, at any time. As the numbering agency for OTC derivatives, the DSB will fall under this obligation and be subject to the same scrutiny by ISO.

In addition, the DSB Board will engage an independent consultancy to perform an ongoing review of the DSB activities, including its costs and cost management.

6 Original Proposed Model

6.1 Description

The proposed model is a combination of those considered in section 0. The key aspects are:

- FIX Access organizations will pay a value-based fee for systematic connectivity to the DSB.
- This fee will be used to reduce the cost of ISIN generation for all ISIN creators, with a focus on those entities that have a regulatory mandate to create ISINs
- The FIX Access fee will require an annual upfront subscription, in order to provide certainty of the fee to be paid by the Regulated ISIN Creators. The FIX Access fee will be paid by all users who wish to have FIX connectivity to the DSB, including Regulated ISIN Creators, non-Regulated ISIN Creators and Registered Users who are not ISIN Creators.
- Regulated ISIN Creators will pay an annual subscription fee based on the number of instruments they have available to trade relative to the total number of instruments ToTV plus instruments with uToTV. This fee is in addition to the FIX Access fee should they wish to connect to the DSB via the FIX network.
- Non-Regulated ISIN Creators will be charged on a per ISIN basis. This fee is in addition to the FIX Access fee should they wish to connect to the DSB via the FIX network. The fee for the non-regulated ISIN Creators will be set by the DSB based on the total cost of the DSB and the expected ISINs created for the year. The per-ISIN fees from non-regulated ISIN Creators will result in a surplus that will then be redistributed back to users. The mechanism for this redistribution is the subject of a future consultation paper.
- The consumption of ISINs and related data over the website or via the File Download Service will have no charge

6.2 Payment Structure

The key aspects of the payment structure for this fee model are:

FIX Access Organizations

- From the expectation that this group will represent the bulk of ISIN-generation volume and use of the archive, the DSB proposes that fees collected from this group will be the foundation of the cost-recovery program. Whatever cost recovery is not achieved through these fees will be assigned to ISIN Creator users that are not FIX-connected.
- There will be two tiers of FIX access fees, based on whether an organization subscribes to services related to a single asset-class or multiple asset classes
- The fee will be payable annually in advance, enabling calculation of the residual fees charged to the ISIN Creator groups
- If the advance commitments of FIX Access users are greater than the overhead cost of the DSB numbering agency services, the FIX Access fee will be reduced for those users.
- The first payment will cover the costs from October 2017 to December 2018.
- Once the list is open for FIX connectivity, onboarding of market participants will be sequenced based on when they execute contracts with the DSB

Regulated ISIN Creators

- If the fees from the FIX Access organizations are sufficient to cover the whole cost of the DSB, then no fees will be charged to Regulated ISIN Creators

- If the fees from the FIX Access organizations are not sufficient to cover all the DSB costs, then Regulated ISIN Creators will submit their estimate of the number of instruments they expect to submit under their RTS23 obligation.
- The DSB will calculate the fees for each Regulated ISIN Creator based on the weighting methodology calculated in section 4.2.5 (Additional Volume Metric - Number of instruments Tradeable on a Trading Venue or with an underlying Tradeable on a Trading Venue)
- Regulated ISIN Creators will pay in advance for the year ahead based on their estimate
- ISIN Creators exceeding their estimate will be able to adjust up their estimates intra-year, with the uplift fee being proportionate to the uplifted figure.
- An additional weighting applied to the cost of excess transactions is under consideration, as an incentive for accuracy in start-of-year estimates so that the group's fees are fair. The DSB proposes to set such a weighting in the 10%-20% range.
- ISIN Creators who undershoot their estimate will be offered either a refund or a credit carried over to the following year.
- The first payment will cover the expected costs from October 2017 to December 2018. The comparison of Regulated ISIN Creator estimates vs. actuals will be based on the ToTV & uToTV figures published by ESMA during 2018 based on RTS23 submissions of the relevant Regulated ISIN Creators.

Non-Regulated ISIN Creators

- The DSB will set the per ISIN charge based on the Total Cost of the DSB and the estimate of the total number of ISINs to be created
- In the first instance, the DSB will need to estimate the total number of ISINs, but once operational, the DSB will utilise actual ISIN creation figures instead of estimated figures
- The per-ISIN charge will carry an additional weighting over fees paid by ISIN creators with annual contracts. The DSB proposes to set the weighting at around 100% which in effect is the premium for ad hoc, one-off transactions compared to entities who have taken on an annual commitment.
- Non-Regulated ISIN Creators will pay monthly in arrears for the ISINs that they created in that month.
- Given the proposed methodology, surplus revenue for the DSB may be expected. If this occurs, the surplus will be returned to the user base. The methodology for this re-balancing will be the subject of a future consultation paper.

6.3 Worked Example – Base Case

The projected fees in this section use the numbers stated in the Cost Basis section above.

FIX Access

- The proposed fees for FIX Access are as follows:
 - **€80K for single-asset**
 - **€120K for multi-asset**
- Assuming a 50-50 split between organizations wishing to consume a single asset vs multi-asset, the implication is as follows:
 - Number of single-asset FIX Access organizations = 25
 - Number of multi-asset FIX Access organizations = 25
- Total revenue generated from this group = $[25 \times \text{€}80\text{K}] + [25 \times \text{€}120\text{K}] = \text{€}5\text{m}$

Total estimated cost of the DSB = €6m which leaves a remainder of €1m to be raised from ISIN Creators.

Regulated ISIN Creators

To ensure no revenue shortfall for the DSB, particularly in its early years when unexpected costs are most likely and contingency funding most precarious, the DSB proposes to levy the remaining cost recovery fees on Regulated ISIN Creators.

This model places a potentially significant financial obligation on Regulated ISIN Creators. The corollary of this obligation are several benefits, including (a) potentially paying no ISIN creation fees if the FIX Access fees cover the entire cost of the DSB, and (b) a guaranteed discount in the implied per-ISIN fee compared to non-regulated ISIN Creators.

In this specific example:

- The total annual cost being funded by this group = **€1m**
- Each Regulated ISIN Creator submits to the DSB their estimate of the number of entries they expect to report under their RTS23 obligations over the year.
- Assume the sum total of all these estimates is 3m
- An organization that provides an estimate of 60K as the number of instruments they expect to report under their RTS23 obligations over the year would pay = €1m x (60K / 3m) = **€20K** for the year
- If the organization exceeds its estimate during the year, it will be able to adjust up its estimates intra-year, with the uplift fee being proportionate to the uplifted 'market share' figure plus an additional weighting of 10%-20% applied to the delta.
 - An increase from 60K to 90K of reportable instruments will result in an unweighted uplift of €1m x (30K / 3m) = **€10K** for the year
 - Applying an additional weighting of 15% (the mid range of the proposed 10%-20% weighting) results in an actual uplift of **€11.5K = €10K x 115%**
 - Therefore the total fee for the organization for the year will be **€31.5K = €20K + €11.5K**
 - This **€11.5K** will result in a surplus that will be redistributed to users, the mechanism for the rebalancing to be the subject of a future consultation paper.
- If the organization undershoots its estimate at the end of the year, it will be offered either a refund or a credit carried over to the following year.
- The implied per-ISIN generation fee = [Remaining cost of the DSB] / [the expected number of ISINs] = €1m / 2m = **€0.50 per ISIN**

Note that the implied per-ISIN generation fee is not impacted by the weighting metric based on RTS23 submissions. The weighting metric is simply a mechanism to distribute the costs more fairly across the Regulated ISIN Creator user base.

Non-Regulated ISIN Creators

Non-Regulated ISIN Creators have no obligation to create any ISINs. They follow a simple Pay-as-You-Go model based on a per-ISIN fee.

- The un-weighted per ISIN fee = [Remaining cost of the DSB] / [the expected number of ISINs] = €1m / 2m = **€0.50 per ISIN. Applying a weighting of 100% takes the figure to €1.00 per ISIN.**

- An organization that creates 10K ISINs will expect to pay = €1.00 x 10K = **€10K for the year**
- Assuming 200K ISINs are created via non-regulated ISIN Creators, the total fees paid = €1.00 x 200K = **€200K for the year**.

Given the assumptions of this model, this €200K from the Non-Regulated ISIN Creators would create a surplus for the DSB. The methodology to rebalance the revenues – i.e., redistribute these funds back to the user base - will be the subject of a future consultation paper.

6.4 Worked Example – Excess Fees from FIX Connections

The Technology and Operations Consultation Paper proposes to build the DSB with an initial capacity to support 200 FIX connections. This worked example illustrates the expected fees should the full capacity be utilised.

FIX Access

- The DSB sets the fees for FIX Access at:
 - **€80K for single-asset**
 - **€120K for multi-asset**
- 200 organizations choose to subscribe to FIX Connectivity
- Assume a 50-50 split between single asset and multi-asset implies
 - Number of single-asset FIX Access organizations = 100
 - Number of multi-asset FIX Access organizations = 100
- Implies total revenue generated from this group = [100 x €80K] + [100 x €120K] = **€20m**

Total estimated cost of the DSB = €6m which implies a surplus of €14m. Therefore, the FIX Access fees would be reduced by 80%, so that the resulting fees become the following:

- **€24K for single-asset x 100 users**
- **€36K for multi-asset x 100 users**

Regulated ISIN Creators

- If FIX Access payments provide the entire cost recovery, there will be no fee for creating ISINs for this group irrespective of the RTS23 submission estimates supplied by the group members. However, any ISIN Creator that is also part of the FIX Access group will still pay the FIX Access fee in the same manner as all other FIX Access users

Non-Regulated ISIN Creators

- As per the worked example in section 6.3 the DSB will generate a **€200K surplus** for the year from this group based on a **€1.00 per ISIN fee**
- This surplus will be redistributed to the DSB users. The mechanism for this redistribution will be the subject of a future consultation.

6.5 Intermediary Effect

The potential that some users of the DSB will be intermediaries representing multiple entities that might otherwise be direct users raises the question of the impact of intermediaries on the fee

model. In determining this impact, the DSB considers the principles of equitable access and pricing for all users. The approach to ensure such fairness is described below:

- For FIX Access: To ensure fairness among users with a direct connection and users connecting via an intermediary aggregator, the intermediary would pay a separate fee for each end client connected to its FIX network.
- For Regulated ISIN Creators:
 - the intermediary could opt to pay the per-ISIN fee.
 - Alternatively, to ensure fairness between users with direct connectivity and users connecting via an intermediary, the intermediary would identify all the regulated ISIN Creators connected to it so that an accurate calculation of the fee can be made based on the sum of the RTS23 submissions across all the Regulated ISIN Creators.
- For Non-regulated ISIN Creators: there is no impact on fairness for this user group because the intermediary will be obtaining ISINs for these clients on a per-ISIN basis.

7 Model Analysis

The direct responses to the questions regarding the proposed fee model were, in general, that it was complex, cumbersome and potentially unfair. However, there were several aspects that were accepted, albeit labelled in a different way. The DSB's original focus was for 'FIX Access' users to bear the majority of the cost since the likelihood was that any user connecting to the system over FIX would be a significant user of OTC Derivative ISINs and their associated reference data. The combination of this with 'ISIN Creators' appears to have created confusion, especially when interlaced with using ToTV as a proxy for creation and the separation of mandated ISIN users versus those using them voluntarily.

Most respondents wanted the costs to be spread amongst a wider market constituency and for it to bear closer relation to retrieval and timeliness of the data. Other factors were also suggested, such as categorizing the users, understanding the purpose of their ISIN use and their method of connectivity. Although some of these have merit, the DSB considers their inclusion might introduce additional unwanted complexity.

Simplification can be achieved but the DSB is conscious, as were some of the respondents, that data aggregators or 'intermediaries' did require special treatment because of their effect on the population and cost distribution of those connecting directly to the DSB.

8 New Proposed Model

8.1 Description

The key aspects of the proposed model are:

- On registration, users will be required to state whether they want to be Power Users, Standard Users or simply Registered Users
- Power Users and Standard Users will be required to pay an annual up-front subscription fee
- Registered Users will not be required to pay a fee

8.2 Payment Structure

The key aspects of the payment structure for this fee model are:

Power Users

- There will be two tiers of Power Users based on whether an organization subscribes to ISINs related to a single asset class or multiple asset classes
- The ratio of fees between a single-asset user to a multiple-asset user will be 2:3 respectively
- Power Users, with their access to more timely data, are expected to be heavier users of the DSB than Standard Users and as such, a greater portion of the fees will fall to this group. The ratio used in this proposed model is 3:1
- The fee will be payable annually in advance

Standard Users

- There will be two tiers of Standard Users based on whether an organization retrieves ISINs related to a single asset class or multiple asset classes
- The ratio of fees between a single-asset user to a multiple-asset user will be 2:3 respectively
- The fee will be payable annually in advance

8.3 Worked Example – Base Case

The projected fees in this scenario are:

Power Users

- 50 users in total: 40 multi-asset class and 10 single-asset class
- The proposed fees are:
 - **€99K for multi-asset**
 - **€66K for single-asset**
- Total revenue generated from this group = $[40 \times €99K] + [10 \times €66K] = \mathbf{€4.63m}$

Standard Users

- 50 users in total: 25 multi-asset class and 25 single-asset class
- The proposed fees are:
 - **€33K for multi-asset**
 - **€22K for single-asset**
- Total revenue generated from this group = $[25 \times €33K] + [25 \times €22K] = \mathbf{€1.37m}$

Total revenue of the DSB equals its costs (using the €6m from the Cost Basis section).

8.4 Worked Example – Increased User Base

The projected fees in this scenario are:

Power Users

- 100 users in total: 80 multi-asset class and 20 single-asset class
- The proposed fees are:
 - **€49K for multi-asset**
 - **€33K for single-asset**
- Total revenue generated from this group = $[80 \times €49K] + [20 \times €33K] = \mathbf{€4.63m}$

Standard Users

- 100 users in total: 50 multi-asset class and 50 single-asset class
- The proposed fees are:
 - **€16K for multi-asset**

- **€11K for single-asset**
- Total revenue generated from this group = $[50 \times €16K] + [50 \times €11K] = \mathbf{€1.37m}$

Total revenue of the DSB equals its costs (using the €6m from the Cost Basis section).

8.4.1 Worked Example – Further Additional Users

If an additional **20** Power Users join the DSB evenly in both the single-asset and multi-asset categories in this scenario, this will result in the following additional revenue:

- $20 \times €49K = \mathbf{€980K}$
- This surplus will be redistributed to the DSB Power and Standard Users. The mechanism for this redistribution will be the subject of a future consultation.

8.5 Intermediary Effect

Intermediaries that act as data aggregators or represent multiple entities will have an effect on the costs borne by direct Power and Standard Users of the DSB.

Any intermediary will be required to identify and categorize each of their users. Each user will sign the DSB user agreement and pay their appropriate fee. This approach means there is no cost advantage to connecting to the DSB via an intermediary or directly.