



ANNA-DSB

Fee Model Consultation Paper

9 January 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 to assign global, permanent and timely ISINs to OTC derivatives.
- This document is part of a broader public consultation approach the DSB is using to provide transparency and obtain industry input to decisions regarding key aspects of the service, including product definitions and technology and operations standards.
- This consultation paper 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 proposed fee model and outlines the fee models that were considered during the process of development.
- The timelines are compressed for the DSB to be fully operational to meet the regulatory deadline. Thus, the consultation periods are also squeezed. The DSB implementation schedule includes the following key milestones:
 - Demo – available now; currently being rolled out to the industry;
 - UAT – End of Q1 2017;
 - Production – End of Q3 2017.
- This Fee Model consultation will close on 6 February 2017. Please send responses to the DSB Secretariat at DSB-FM-Secretariat@etradingsoftware.com.

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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 regulated 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 internalisers (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 describes the DSB’s proposal for a fee model for recovering the cost of the numbering agency services of the DSB. This model is based on predicative estimates of costs as well as volume and user distribution.

The consultation also outlines the fee models that were considered in order to arrive at the proposed fee model, which aims 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:

- 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

Questions to the industry are included in the relevant sections. In addition to responses to these questions, more general comments on the fee model are invited.

The DSB also welcomes feedback on the usability of this document. Specifically, we would like to know if the presentation has been sufficiently clear and understandable, as well as whether the level

of detail has been adequate to support respondents' considerations and responses. If there are additional details that would be helpful, we would be interested to receive that information from respondents to this consultation.

Responses should be sent to the secretariat at DSB-FM-Secretariat@etradingsoftware.com. The response period closes at end-of-day on 6 February 2017.

Responses will be published on the consultation page of the ANNA website, unless a respondent requests anonymity.

Upon closure of the comment period, the responses will be studied by the DSB management and the ANNA board of directors. A final document is expected to be published by the end of February 2017. Subsequently, additional questions and clarifications will be addressed in FAQ documentation.

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/>).

Q1: Do you agree that there should be no restriction regarding the organization types able to consume the ISINs and their associated reference data at no charge? If not, please explain your reasoning and provide evidence where possible.

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

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 ISIN creation.

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.

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 emphasised 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 internalisers, 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.

Q2: There is a marginal cost associated with registration and onboarding a new organization for access to the DSB. Do you agree that organizations registering with the DSB should not be charged any fee for data access or onboarding? If not, please suggest an alternative approach that is consistent with the principle of 'reasonable cost' access to ISINs for OTC derivatives.

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 internalisers 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.

Q3: Do you agree with the DSB estimate of 40 for the number of organizations that will want to create ISINs? If not, please explain an alternative estimate and provide evidence to support your answer.

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.

Q4: Do you agree with the DSB estimate of 50 for the number of organizations that will want to connect to the service via the FIX network? If not, please provide evidence that supports a different estimate.

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).

Q5: Do you agree with using 2m as a predictive estimate for the number of ISINs the DSB expects to create in a 12-month period? If not, please explain why and provide any necessary evidence or examples to support your response.

4.2.5 Additional Volume Metric – Number of instruments Tradeable on a Trading Venue or with an underlying Tradeable on a Trading Venue

The specific European regulatory requirement for ISINs for trading venues and systematic internalisers 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 internaliser.

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 internaliser, 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.

Q6: Given the potential disincentive to be the first requestor to create a given ISIN, do you agree that using the ISIN reporting obligation is a sensible basis for allocating costs (and therefore fees) amongst the regulated entities that have an ISIN reporting obligation? If not, please explain why and suggest an alternative approach and evidence why that is more appropriate.

Q7: Do you foresee any challenges with using the number of OTC derivative instruments reported under RTS23 as the mechanism to collect the relevant data to allow the calculation to take place? If not, please explain why and suggest an alternative approach and evidence why that is more appropriate.

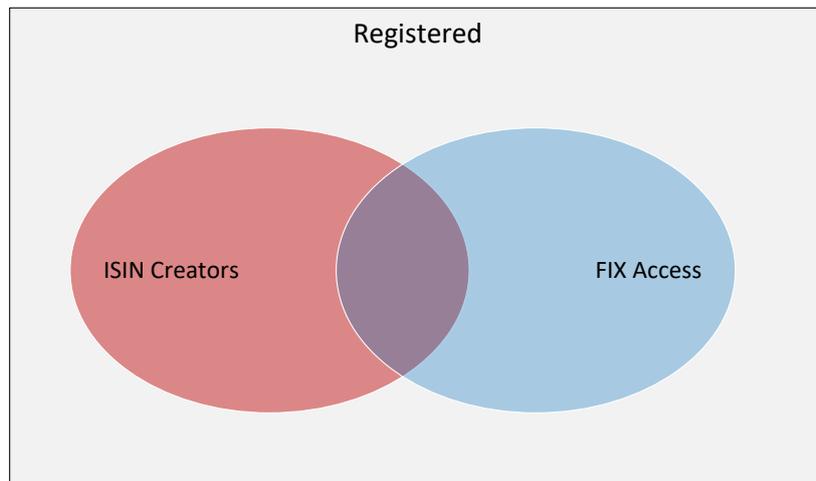
4.2.6 Estimates Summary

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.

Q8: Is there another group of organizations that will interact with the DSB and should be taken into account when constructing the fee model? If so, please describe them, how their usage may differ from that already described, and what their potential impact might be on the service.

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 Proposed Model

6.1 Description

The proposed model is a combination of those considered in section 7. 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 organisation 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 organisations 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 organisations 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 organisations 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 organisation 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 organisation 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 organisations 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.

Q9: Having read about the proposed fee model in the above section and the various fee models considered in Section 7 below, do you agree that the proposed model offers a fair and equitable approach to fees for the numbering agency function of the DSB? If not, please explain your reasons. If possible, suggest improvements on the proposed model.

Q10: Do you think there may be practical difficulties in executing the proposed model? If so, please explain and, if possible, suggest alternative solutions to these challenges.

7 Fee Models Considered

While this paper details a proposed fee model which incorporates features from various fee models described below, these other fee models remain under consideration until a decision is made on the fee model features and structure.

The listing for each of the fee model includes the following sub-sections:

- Description – highlights the key aspects of the model regarding which groups are charged and which are not
- Worked Example – using the numbers proposed in the Cost Basis section, demonstrates examples of the possible fees charged to users of the DSB under the given model
- Payment Structure – proposes when the payments to the DSB will be made and any incentives the DSB is currently considering for the model in question
- Intermediary Effect – examines the potential impact on the fee model on vendors that effectively aggregate ISIN Creator firms under a vendor's single user account with the DSB. These intermediaries can take various forms & roles:
 - Market data vendors may add proprietary, value-add data points to the ISIN dataset, or they may serve as agents of their clients in ISIN creation. Assuming the vendor's agency role is transparent to the DSB and that the ISIN-creation fee is handled between the DSB and the end user, there is no material effect on the fee model.
 - With other categories of intermediaries, such as legal firms that serve as designated agents for ISIN creations or software vendors that may offer automated DSB interface for ISIN creation, the same principle holds. The DSB must effect a financial relationship with the end user that reflects the service level the end user is employing.
 - Large financial institutions may appoint a single entity to act as the interface and pathway for the whole institution to create and/or consume the ISIN dataset. This consolidation may effect some of the fee models under consideration.
- Pros & Cons – positives and negatives of each fee model under consideration

7.1 Fee Model: Per-ISIN Creation

7.1.1 Description

Key aspects of this fee model are the following:

- Organizations pay on a per ISIN-created basis.
- Organizations that only consume ISINs and associated data, regardless of whether this is via the website, file download or the FIX network, are not charged.

7.1.2 Worked Example

Using the numbers stated in the Cost Basis section:

- Per ISIN charge = [Total cost of the DSB] / [Number of ISINs]
- Per ISIN charge example = €6,000,000 / 2,000,000 = **€3.00**

Note that a halving or doubling in the number of ISINs will double or halve the per-ISIN fee respectively.

7.1.3 Payment Structure

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

- ISIN Creators are requested to submit their estimate of the ISINs they expect to create in the upcoming year.
- The DSB will calculate the standard fee per ISIN based on the worked example equation above – using the total number of expected ISINs from the ISIN Creators.
- ISIN Creators will pay based on their estimate in advance for the year.
- If an ISIN Creator exceeds their estimate they will be able to uplift their estimate intra-year, subject to an additional weighting of 10% - 20%, in order to provide fairness to those organisations who estimated more accurately at the start of the year.
- If an ISIN Creator undershoots their estimate at the end of the year, they will receive a credit or a refund at the end of the year.

7.1.4 Intermediary Effect

The expected impact on the Per ISIN Creation model by an intermediary vendor is:

- No impact on the immediate revenue stream – intermediaries would pay for each ISIN they generate. The number of ISINs created would be unaffected by the presence of intermediaries and therefore the revenue would remain the same.

7.1.5 Pros & Cons

Pros	Cons
Simple fee model easily understood and transparent to the industry	Rewards free-riding – waiting for others to create the ISIN
All users creating an ISIN are charged the same amount	

7.2 Fee Model: Fixed Fee for ISIN Creators

7.2.1 Description

Key aspects of this model are the following:

- All organizations in the ISIN Creators group pay the same annual fee, including Non-Regulated ISIN Creators and ISIN Creators with low volume ISIN creation needs.
- This fee will be calculated to cover all the costs of the DSB.
- Organizations not part of this group do not pay anything regardless of their use of the remaining services provided by the DSB.

7.2.2 Worked Example

Using the numbers stated in the Cost Basis section:

- Annual fee paid by each organization in this group = [Total cost of the DSB] / [Number of ISIN Creators]
- Annual fee example €6,000,000 / 40 = **€150,000**

Note that a halving or doubling in the number of organizations in the ISIN Creators group will double or halve the implied annual fee.

7.2.3 Payment Structure

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

- ISIN Creators will pay, based on the worked example above, in advance for the year

7.2.4 Intermediary Effect

The expected impact on the Fixed Fee model by an intermediary vendor is:

- Reduces the population of the ISIN Creators and therefore increases the annual fee for all the remaining members. E.g., five trading venues contract with vendor A for the ISIN data and some added-value services. Vendor A joins the DSB as an ISIN Creator, thereby reducing the total population (and the denominator for the fee calculation) by 4. The consequence is that other ISIN Creators are now each paying a greater share of the total cost because of the reduction in population. The magnitude of the impact of this change is determined by what proportion of the total population the '4' represents

7.2.5 Pros & Cons

Pros	Cons
Simple fee model easily understood and transparent to the industry	Some reward for free-riding – an organization might choose to not join the 'ISIN Creator' group and simply wait for others to generate the ISIN
No bias or favourable treatment of organizations possible – all generating organizations pay the same fee	Organizations generating 1m ISINs pay the same fee as an organization generating 10 ISINs
	Intermediary effect impacts the distribution of fees to the detriment of other affected ISIN Creators

7.3 Fee Model: Banded Fees for ISIN Creators

7.3.1 Description

Key aspects of this model are:

- Organizations in the ISIN Creators group are separated into bands based on the number of ISINs they expect to create on an annual basis
- A suggested band range is shown below bearing in mind the impact on new entrants to the market and the estimation of new ISINs (2m) articulated in the cost basis section:
 - Band 1: 0 – 5,000
 - Band 2: 5,001 – 50,000
 - Band 3: 50,001 – 250,000
 - Band 4: 250,001 +
- The costs of the DSB could be allocated across these bands using the following ratios:
 - Band 1: 0%
 - Band 2: 25%

- Band 3: 35%
- Band 4: 40%
- Organizations not part of the ISIN Creator group do not pay any fees

7.3.2 Worked Example

Using the numbers stated in the Cost Basis section:

- The total annual fee paid by each band = [Band Ratio] x [Total cost of the DSB]
- The total annual fees paid by each band would be:
 - Band 1: €0
 - Band 2: **€1.5m**
 - Band 3: **€2.1m**
 - Band 4: **€2.4m**
- The annual fee paid by an individual organization will depend on the population of their band. E.g. If Band 2 has 20 organizations, they will pay **€75K** each

For equivalence, if we assume that the 20 organizations each generate 37,500 ISINs then for one of those organizations, the per ISIN charge = €75,000 / 37,500 = **€2.00 per ISIN**

7.3.3 Payment Structure

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

- ISIN Creators will submit which band they expect to occupy
- ISIN Creators will pay, based on the worked example above, in advance for the year
- ISIN Creators joining during the financial year will pay the full amount for their band
- If an organization exceeds their band upper limit, they will be charged on a per ISIN basis – the fee for which will be set by: [Band Annual Fee] / ([Number of ISIN Creators in new band] * [Minimum number of ISINs])

7.3.4 Intermediary Effect

The expected impact on the Banded Fees model by an intermediary vendor is:

- Reduces the population of ISIN Creators thereby increasing the fees for the remaining users in the relevant band.

7.3.5 Pros & Cons

Pros	Cons
Relatively simple fee model	The model described can result in significantly different implied per-ISIN fees across different bands which may result in unfair treatment of some users compared to others depending on which band they fall into.
Number of ISINs being generated by an organization sets the fee amount	Intermediary effect poses risks to the revenue stream, and thus to pricing for other users
Low barriers to entry for new or small organizations	Can induce behaviour change when an organization approaches the boundary from one band to another

7.4 Fee Model: Market-Share Proxy for ISIN Creators

7.4.1 Description

The key aspect of this model is that it calculates fees for Regulated ISIN Creators -- trading venues and SIs -- according to the size of their ISIN generation obligations in proportion to all other Regulated ISIN Creators.

- This metric enables the DSB to distribute the cost of generating ISINs across all the organizations that are required to generate them as part of their MiFID II reporting obligations.
- The fee levied on a particular organization will be determined by its share of the total of submitted estimates from SIN Creators for the number of ISINs to be reported under RTS23 for the year ahead.
- Fees will be calculated annually in advance.

7.4.2 Worked Example

Using the numbers stated in the Cost Basis section:

- The total annual fee paid by each = [Estimated Proportion of total ToTV & uToTV] x [Total cost of the DSB]
- Assume that an ISIN Creator estimated ToTV & uToTV is 60K instruments
- Assume the sum of the submissions of all ISIN Creators is 3m
- ISIN Creator pays = $[60,000 / 3m] \times \text{€}6m = \text{€}120K \text{ per annum}$

7.4.3 Payment Structure

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

- ISIN Creators are requested to submit their estimate of their ToTV & uToTV.
- The DSB will calculate the fee for each ISIN Creator based on their proportion of the aggregated estimates of all ISIN Creators.
- ISIN Creators pay in advance 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%.
 - An increase from 60K to 90K of reportable instruments will result in an unweighted uplift of $\text{€}6m \times (30K / 3m) = \text{€}60K$ for the year
 - Applying the additional weighting of say 15% results in an actual uplift of **€69K = €60K x 115%**
 - Therefore the total fee for the organisation for the year will be **€189K = €120K + €69K**
 - This **€69K** will result in a surplus that will be redistributed to users. The mechanism for the redistribution is the subject of a future consultation paper.
- If the organisation 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.

7.4.4 Intermediary Effect

There is no expected impact on the fees for the ToTV & uTOTV model by an intermediary vendor, as fees are not based on actual generation or connectivity but rather on a proxy from regulatory data.

However, the DSB would have to obtain identification of the vendor clients in order to obtain ToTV and uToTV estimates.

7.4.5 Pros & Cons

Pros	Cons
Relatively simple fee model	Fee model based on EU requirements for ISINs in MiFID II and therefore difficult to extend if ISINs are used beyond the EU or for non-regulatory use
No effect of intermediaries on revenue stream	Network connectivity costs are funded by all ToTV and uToTV users which may not be a fair distribution of cost allocation across the DSB user base
No boundaries or inducements to affect user behaviour	

7.5 Fee Model: Fixed Fee for FIX Access

7.5.1 Description

Key aspects of this model are:

- All organizations in the FIX Access group pay a fixed fee that covers the full cost of the DSB service. This is regardless of whether they are ISIN Creators or not.
- The fees will have the following two tiers:
 - Lower fee for a single asset data
 - Higher fee for multiple asset data
- Organizations not part of this group do not pay anything. This includes those organizations that are only ISIN Creators

7.5.2 Worked Example

- Assume 50 organisations that wish to connect to the DSB
- Assume a 50-50 split between those FIX Access entities wanting a single asset class versus those that want more than one
- Proposed fees to cover the €6m cost of the DSB:
 - Single Asset = **€96K per annum** x 25 = €2,400K
 - Multi-Asset = **€144K per annum** x 25 = €3,600K

7.5.3 Payment Structure

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

- The DSB will set the fees due from FIX Access organizations at a flat level for all users such that the sum of the fee paid by all users in advance covers the costs of the DSB
- FIX Access organizations will pay annually in advance
- Additional FIX connections intra-year will result in a surplus that will be redistributed to users. The mechanism for the redistribution is the subject of a future consultation paper.

7.5.4 Intermediary Effect

The expected impact on the Fixed Fee for FIX Access model by an intermediary vendor is:

- Matches the effect on the Fixed Fee for ISIN Creators with just a different user base – i.e., the possible reduction in organizations in this group increases the per user fees. The magnitude of the impact is determined by what proportion of the total population connect via an intermediary.

7.5.5 Pros & Cons

Pros	Cons
Simple fee model easily understood and transparent to the industry	There is no guarantee that revenue from FIX Access organisations will cover the cost of the DSB, particularly if ISIN Creators decide to use the DSB web-site instead of FIX connections.
No bias or favourable treatment of organizations possible – all network organizations pay the same fee	Organizations not creating ISINs but consuming and connected over the network pay the same as those who are both FIX Access and ISIN Creators
No free-riding	Intermediary effect poses risks to the revenue stream
	Organizations creating and/or consuming larger amounts of ISINs and their data pay the same as those with a much lower activity base

8 Fee Model Summary Table

The below is a summary of the potential fees considered in section 7 above.

Model Name	Example Fees	Intermediary Effect
Per ISIN Creation	€3.00 per ISIN (assuming 2m created p.a.) €6.00 per ISIN (assuming 1m created p.a.)	No effect
Fixed Fee for ISIN Creators	€150K p.a. (assuming 40 ISIN Creators)	Potential increase in costs for remaining direct users
Banded Fees for ISIN Creators	Band 2 allocated 25% of total costs with a population of 20 = €75K p.a.	Potential increase in costs for remaining direct users
Market-share Proxy for ISIN Creators	Organization listing 60K ISINs = €120K	No effect
Fixed Fee for FIX Access	Single-Asset user = €96K p.a. Multi-Asset = €144K p.a. assuming 50 FIX connection	Potential increase in costs for remaining direct users

Q11: What other fee models should the DSB consider as part of its deliberations? Please provide an explanation in the form of the examples provided in this paper and evidence the impact on users where possible.

Q12: What additional effects might the presence of intermediary vendors have on the fee model of the DSB? Please provide examples and evidence where possible.

9 Questions Summary

Q1: Do you agree that there should be no restriction regarding the organization types able to consume the ISINs and their associated reference data at no charge? If not, please explain your reasoning and provide evidence where possible.

Q2: There is a marginal cost associated with registration and onboarding a new organization for access to the DSB. Do you agree that organizations registering with the DSB should not be charged any fee for data access or onboarding? If not, please suggest an alternative approach that is consistent with the principle of 'reasonable cost' access to ISINs for OTC derivatives.

Q3: Do you agree with the DSB estimate of 40 for the number of organizations that will want to create ISINs? If not, please explain an alternative estimate and provide evidence to support your answer.

Q4: Do you agree with the DSB estimate of 50 for the number of organizations that will want to connect to the service via the FIX network? If not, please provide evidence that supports a different estimate.

Q5: Do you agree with using 2m as a predictive estimate for the number of ISINs the DSB expects to create in a 12-month period? If not, please explain why and provide any necessary evidence or examples to support your response.

Q6: Given the potential disincentive to be the first requestor to create a given ISIN, do you agree that using the ISIN reporting obligation is a sensible basis for allocating costs (and therefore fees) amongst the regulated entities that have an ISIN reporting obligation? If not, please explain why and suggest an alternative approach and evidence why that is more appropriate.

Q7: Do you foresee any challenges with using the number of OTC derivative instruments reported under RTS23 as the mechanism to collect the relevant data to allow the calculation to take place? If not, please explain why and suggest an alternative approach and evidence why that is more appropriate.

Q8: Is there another group of organizations that will interact with the DSB and should be taken into account when constructing the fee model? If so, please describe them and what their potential impact might be on the service.

Q9: Having read about the proposed fee model in the above section and the various fee models considered in Section 7, do you agree that the proposed model offers a fair and equitable approach to fees for the numbering agency function of the DSB? If not, please explain your reasons and, if possible, suggest improvements on the proposed model.

Q10: Do you think the proposed model is practical and executable? If not, please provide your reasons and, if possible, potential solutions to the challenges.

Q11: What other fee models should the DSB consider as part of its deliberations? Please provide an explanation in the form of the examples provided in this paper and evidence of the impact on users where possible.

Q12: What additional effects might the presence of intermediary vendors have on the fee model of the DSB? Please provide examples and evidence where possible.