Derivatives Service Bureau

Industry Views on Proposed Amendments to Functionality, Data Submission Process, Service Levels, Service Availability & Cybersecurity in 2020

Final Report

19 August 2019

Contents

1 Introduction

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

The 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 ANNA as the Registration Authority for ISINs under contract with the International Organization for Standardization (ISO) through strict rules over business and technical operations, including limiting user fees to cost recovery.

The European Union's MiFID II/ MiFIR regulations mandate the use of ISINs to identify certain OTC derivatives, starting 3rd 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)[1]. ANNA, after discussions with the industry and ISO, set up the Derivatives Service Bureau (DSB) to assign global, permanent and timely ISINs to OTC derivatives.

The current level of ISIN, CFI and FISN generated by the DSB is designed to enable users to satisfy obligations under MiFID II and MiFIR, with the capability of an identification hierarchy to be introduced as required by industry, such as Unique Product Identifier (UPI)[2]. Likewise, the CFI codes provided assist with EMIR Level III reporting to offering a single, consistently generated value that can be absorbed by all users of DSB data.

Over 70% of institutions using the service access the DSB free of cost as Registered Users, 18% Power Users (organizations – including affiliates - with programmatic connectivity), 3% Infrequent Users – including affiliates (GUI connectivity) and 8% Standard Users – including affiliates (GUI connectivity). Amongst fee paying users; banks and credit institutions contribute towards 52% of DSB fees, trading venues contribute 35% with the balance comprised of the buy-side, data vendors and others.

The purpose of this document is to present a summary of industry feedback to the second consultation paper of 2019, related to the Proposed Amendments to Functionality, Data Submission Process, Service Levels, Service Availability & Cybersecurity for the 2020 service provision. The report also presents a final snapshot of changes to be taken forward in 2020 based on industry feedback from both trade associations and individual DSB users. This final report should be read in conjunction with both consultation papers and associated industry responses which are available here https://www.anna-dsb.com/2020-user-fee-and-user-agreement-consultations/.

[1] As defined in MiFIR

[2] Harmonisation of the Unique Product Identifier-Technical Guidance https://www.bis.org/cpmi/publ/d169.htm

2 Executive Summary

The DSB serves two distinct categories of users for each of OTC record creation and consumption. Consumers access the DSB for end of day data and/ or search the DSB for all or part of the OTC record which contains the OTC ISIN, the CFI, the FISN and the full set of associated user input and derived attributes.

OTC ISIN creation activity is driven by the sell-side (in terms of the number of OTC ISINs created), with a broader range of data consumers, who comprise over 70% of all firms accessing the DSB's services.

As the data in Consultation Paper 1 (CP1) shows[3], the DSB facilitates access for a broad spectrum of users, including credit institutions, small brokerages, private wealth management firms, boutique asset managers, large, multi-segment and/or multi-market trading venues, derivatives houses from across the buy and sell-sides and universal-bank style sell-side institutions with multiple business segments within a single group holding structure.

The DSB completed two rounds of industry consultation in 2019 – the first consultation paper (CP1) was published on 9th May 2019, and the second consultation paper (CP2) was published on 5th July 2019. The DSB sought industry's views on a range of possible enhancements that could be made in 2020 including functionality, data submission aspects, service levels, service availability and cybersecurity, user fees and possible set up of a group wide user agreement forum. All responses from industry are published on the DSB website[4].

The first consultation sought to obtain industry views on a broad range of topics arising from user feedback during the prior 12-month period; whilst the second consultation paper summarized industry responses and presented proposals based on an understanding of the areas that industry (on an aggregate basis) wanted the DSB to evaluate further within the communal cost recovery ring-fence.

Requests for feedback were sent to the DSB's user community, comprising more than 3,100 individuals across 420 organizations. In response to the first consultation paper, the DSB received 15 responses representing a total of 19 institutions, with one third of the responses from trade associations - double that in the prior year. The second consultation paper received 9 responses representing 12 institutions, with 4 responses from trade associations.

The DSB received responses from four trade associations alongside institutional responses from banks, data vendors and trading venues. 17% of whom sought anonymity when submitting responses to the consultation paper. In the majority of cases, such members belonged to trade associations who also provided their own, sometimes differing, feedback. The DSB has honoured these requests for anonymity in line with standard practice while noting the type of institution at the header of each such response.

[3] https://www.anna-dsb.com/2020-user-fee-and-user-agreement-consultations/#DSB-2020-First-Consultation. Please refer to pages 6 and 7

[4] https://www.anna-dsb.com/2020-user-fee-and-user-agreement-consultations/

Responses to CP2 show that industry has an appetite for the DSB to undertake further analysis on functionality that may be helpful in delivering improved data quality, standardization and automation as well as reduced cybersecurity risk.

This final consultation paper mirrors the structure of the prior papers, with sections focusing on responses received on functionality, data submission enhancements, service levels, cyber-security, user fees and the group wide user agreement forum respectively. Each section lists the questions that were asked, the responses and the DSB's next steps. Further information is available in sections 5 and 6.

All proposals assume the DSB will follow its standard governance process for implementation. i.e.

- Where matters pertain to DSB product templates and associated matters, the DSB will provide appropriate analysis to the Product Committee (PC) to determine prioritization and progress accordingly;
- On matters involving DSB infrastructure, workflow and associated matters, the DSB will provide appropriate analysis to the Technology Advisory Committee (TAC) to obtain their views to ensure that the DSB remains aligned with market feedback as it progresses these items.

The DSB remains focused on delivery of the OTC ISIN core service for 2020 to be aligned with the feedback received in this annual consultation. The OTC ISIN service provision for 2020 will not be impacted by the Financial Stability Board (FSB) designation of the DSB[5] as the sole issuer of UPI codes and operator of the UPI reference data library.

Throughout 2019, following the feedback from the 2018 industry consultation, both the PC and TAC have been reviewing integration of the UPI with the OTC ISIN, the PC reviewing the production definition alignment and a TAC sub-committee examining workflows to support the creation, search and retrieval of data related to UPIs. This effort is related to the industry request for establishment of a future identification framework and will feed into the UPI implementation analysis and planning. Going forward, the DSB will continue to engage with FSB and a range of authorities to progress UPI implementation in parallel to providing the OTC ISIN core service. Updates on UPI implementation progress will be provided as and when they are available.

[5] https://www.fsb.org/2019/05/fsb-designates-dsb-as-unique-product-identifier-upi-service-provider/

3 Consultation Timeline

Milestone	Date
User fees survey	Mon 4 - Fri 15 Mar 2019
Formation and meeting of the group-wide agreement forum	Mar-Apr 2019
Publication of 1st DSB 2020 consultation document (CP1)	Thu 9 May 2019
1st DSB 2020 consultation webinar - 2pm UK time	Thu 16 May 2019
Industry feedback re CP1	Thu 9 May - Wed 5 Jun 2019
Publication of 2nd DSB 2020 consultation document (CP2)	Fri 5 Jul 2019
2nd DSB 2020 consultation webinar @ 2pm UK time	Thu 11 Jul 2019
Industry feedback re CP2	Fri 5 - Mon 29 Jul 2019
DSB 2020 final consultation report published	Mon 19 Aug 2019
DSB 2020 draft user agreement (UA) publication	Mon 19 Aug 2019
Deadline for industry feedback on proposed UA changes	Mon 2 Sep 2019
DSB 2020 final user agreement publication	Fri 20 Sep 2019
DSB 2020 final user agreement webinar @ 2pm UK time	Fri 20 Sep 2019

4 Principles

Below is a table with a brief statement on the four key principles relied on by the DSB in development of the fee model.

Principle	Brief Description
Cost Recovery	The DSB will provide all numbering agency services on a cost recovery basis. 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. Furthermore, the funding model needs to be sustainable, which includes the need to be efficient and reliable.
Unrestricted Data	The DSB intends that no data associated with the definition of an ISIN will have licensing restrictions dictating usage or distribution. 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.
Open Access	Access to the DSB archive for consumption of OTC derivative ISINs and associated reference data will be available to all organizations and users.
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

5 Response Highlights

The first and second consultation papers sought to obtain industry feedback on a total of 25 potential changes to the service, based on user feedback received during the past 12 months. A summary view is presented below, with full details in subsequent sections.

This final report concludes that 7 proposals will not be taken further owing to limited industry support, 3 changes will be taken forward on a significantly scaled back basis (analysis only), 10 changes to be taken forward will have no incremental impact on the DSB's cost base as they will be taken forward on a business as usual basis (BAU), subject to prioritization by the PC and the TAC, and 5 changes will incur incremental costs.

The table below provides a summary of the costs with further breakdown provided in subsequent sections. The Proposed Cost Impact figures reflect the CP2 proposed costs whereas the Final Cost Impact figures reflect the cost of those items being taken forward[6]. Feedback on aspects relating to DSB user fees and the legal agreement are set out in section 6 of this document.

CATEGORY	DROPPED	SCALED BACK	TAKEN FOWARD	TOTAL	PROPOSED COST IMPACT	FINAL COST IMPACT
Functionality		2	4 (3 BAU)	**6**	• 2020: € 30K • 2021-2024: € 365K pa • 2025-: € 200K pa	• 2020: € 30K • 2021-2024: € 25K pa • 2025-: None
Data Submission Enhancements	2	1	6 (5 BAU)	**9**	• 2020: € 60K • 2021-2024: € 155K pa • 2025-: € 90K pa	• 2020: € 60K • 2021-2024: € 15K pa • 2025-: None
Service Levels	3		1 (BAU)	**4**	• 2020: None • 2021-2024: € 124K pa • 2025-: € 60K pa	• 2020: None • 2021-2024: None • 2025-: None
Service Availability			1 (BAU)	**1**	• 2020: None	• 2020: None
Cyber-Security[7]	2		3	**5**	• 2020: € 470K • 2021-2024: € 385K pa • 2025-: € 335K pa	• 2020: € 470K • 2021-2024: € 290K pa • 2025-: € 290K pa
TOTAL[8]	**7**	**3**	**15 (10 BAU)**	**25**	• **2020: € 560K** • **2021-2024: €1,029K pa** • **2025-: € 685K pa**	• **2020: € 560K** • **2021-2024: € 330K pa** • **2025-: € 290K pa**

[6] The 2019 DSB budgeted cost base is €9.14m, with details in section 7.1

[7] Please see section 5.5.5 for details of a DSB checkpoint that may impact cyber-security costs in the years 2021 onwards

[8] The figures shown in the 2020-24 period include capitalisation of analysis costs. All capex costs are amortised over 4 years, in the period 2021-2024. This approach means that in 2020, industry users do not pay the cost of any capitalised analysis. In 2020, such cost is funded by the DSB's financial sustainability margin, with 25% of the cost passed to user fees in each of the years 2021-24. In the event that industry does not wish to progress with implementation of any of the systems related to the analysis, then accountancy standards require the associated capex to be written off in the following year.

5.1 FUNCTIONALITY

The DSB consulted on 6 proposed enhancements to the service functionality, based on user feedback received in the past 12 months. The responses are summarised below, together with the DSB's analysis of the responses and proposed next steps.

FUNCTIONALITY		NEXT STEPS	PROPOSED COST IMPACT	FINAL COST IMPACT
5.1.1	CFI Codes for EMIR	Scaled back – taken forward for analysis only	• 2020: None • 2021-2024: € 260K pa • 2025-: € 160K pa	• 2020: None • 2021-2024: € 10k pa • 2025-: None
5.1.2	Mapping to MiFID II Taxonomy	Taken forward	• 2020: € 30K pa	• 2020: € 30K
5.1.3	Default values in ISIN Templates	Taken forward (BAU)	• 2020-: None	• 2020-: None
5.1.4	Underlying Identifiers	Taken forward (BAU)	• 2020-: None	• 2020-: None
5.1.5	GUI Enhancements	Scaled back – taken forward for analysis only	• 2020: None • 2021-2024: € 105K pa • 2025-: € 40K pa	• 2020: None • 2021-2024: €15K pa • 2025-: € 0K pa
5.1.6	Other Technical Enhancements	Taken forward (BAU)	• 2020-: None	• 2020-: None
TOTAL			• **2020: € 30K** • **2021-2024: € 365K pa** • **2025-: € 200K pa**	• **2020: € 30K** • **2021-2024: € 25K pa** • **2025-: € 0K pa**

5.1.1 Q1.1 – CFI CODES FOR EMIR

CP1 Description: The DSB was originally set up specifically to generate OTC ISINs to meet industry's needs for MiFID II RTS 22 / 23 transaction reporting.

Some DSB users have expanded their use of the DSB service for additional regulatory purposes such as generation of CFI codes for EMIR reporting. However, the DSB implementation to support EMIR has been ad-hoc and is not comprehensive, given the initial focus on OTC ISIN coverage.

The DSB would therefore like to understand whether industry would like the DSB to provide a comprehensive CFI generation service for all OTC derivative products in scope of EMIR so that CFI codes could be obtained from a central source, without the need to auto-generate the OTC ISIN or the OTC ISIN data record.

CP1 Question: Should the DSB investigate the provision of a service that supports the creation, search and publication of CFI codes for all products in scope of EMIR? Given the wider product scope of EMIR vs MiFID, the DSB envisions such a CFI service to be independent of the existing ISIN generation service.

CP2 Question: Given the approach and cost estimates provided by the DSB in this consultation, and bearing in mind that these costs would be shared across the DSB's user base as per the DSB's existing fee model, do you believe it is appropriate for the DSB to provide a CFI service to act as the golden source of CFI codes for all EMIR Level III products, or should such a service be left to commercial operators?

Industry Responses

The responses received to the question posed in the second consultation are set out below.

	Yes	No
	4	**5**
Trade Associations	2	2
DSB Users	2	3

Respondents who did not wish the DSB to provide a CFI service, cited the following:

- Concerns that costs are too high
- Costs and terms should be separate from OTC ISIN terms
- Golden source should be provided by commercial operators or regulators

Respondents who wanted the DSB to provide the service, listed the following as the rationale:

- Market standardization and improved data consistency
- Expanded product coverage

Analysis of Responses

All respondents provided their views with trade association opinions evenly split. Trade associations noted that the service was non-core, would ideally be provided on a stand-alone basis and had concerns about the forecast build and run costs that would be shared amongst the larger users who would not require the service.

Amongst DSB users, responses showed a desire for standardized CFI output from the buy-side and most of the sell-side, with some strongly in favour. Trading venues noted that any expanded CFI service should be offered outside the terms of the core cost recovery framework or by commercial providers, with some noting that any such service should be offered as optional with the additional costs of development funded by the institutions that wish to utilize the service.

DSB Next Steps

In light of concerns about the possibly limited scope and benefit of any such service, some views that broader CFI coverage would enhance their operational processes the DSB proposes to only undertake analysis to examine the proposed scope i.e. no implementation to occur within the cost recovery framework in 2020.

Analysis would be conducted in collaboration with both the PC and the TAC (for product and technology aspects respectively) to ensure appropriate industry participation in shaping the outcome. The analysis would also need to be mindful of changes that might result from the EMIR refit process and the evolving CFI standard.

The analysis would identify gaps in product coverage, determine materiality and provide an overview of any required workflows. Following PC and TAC sign-off, the document would be made available on the DSB website to provide industry with a harmonized view of coverage gaps.

As set out in the prior consultation paper, the analysis would require some level of additional DSB resources in light of the DSB's significant BAU work to support the existing PC and TAC deliverables alongside ongoing data quality analysis and review work. By leveraging the existing DSB PC and TAC governance frameworks, the incremental cost to perform the detailed analysis can be kept to €40k.

This effort would be treated as 2020 capital expenditure funded by the DSB's financial sustainability margin. As per the existing DSB cost recovery fee model, this cost would be amortized over 4 years starting from 2021, after which the capital expenditure element would drop off the DSB's cost base.

The DSB's proposed approach was reviewed at the TAC meeting on the 12th August 2019 and the TAC concurred with the DSB's proposal.

Decision 1: Move forward with a significantly scaled-back proposal, delivering analysis only and publication of the PC and TAC driven review to aid industry standardization.

5.1.2 Q1.2 – MAPPING TO MIFID II TAXONOMY

CP1 Description: Users have integrated with the DSB service at varying points in the trading lifecycle from pre-trade through to post-trade, regulatory only purposes.

Some DSB users have requested that the DSB maintain and publish the mapping between each DSB product template and the associated sub-asset class as specified by the ESMA MiFID II RTS-2 taxonomy.

Such a service would provide a central data source for OTC derivatives users and could be maintained on an ongoing basis as new OTC derivative templates were added to the DSB (for ISIN or CFI purposes) – for use in either machine readable and/or human readable contexts.

CP1 Question: Where users are programmatically integrated into the DSB and seek to map data across a variety of regulatory reporting related needs, should the DSB investigate the provision of (machine and human) readable mapping between DSB product definition templates and the ESMA MIFID II RTS-2 taxonomy's sub-asset classes?

CP2 Question 2(a): Do you concur with the DSB's proposal to perform the analysis for MiFID II RTS-2 Taxonomy mapping?

CP2 Question 2(b): If you answered "yes" to the question above, do you want the DSB analysis to address all products under MiFID II RTS-2 scope or just OTC derivatives in scope of the DSB?

Industry Responses

The responses received to the question posed in the second consultation are set out below.

2a)

	Yes	No
	7	**2**
Trade Associations	3	1
DSB Users	4	1

2b)

	All Products	OTC only
	4	**1**
Trade Associations	1	
DSB Users	3	1

Analysis of Responses

2a) Respondents who did not wish the DSB to publish the mapping between each DSB product template and the associated sub-asset class as specified by the ESMA MiFID II taxonomy noted that Trading Venues ['TVs'] used a variety of methods to map between ISINs and Products which are ToTV, both derivatives and other financial instruments, which on balance led firms to conclude that now is not the correct time for the development of a single non-public golden source when revisions to MiFIR and equivalence are set to introduce substantive changes

Respondents who wanted the DSB to publish the mapping between each DSB product template and the associated sub-asset class as specified by the ESMA MiFID II taxonomy noted the following:

- the analysis should determine feasibility of such a mapping
- the output of the analysis should be shared with regulators to facilitate alignment
- that costs of the analysis be distributed to users currently non-paying customers who would use such analysis

2b) Of those who wished the DSB to pursue analysis, 4 out of 5 respondents noted their preference for the analysis to encapsulate all products, not just OTC derivatives. Where additional feedback was provided, respondents noted that:

- they would wish to see the analysis extended to also include all products under RTS-1 scope, not just those in scope of RTS-2
- that the DSB analysis should only address DSB instruments at first. DSB should re-assess expanding the universe once the DSB instruments are analysed

DSB Next Steps

In light of industry's satisfaction with the proposal the DSB will undertake time-boxed analysis for a period of six months, with direct industry input via the DSB PC and TAC, for a cost of no more than €30k.

As set out in the prior consultation paper, the DSB PC sub-committee (with industry experts) will assist in determining how a mapping could be both created and maintained, with the DSB TAC determining how best to facilitate distribution and publication of mapping data, alongside existing DSB MiFID II product templates.

In conjunction with producing workflows and output format, the analysis will also determine the best approach for low-cost implementation and maintenance through the involvement of the DSB TAC.

The analysis will aim to provide industry driven consensus on the following:

- Agreement on the use case scenarios that industry believe the mapping is intended to resolve
- PC to determine whether a two-phase approach would work best in determining feasibility i.e. whether to solve for OTC derivatives first
- Identify quick wins where broad agreement exists on the DSB template to RTS-2 asset class and sub-asset class mapping
- Build consensus on all remaining DSB template mappings

- Agreement on next steps including maintenance and publication if consensus is built

Decision 2: DSB to proceed with the proposal set out in the second consultation paper.

5.1.3 Q1.3 – DEFAULT VALUES IN ISIN PRODUCT TEMPLATES

CP1 Description: Currently, most DSB product templates support default values for several attributes (e.g. Delivery Type and Price Multiplier). The provision of defaults is intended to support the user experience, with defaults approved by the DSB Product Committee to reflect the most commonly used values that match prevailing ISO standards.

CP1 Question: Do you consider that the use of default values is helpful in the creation of ISINs by the DSB?

CP2 Question 3: Do you concur with the DSB's proposal to utilize the DSB Challenge Process and existing PC secretariat resourcing to manage default value population within the product templates?

Industry Responses

The responses received to the question posed in the second consultation are set out below.

	Yes	No
	9	0
Trade Associations	4	
DSB Users	5	

Analysis of Responses

All respondents wanted the DSB to continue the proposal to utilize the DSB Challenge Process and existing PC secretariat resourcing to manage default value population within the product templates. Comments included:

- Default value analysis should continue to be performed on a case by case basis given bigger priorities as CFI and Taxonomy mapping
- The need for continued appropriate and timely external communication

DSB Next Steps

The DSB will continue to utilize the DSB Challenge Process and existing PC secretariat resourcing to manage default value population within the product templates.

Decision 3: DSB to proceed with the proposal set out in the second consultation paper and continue to address default values via the existing BAU process.

5.1.4 Q1.4 – UNDERLYING IDENTIFIERS

CP1 Description: The DSB utilizes a number of sources to support the provision of Reference Rates and Underlying Indices for OTC derivative products.

The full list of underlying indices that are supported (excluding user owned proprietary indices) are available here. The DSB currently updates its list of enumerated values as new values become available.

CP1 Question: Do you consider that the underlying identifiers made available by the DSB are sufficient for the OTC ISINs that need to be created or accessed by your institution?

CP2 Question 4: Do you concur with the DSB's proposal to utilize existing PC secretariat resources to manage requests for additional underlying data such as US equities?

Industry Responses

The responses received to the question posed in the second consultation are set out below.

	Yes	No
	9	0
Trade Associations	4	
DSB Users	5	

Analysis of Responses

All respondents wanted the DSB to continue the proposal to utilize the existing PC secretariat resources to manage requests for additional underlying data such as US equities. Comments included:

- more indices and reference rate at same existing resources / cost base are welcome
- initial insight shared a degree of satisfaction with the existing underlying data available for indices, however there is support existing PC resources to identify potential improvements in the index coverage should prioritization allows to do so

DSB Next Steps

The DSB will continue to utilize existing PC secretariat resources to manage requests for additional underlying data such as US equities, subject to PC prioritization.

Decision 4: The DSB will continue to utilize existing PC secretariat resources to manage requests for additional underlying data such as US equities, subject to PC prioritization.

5.1.5 Q1.5 – GUI ENHANCEMENTS

CP1 Description: The existing DSB GUI allows users to search and create ISINs as an alternative to Programmatic APIs. The GUI create function allows users to create one ISIN at a time and the search functionality offers a range of searching capabilities for technical users who are familiar with the Lucene programming language as available here.

Please note that this query focuses on the search aspects of the service to allow for the views of the approximately 300 firms using the DSB's GUI based search functionality.

CP1 Question: Should the DSB investigate the enhancement of its web-based GUI to allow non-technical users to search for ISINs by any attribute across any product template?

CP2 Question 5: Do you concur with the DSB's proposal to implement a minimal set of search filters targeting non-technical users?

Industry Responses

The responses received to the question posed in the second consultation are set out below.

	Yes	No
	4	**5**
Trade Associations	2	2
DSB Users	2	3

There was a mixed set of responses received. Respondents who wanted the DSB to proceed with the proposed GUI changes cited 3 primary themes:

- Yes, easy to search improvements in line with TAC recommendation are welcome
- Yes, we would support enhancements of the existing search functionalities and easy-to-use filters intended to target non-technical users
- We propose only the analysis is approved to allow a better assessment of the costs and benefits. Careful consideration needs to be given to ongoing run cost beyond the build cost

Respondents who did not want the DSB to proceed with the proposed GUI changed listed the follow 3 key themes:

- This would incur cost for users who took the time to train their staff. Occasional users should do the same
- Size of the build and run budgets are too high
- This is not a cost that should be borne by the entire user base given it is not requested by a large majority of DSB users

Analysis of Responses

Addressing the articulated concerns:

- *Occasional users should incur the same training costs as high-volume users*

The DSB believes that the low-volume users are an important constituent of the DSB user base and an appropriate level of effort should be made in order to reduce potential barriers to the use of the DSB service by such users.

- *Build and run costs are too high*
  The responses did not make clear why they considered costs were too high. In the absence of further information from responders, the DSB believes the best approach is to include a cost-benefit analysis to the terms of reference of the analysis in order to provide industry with a more informed view on the cost/value trade-off involved in any future implementation.
- *Cost should not be borne by the entire user base*
  The current fee model of the DSB has been the subject of extensive consultation in order to ensure an appropriate balance between different DSB user types. This fee model is reliant on a single cost recovery ring-fence whose costs are borne by the entire user base. The DSB received confirmation from industry in its summer 2018 consultation that the current fee model remains appropriate and does not need to be changed. Industry feedback as part of this consultation, on whether the fee model should remain unchanged and next steps, has resulted in no changes to the 2020 fee model. However, given the split view, the DSB will revisit interest in this topic as part of next year's consultation. Full details can be found in section 6, User Fee Survey.

Considering the responses in favour:

- *Perform only the analysis to allow a better assessment of the costs and benefits*
  Given the feedback on costs, the DSB will include a cost-benefit analysis to the terms of reference of the analysis in order to provide industry with a more informed view on the cost/value trade-off involved in any future implementation. The decision on implementation will be deferred until after the analysis is provided to the PC, TAC and to industry for further feedback.

Industry responses were reviewed at the TAC meeting on the 12th August 2019 and the TAC concurred with the DSB's proposal.

DSB Next Steps

The DSB will take forward the analysis aspects of this proposal only which will include details of the build and run costs. The DSB will not to undertake any implementation as part of the cost recovery framework.

The analysis undertaken would be conducted in collaboration with both the PC and the TAC to ensure appropriate industry participation in shaping the outcome. The detailed analysis undertaken will require an incremental cost increase of €60k.

This effort would be treated as 2020 capital expenditure funded by the DSB's financial sustainability margin. As per the existing DSB cost recovery fee model, this cost would be amortized over 4 years starting from 2021, after which the capital expenditure element would drop off the DSB's cost base.

Decision 5: Move forward with a scaled-back proposal, delivering analysis only and publication of the analysis to the PC and TAC forums to agree the next steps.

5.1.6 Q1.6 – OTHER TECHNICAL ENHANCEMENTS

CP1 Description: The DSB's template-based architecture is going to be subject to major enhancements over the next twelve months in support of work to provide dynamic enumeration and hierarchy facilitation.

CP1 Question: Do you think that the DSB service should be reviewed in order to examine any additional technical enhancements that could be made to facilitate enhanced and/or more efficient integration?

CP2 Question 6: Do you concur with the DSB's proposal to utilize existing TAC resources to address the identified concerns as part of the DSB's business as usual resourcing?

Industry Responses

The responses received to the question posed in the second consultation are set out below.

	Yes	No
	9	**0**
Trade Associations	4	
DSB Users	5	

All respondents were in support of this proposal, comments included:

- Yes, assuming the DSB can handle any increased workload
- Yes. Indeed, we would encourage ANNA DSB to improve ANNA server. On a few occasions, ANNA server side couldn't deter heartbeat of client processes, even though procedures were followed to recycle our subscriber process multiple times
- Yes, existing TAC resources should be used to address identified concerns as part of the DSB's business as usual resourcing
- We agree with the proposal to utilize existing resources
- Yes, we concur with the DSB's proposal
- Yes, (we) concur with the DSB's proposal to utilize existing TAC resources to address the identified concerns as part of the DSB's business as usual resourcing

Analysis of Responses

We received a unanimous response in favour of this proposal. The DSB's assessment of the responses received was reviewed at the TAC meeting on the 12th August 2019 where the TAC agreed with the DSB's proposal.

DSB Next Steps

The DSB will implement the proposal.

Decision 6: The DSB will utilize the existing resources, at no additional cost, to progress the additional items raised during the consultation exercise.

5.2 DATA SUBMISSION ENHANCEMENTS

The DSB consulted on 9 proposed enhancements to enhance the submission of data to the DSB, based on user feedback received in the past 12 months. The responses are summarised below, together with the DSB's analysis of the responses and next steps.

DATA SUBMISSION ENHANCEMENTS		NEXT STEPS	PROPOSED COST IMPACT	FINAL COST IMPACT
5.2.1	Tool for Proprietary Index Submissions	Closed	• 2020-: None	• 2020-: None
5.2.2	SLA for Proprietary Index Submissions	Closed	• 2020-: None	• 2020-: None
5.2.3	Automated User Submission Process	Taken forward (BAU)	• 2020-: None	• 2020-: None
5.2.4	Machine-Readable Format for Proprietary Indices	Taken forward (BAU)	• 2020-: None	• 2020-: None
5.2.5	LEI for CDS Single Name	Scaled back – analysis only	• 2020: None • 2021-24: €155K pa • 2025-: € 90K pa	• 2020: None • 2021-24: € 15K pa • 2025-: None
5.2.6	Validation of CDS Single Name	Taken forward (BAU)	• 2020-: None	• 2020-: None
5.2.7	Supplemental Data for ISIN-LEI Mapping	Taken forward (BAU)	• 2020-: None	• 2020-: None
5.2.8	Mapping of Index Names to Underlying Identifiers	Taken forward	• 2020: €60K • 2021-: None	• 2020: €60K • 2021-: None
5.2.9	Data Review Process	Taken forward (BAU)	• 2020-: None	• 2020-: None
TOTAL			• **2020: € 60K** • **2021-2024: €155K pa** • **2025-: € 90K pa**	• **2020: € 60K** • **2021-2024: € 15K pa** • **2025-: None**

5.2.1 Q2.1(b) – TOOL FOR PROPRIETARY INDEX SUBMISSIONS

CP1 Description: The DSB currently supports a workflow that ensures that a Proprietary Index will be made available for the creation of OTC ISINs a maximum of 24 hours (if the request is submitted on a business day) following receipt of the initiating request.

This process allows users to submit indices for which they are responsible for later use as an underlying instrument in the creation of OTC derivative product records. The DSB then makes this data available via manual upload on to the DSB website, for download and consumption by users.

Any amendments to the list (once available in the DSB's Production systems, but where the underlying index in question has not been used in the creation of an OTC derivative product record) require between two to four weeks to allow for code changes ahead of implementation.

The DSB currently updates the Proprietary Index list manually with dependency on the information provided by the users. Validation is undertaken to ensure that each index name remains unique.

CP1 Question: The DSB currently supports a workflow that ensures that a Proprietary Index will be made available for the creation of OTC ISINs a maximum of 24 hours (if the request is submitted on a business day) following receipt of the initiating request.

Do you want the DSB to investigate the creation of a tool to ensure that the submitted information can be easily amended if changes are required by an institution and the underlying data element has not been used to create an OTC ISIN?

Any amendments to the list (once available in the DSB's Production systems, but where the underlying index in question has not been used in the creation of an OTC derivative product record) require between two to four weeks to allow for code changes ahead of implementation.

This would enable users to have changes available in a few days rather than the current 2 to 4-week process.

CP2 Question 7: Do you concur with the DSB's proposal to take no further action on a tool to enhance the proprietary index submission process?

Industry Responses

The responses received to the question posed in the second consultation are set out below.

	Yes	No
	5	**1**
Trade Associations	1	1
DSB Users	4	

On balance, respondents were in favour of not progressing the proposal, with trade association opinion split. Individual users of the service who responded noted they were comfortable with the

service they currently received, with a trade association noting that they had concerns with the proposal and would welcome further analysis.

Comments included:

- support for the proposed DSB approach due to lack of impact
- The current 24-hour turn-around time for the submission of new proprietary indexes is the maximum allowable turn-around time
- The current 2 to 4 weeks for any corrections is not acceptable and should be reduced. Changes should ideally be reflected instantaneously on the ISIN record and in no case later than 24 hours after the change request
- A desire to see proprietary indices leverage the work being done to decouple volatile attribute enumerations from the core DSB product templates and more generally to all reference data that is subject to periodic change
- A wish to have the DSB provide analysis on the number of new proprietary indexes created and the number and type of changes that are required.

Analysis of Responses

The responses to both consultation papers noted general satisfaction with current processes if enhancements cannot be undertaken without additional resource at this time, in light of other ongoing industry mandated activities at the DSB.

The request for further analysis to aid decision making is noted, as was the comment that although the number of firms that submit proprietary indexes is likely small, it is the volume of submissions and the time savings that can be achieved by an automated process or tool that should drive the benefit versus cost analysis.

DSB Next Steps

The DSB will provide both proprietary index submitters and the PC with further analysis showing the number of new proprietary indexes created, the frequency at which these occur and the number and type of changes that have been required are required for decision making ahead of the next consultation period.

Decision 7: The DSB will provide further analysis for decision making ahead of the next consultation period.

5.2.2 Q2.1(c) & (d) – SLA FOR PROPRIETARY INDICES

CP1 Description: As per the description in section 5.2.1

CP1 Question 2.1 (c): Is there a need to reduce the proprietary index SLA to under 24 hours?

CP1 Question 2.1 (d): If yes to 2.1c, what is the required time. Use Cases to support this?

CP2 Question 8: Do you concur with the DSB's proposal to keep unchanged the SLA for proprietary index submissions?

Industry Responses

The responses received to the question posed in the second consultation are set out below.

	Yes	No
	3	**0**
Trade Associations	1	
DSB Users	2	

Of the respondents that chose to opine, the following comments were received:

- The submission SLA is acceptable but should be reduced if this can happen without a cost impact
- Proprietary indices should leverage the work being done to decouple volatile attribute enumerations from the core DSB product templates and more generally to all reference data that is subject to periodic change

Analysis of Responses

The responses to both consultation papers noted general satisfaction with current processes if enhancements cannot be undertaken without additional resource at this time, in light of other ongoing industry mandated activities at the DSB.

DSB Next Steps

The DSB will not develop the proposal further.

Decision 8: The DSB will retain the SLA for proprietary index submissions

5.2.3 Q2.1(e) – AUTOMATED USER SUBMISSION PROCESS

CP1 Description: As per the description in section 5.2.1

CP1 Question: Do you want the DSB to investigate the provision of an automated user submission process?

CP2 Question 9: Do you concur with the DSB's proposal to investigate the provision of an automated user submissions process as part of the DSB's business as usual resourcing and prioritization?

Industry Responses

The responses received to the question posed in the second consultation are set out below.

	Yes	No
	3	**0**
Trade Associations	1	
DSB Users	2	

Analysis of Responses

There was a single comment in response to this query which noted that the issue should be looked at holistically. An automated user submission process is part of the overall solution to improve the quality and SLA of proprietary index creation and modification.

DSB Next Steps

DSB to ask TAC to consider prioritization vs other on-going activities.

Decision 9: The DSB will investigate the provision of an automated user submissions process as part of the DSB's business as usual resourcing and prioritization, subject to TAC prioritization.

5.2.4 Q2.1(f) – MACHINE-READABLE FORMAT FOR PROPRIETARY INDICES

CP1 Description: As per the description in section 5.2.1

CP1 Question: Do you want the DSB to investigate the automated provision of the full list of proprietary indices in a machine-readable format?

CP2 Question 10: Do you concur with the DSB's proposal to investigate the automated provision of the full of list proprietary indices in a machine-readable format as part of the DSB's business as usual resourcing and prioritization?

Industry Responses

The responses received to the question posed in the second consultation are set out below.

	Yes	No
	3	**0**
Trade Associations	1	
DSB Users	2	

Analysis of Responses

There was a single comment in response to the DSB proposal – provided by a trade association. The comment noted that the provision of the list of proprietary indices in machine readable format is similar to the issue encountered for floating rate indexes. Currently these lists are part of the template (JSON schema) itself, which makes changes cumbersome and costly. The approach to put the list of floating rate indexes outside of the template as reference data, in machine readable format should be applied throughout the DSB to all reference data lists that are subject to regular change. Rather than tackle these on an individual basis, we suggest the DSB defines and addresses this issue as one project.

DSB Next Steps

DSB to ask TAC to consider prioritization vs other on-going activities. The DSB will also examine the scope of changes proposed to decouple enumerated values from the core product templates as part of its ongoing work.

Decision 10: The DSB will (a) investigate the automated provision of the full list of proprietary indices in a machine-readable format as part of the DSB's business as usual resourcing and prioritization and (b) examine the scope of changes proposed for dynamic enumerations and liaise with the TAC to progress next steps with respect to proprietary indices.

5.2.5 Q2.2(b) – LEI for CDS SINGLE NAME

CP1 Description: Leveraging the recently introduced ISIN <> LEI mapping facility to enhance the quality of credit reference data

CP1 Question: Where a user submits an underlying ISIN for a credit default swap, do you want the DSB to investigate connecting to the new LEI-ISIN mapping API in order to also provide the LEI (in all instances where it is available) as part of the associated OTC ISIN record?

CP2 Question 11: Do you concur with the DSB's proposal for the build of the LEI-ISIN mapping service for CDS single names?

Industry Responses

The responses received to the question posed in the second consultation are set out below.

	Yes	No
	7	**2**
Trade Associations	4	
DSB Users	3	2

Analysis of Responses

The majority of the responses were in favour of progressing the analysis phase of the proposal. Respondents who did not wish the DSB to proceed with the proposal cited the following:

- Supportive of the idea in Consultation 1, concerned about the costs and need more insight into the rationale for additional resources being required in addition to the DSB's ongoing work programme
- Supportive of the use of LEIs but oppose the DSB's proposal given the high cost involved without any benefit to those users not engaged in CDS activities

Respondents who wanted the DSB to proceed with all or part of the proposal cited the following:

- Full support of a LEI-ISIN mapping service based on the ANNA-GLEIF agreement by two sells-side institutions and two trade associations
- Further analysis proposed by two trade associations:
    - Support in principle the mapping of a submitted ISIN to the LEI using the ISIN-LEI mapping service and with the specific goal of increasing the data quality, with a requirement that the DSB not impose a requirement to use ISINs/LEI to identify reference obligations. The costs as proposed are high, in particular the ongoing annual run cost, and the direct benefits are unclear. We therefore propose an initial analysis that outlines in more detail the approach and work needed, the costs and the benefits of integrating the LEI-ISIN mapping. The cost benefit analysis can be used as a basis for a further decision on the actual build.
    - This is one area that could prove useful due to the very incomplete provision of LEIs across both market counterparties and issuers. However, the costings set out in CP2 are higher than we would have supposed, notably in respect of the ongoing running costs and

consequently endorse an initial analysis that outlines in more detail the approach and work needed, the costs and the benefits of integrating the LEI-ISIN mapping for CDS.

Industry responses were reviewed at the TAC meeting on the 12th August 2019. Based on the industry responses, the DSB proposed to move ahead only with the analysis portion of the proposal and the TAC concurred with the DSB's approach.

DSB Next Steps

The DSB will significantly scale back its proposal and proceed with an initial analysis that outlines in more detail the approach and work needed, the costs and the benefits of integrating the LEI-ISIN mapping. The cost of the analysis will be €60k in total, with the output subject to both PC and TAC oversight with respect to product and workflow matters respectively.

As set out in the proposal in consultation paper 2, the DSB would perform business and technical analysis to document the specific workflows required to source, integrate and publish the additional information in DSB CDS product templates.

The DSB would work with the PC and the TAC to determine the best mechanism to leverage the LEI-ISIN mapping service in order to enrich the CDS OTC-ISIN record with the LEI in all instances where it is available.

The analysis would provide information about any updates to historical reference data records to reflect the LEI where available, and also forward-looking integration at the point of ISIN creation. Analysis would also provide for information about the infrastructure, one-off development and deployment costs and annual run cost to support the service.

Work would be time-boxed to six months in order to provide a defined timeline to implementation.

Decision 11: The DSB will proceed with analysis only to allow the industry to make a cost-benefit determination. The analysis will include details of the build and run costs and subject to PC and TAC oversight.

5.2.6 Q2.2(c) – VALIDATION OF CDS SINGLE NAME

CP1 Description: Users have suggested that the DSB should leverage the recently developed ISIN-LEI mapping facility to support data submission for Credit Default Swaps (CDS), so that use of the DSB's Corporate CDS product template only allows underlying corporate bond ISINs to be input by users. The same principle also extends to the use of each of the Municipal and Sovereign CDS product templates.

Such an enhancement would mean that a user attempting to create a Corporate CDS would not be able to submit an underlying bond ISIN associated with a LEI mapped to a sovereign issuer.

CP1 Question: Do you want the DSB to investigate the provision of supplemental data alongside that contained in the new LEI-ISIN mapping API in order to systematically validate whether the underlying ISIN provided by the user at the time of ISIN creation maps to the type of reference data, the user is seeking to create?

CP2 Question 12: Do you concur with the DSB's proposal to examine the number of CDS Single Name ISINs that have been incorrectly created and work with the PC to determine next steps, if any?

Industry Responses

The responses received to the question posed in the second consultation are set out below.

	Yes	No
	8	**0**
Trade Associations	4	
DSB Users	4	

Analysis of Responses

Respondents that submitted comments, noted their support for the DSB's proposal based on existing resource allocation overseen by the Product Committee agree, with the PC examining the CDS Single Name ISINs that have been incorrectly created and determining next steps.

DSB Next Steps

The DSB Secretariat will work with the Product Committee to examine the number of CDS Single Name ISINs that have been incorrectly created and work with the PC to determine next steps. Specifically, where the issuer type of the underlying bond does not match the DSB product template selected and work with the PC to determine next steps, if any.

The range of possible next steps are likely to include guidance on appropriate product template selection, validation vs. underlying issuer type (if available), etc.

Decision 12: The DSB Secretariat will work with the Product Committee to examine the number of CDS Single Name ISINs that have been incorrectly created and work with the PC to determine next steps.

5.2.7 Q2.2(d) & (e) – SUPPLEMENTAL DATA FOR ISIN-LEI MAPPING

CP1 Description: As above, for the description set out in section 5.2.6

CP1 Question 2.2(d): Do you need the DSB to investigate the provision of any other supplemental data that leverages the new ISIN-LEI facility, in order to facilitate your firm's OTC derivative related processes – either pre or post trade?

CP1 Question 2.2(e): If yes to 2.2d, please provide specific examples

CP2 Question 13: Do you concur with the DSB's proposal to perform initial analysis to further explore the supplemental data examples cited by users as part of the DSB's business as usual resourcing and prioritization?

Industry Responses

The responses received to the question posed in the second consultation are set out below.

	Yes	No
	9	0
Trade Associations	4	
DSB Users	5	

Analysis of Responses

All respondents requested that the DSB undertake an initial analysis to further explore the supplemental data examples cited by users in their response to Consultation Paper 1, as part of the DSB's business as usual resourcing, subject to prioritization by the DSB Product Committee.

DSB Next Steps

The DSB Secretariat will undertake an initial analysis to further explore the supplemental data examples cited by users in their response to Consultation Paper 1, as part of the DSB's business as usual resourcing, subject to prioritization by the DSB Product Committee.

As a reminder, the examples cited by respondents in response to the first consultation were as follows; with the goal being streamlined access to other data in the public domain that might be helpful in the course of derivatives data processing:

a) accessing via a single source, the issuer LEI attached to each (relevant) ISIN and processing it internally within the user's systems which would then rearrange the data to have the list of all ISINs under one issuer
b) getting from one source this "pre-packaged" list of ALL ISINs of a particular bond type category under one LEI OR the list of ALL ISINs of a particular Structured Finance Products (SFPs) under one LEI. For convertible bonds this would provide the underlying ISIN for a given OTC derivative, alongside with the underlying issuer (LEI) and total issued nominal amount
c) LEI-ISIN mapping facility for bonds and SFPs including identifying which bond/SFP issuer LEI exists for any given ISIN and vice versa to help determine all the ISINs under each bond/SFP issuer LEI
d) Another enhancement to the ISIN and LEI relationship could be obtained through an extra mapping between LEI & MIC codes (Operating & Segment)

Decision 13: The DSB Secretariat will undertake an initial analysis to further explore the supplemental data examples cited by users in their response to Consultation Paper 1, as part of the DSB's business as usual resourcing, subject to prioritization by the DSB Product Committee

5.2.8 Q2.3 – MAPPING OF INDEX NAMES TO UNDERLYING IDENTIFIERS

CP1 Description: Mapping of index and/or reference rate names and underlying identifiers where these are available

Currently, DSB users create OTC ISINs and CFI codes for index and/or reference rate related derivatives by selecting the name of the reference rate and/or underlying index, but frequently report an underlying identifier (usually the underlying ISIN) in the records submitted to regulators.

The DSB currently maps underlying equity index names to associated ISINs – based on ad-hoc user feedback and updates. Where an underlying ISIN mapping exists, the DSB converts the underlying index name into the relevant underlying ISIN, so that only the underlying ISIN is available in the OTC ISIN record.

The current process requires that users searching for OTC derivatives on an index need to be aware of the associated underlying ISIN and search for both the index name and the underlying ISIN in order to identify whether the relevant OTC derivative data record exists in the DSB database.

The DSB has received user requests to proactively support systematic mapping (and publication) that would allow users creating an OTC derivative ISIN or CFI code to be able to consistently submit either the underlying index identifier or the name, with the DSB mapping between the two to ensure that only a single valid OTC derivative product record is created in each instance.

CP1 Question:

a) Does your firm use the DSB to create and/or search for OTC ISIN data for derivatives with an index and/or reference rate as an underlying instrument?

b) If you answered "yes" to (a) above - should the DSB investigate provision of links to sources that might assist with mapping between the underlying index/reference rate names?

If you answered "yes" to (b) above – do you have a view on which identifiers should be used to assist with the mapping process and the most appropriate source of each identifier?

CP2 Question 14: Do you concur with the DSB's proposal to perform the business and technical analysis on the mapping of index names to underlying identifiers?

Industry Responses

The responses received to the question posed in the second consultation are set out below.

	Yes	No
	8	**1**
Trade Associations	4	
DSB Users	4	1

Analysis of Responses

The single respondent that did not wish for the DSB to proceed with this proposal did not provide any comments.

Respondents who wanted the DSB to investigate the service further, which included four trade associations, noted the following:

- Analysis of mapping of index ISIN and index name is welcome
- We support the business and technical analysis on the mapping of index names to underlying identifiers
- Yes, we support for the DSB to do an initial business and technical analysis to look at solutions to improve the data quality. DSB needs to leverage the European Benchmarking Regulation and its implementation, to determine indexes and aliases for the indexes to map to
- Continued support for the DSB to do an initial business and technical analysis to look at solutions to improve the data quality

DSB Next Steps

As proposed in the second consultation paper, the DSB will perform the business and technical analysis, working with the PC to identify the specific asset classes that industry wishes the DSB to focus on, identification of the desired data sources, an examination of the workflows to integrate the additional data into DSB product templates and the effort to implement a solution to allow publication of the data in OTC derivative reference data records.

The DSB also proposes to work with the TAC in order to determine the relevant technology requirements.

This period of analysis will require additional DSB resource, in light of the already significant DSB BAU schedule.

Impact on DSB total costs: €60k in 2020; None from 2021 onwards

Decision 14: The DSB will proceed with the proposal as set out in the second consultation paper.

5.2.9 Q2.4 – DATA REVIEW PROCESS

CP1 Description: The DSB undertakes a series of data normalization and data validation checks in the course of OTC derivative product record creation, with the current ruleset available here for all products excluding non-standard instruments and here for non-standard instruments for review. Examples of the best practice published by the DSB is available here.

The DSB proactively updates its ruleset in conjunction with support from the Product Committee as part of ongoing data validation exercises. Users are also able to use the DSB's Change Request Process to submit ISIN challenges, with no ISIN challenges having been submitted thus far.

CP1 Question: Do you wish the DSB to prioritize particular aspects of the review process? If yes, please provide specific examples

CP2 Question 15: Do you concur with the DSB's proposal to work with the PC to review each of the requests for additional underlying data made above on a case by case basis as part of its business as usual operations?

Industry Responses

The responses received to the question posed in the second consultation are set out below.

	Yes	No
	7	0
Trade Associations	3	
DSB Users	4	

Analysis of Responses

All but two respondents provided feedback to this query, confirming their support of the DSB proposal that in light of the mixed feedback to the first consultation, the DSB would continue to work with the PC to review each of the requests for additional underlying data made above on a case by case basis as part of its business as usual operations.

DSB Next Steps

The DSB will work with the PC to review each of the requests for additional underlying data made in response to the first consultation above on a case by case basis as part of its business as usual operations.

As a reminder, the areas where further analysis was requested included:

- Addition of a tag to show which OTC interest rate derivatives are forward starting, once the DSB's enhancements to RTS-23.Field41 have been implemented
- Increased efforts to review data quality input by users, in particular, their use of the delivery type and IR term of contract attributes
- Provision of guidance on the use of reference rate term unit and common normalization methodologies

Decision 15: The DSB will work with the PC to review each of the requests for additional underlying data made in response to the first consultation above on a case by case basis as part of its business as usual operations.

5.3 SERVICE LEVELS

The DSB consulted on 4 proposed enhancements to service levels, based on user feedback received in the past 12 months. The responses are summarised below, together with the DSB's analysis of the responses and proposed next steps.

SERVICE LEVELS		NEXT STEPS	PROPOSED COST IMPACT	FINAL COST IMPACT
5.3.1	Bulk ISIN Creation	Closed	• 2020-: None	• 2020-: None
5.3.2	Searchable On-Line Utility	Taken forward (BAU)	• 2020-: None	• 2020-: None
5.3.3	Phone-Based Support	Closed	• 2020-: None	• 2020-: None
5.3.4	Proactive AUP Monitoring - Core	Closed	• 2020: None • 2021-2024: €82.5K pa • 2025-: €40K pa	• 2020: None • 2021-2024: None • 2025-: None
5.3.4	Proactive AUP Monitoring - API	Closed	• 2020: None • 2021-2024: €41.25K pa • 2025-: €20K pa	• 2020: None • 2021-2024: None • 2025-: None
TOTAL			• **2020: None** • **2021-2024: €123.75K pa** • **2025-: € 60K pa**	• **2020: None** • **2021-2024: None** • **2025-: None**

5.3.1 Q3.1 – BULK ISIN CREATION

CP1 Description: None

CP1 Question: Is the creation of one OTC ISIN at a time satisfactory

CP2 Question 16: Do you concur with the DSB's proposal to drop further analysis on bulk ISIN creation?

Industry Responses

The responses received to the question posed in the second consultation are set out below.

	Yes	No
	7	0
Trade Associations	2	
DSB Users	5	

All respondents were in support of the DSB's proposal to drop further analysis with respect to bulk ISIN creation via the GUI. The key comments received in favour of the proposal were as follows:

- Yes, our firm does not primarily rely on the use of the DSB GUI to create ISINs.
- We do not support further analysis on bulk ISIN creation in the context of the first consultation question, i.e. question related to DSB GUI only. We believe the DSB FIX API can be improved in this regard.
- We agree to drop further analysis on bulk ISIN creation.
- Yes, (we) would suppose this to be a reasonable way forward from our response to CP1/Q3.1.

Analysis of Responses

The feedback received confirms that there is no desire to further enhance the DSB's GUI to provide a bulk ISIN capability.

DSB Next Steps

The DSB will take no further action with respect to this question.

Decision 16: The DSB will not proceed with the further analysis with respect to the build of bulk ISIN creation capability via the DSB's GUI.

5.3.2 Q3.2 – SEARCHABLE ON-LINE UTILITY

CP1 Description: The DSB currently provides product documentation (attributes, enumerated values, normalisation rules, indices etc.) across several PDF documents that are available to download through the DSB website.

CP1 Question: The DSB currently provides product documentation (attributes, enumerated values, normalization rules, indices, etc.) across several pdf documents that are available to download through the DSB website. Do you believe that making this information available through a searchable on-line utility would be of benefit to the user experience?

CP2 Question 17: Do you concur with the DSB's proposal to work with the TAC and PC to agree an appropriate design and functionality as part of its business as usual operations?

Industry Responses

The responses received to the question posed in the second consultation are set out below.

	Yes	No
	9	**0**
Trade Associations	4	
DSB Users	5	

All respondents were in favour of the proposal, the key comments can be seen below:

- Yes, enhancements as part of standard procedures are welcome
- Yes, assuming the DSB can handle any increased workload.
- Bearing in mind the rest of priorities, I would support this initiative to be progressed as part of the TAC / PC business as usual operations.
- We support working with the TAC and PC to agree on appropriate design and functionality as part of its business as usual operations.
- We agree to cover this as part of the business as usual operations. A general note of caution: we want to be careful not to overload the TAC and PC.
- Yes, (we) would support this as an appropriate way forward in-line with our support in CP1/Q3.2.
- Yes, we agree with the DSB's proposal.

Analysis of Responses

The responses were unanimously in support of the proposal.

DSB Next Steps

To proceed with the recommendation.

Decision 17: The DSB's will work with both the TAC and the PC to agree an appropriate design and functionality. This will be undertaken as part of BAU at no additional cost.

5.3.3 Q3.3 – PHONE BASED SUPPORT

CP1 Description: This query was raised last year and has been revisited in light of a number of user requests.

CP1 Question: Investigate the provision of phone support as part of baseline service?

CP2 Question 18: Do you concur with the DSB's proposal to drop further investigation on phone support?

Industry Responses

The responses received to the question posed in the second consultation are set out below.

	Yes	No
	5	**2**
Trade Associations	1	1
DSB Users	4	1

Respondents who did not agree with the proposal to drop further investigation on phone support had the following comments:

- We would encourage ANNA DSB to enhance the quality in regard to the responsiveness when dealing with DSB support. There have been cases where our technical departments have waited for more than 24 hours to receive a response from DSB support on technical issues.
- As we stated in our consultation response last year and in our CP1 response this year, phone support should become an integral part of the escalation process. This is a mere reconfiguring of the existing escalation process and as such should not require additional resources. We agree to drop if the DSB does not see a way to implement this without a cost increase.

Respondents agreed with the proposal to drop further investigation on phone support had the following comments:

- We support dropping further investigation on phone support.
- Yes. We would like to note here that our primary reason for not pursuing this is the added costs that would be implemented in order to support this.
- Yes, (we) would support this as an appropriate way forward in-line with our comments that MiFID TVs do not exploit phone support in CP1/Q3.3.
- Yes, we support the DSB's proposal to drop further investigation on phone support. As previously noted in our response to a prior ANNA DSB consultation, we believe that the focus should be placed on reducing the time needed to respond to email requests from users rather than phone-based helpdesk support

Analysis of Responses

The majority of the responses were in favour of dropping phone support as a standalone service. The DSB will review whether it is possible to provide phone support as part of the escalation process with existing BAU resourcing and revert to the TAC with its findings.

DSB Next Steps

The DSB will review whether it is possible to provide phone support as part of the escalation process with existing BAU resourcing and revert to the TAC with its findings.

Decision 18: The DSB will not proceed with any further investigation into provide dedicated phone support but will review whether it is possible to provide phone support as part of the escalation process with existing BAU resourcing.

5.3.4 Q3.4 – PROACTIVE AUP MONITORING

CP1 Description: The current monitoring and notification process related to the DSB's Acceptable Use Policy (AUP) thresholds is reactive, notifying users once they have breached the AUP. The DSB has received feedback from several users that proactive monitoring and notification would be preferred.

CP1 Question: Should the DSB's AUP monitoring process be extended to warn users when they exceed certain percentage levels of their AUP allocation?

CP2 Question 19(a): Do you concur with the DSB's proposal to implement the core functionality?

CP2 Question 19(b): Do you concur with the implementation of the API functionality?

Industry Responses

The responses received to the question posed in the second consultation are set out below.

(a)

	Yes	No
	1	4
Trade Associations		2
DSB Users	1	2

(b)

	Yes	No
	0	5
Trade Associations		2
DSB Users		3

The majority of respondents did not wish the DSB to extend the AUP service to provide warnings when a certain percentage is met. The comments associated with the negative responses were as follows:

- We favour a proactive monitoring system of the UAP limits. However, if the DSB cannot provide this functionality as part of the BAU environment, this should be dropped
- We do not support the DSB's proposal due to the costs involved

A single respondent was in favour of supporting the core functionality in question 19a.

Analysis of Responses

The majority of the respondents did not support the core functionality, unless this could be undertaken as part of BAU. There was also concern raised about the additional cost. There was no support for the second option which itself was dependent on the first. The DSB's assessment of the responses received was reviewed at the TAC meeting on the 12th August 2019 where the TAC agreed with the DSB's proposal.

DSB Next Steps

The DSB will not to proceed with this item. The DSB's assessment of the responses received was reviewed at the TAC meeting on the 12th August 2019 where the TAC agreed with the DSB's proposal.

Decision 19: The DSB will not to proceed with the extensions to the AUP process.

5.4 SERVICE AVAILABILITY

The DSB consulted on a proposed change to service availability, based on TAC deliberations in the past 12 months. The responses are summarised below, together with the DSB's analysis of the responses and proposed next steps.

SERVICE AVAILABILITY	NEXT STEPS	PROPOSED COST IMPACT	FINAL COST IMPACT
Downtime Window	Taken forward (BAU)	• 2020-: None	• 2020-: None
TOTAL		• **2020-: None**	• **2020-: None**

5.4.1 Q4.1 – DOWNTIME WINDOW

CP1 Description: Following feedback from the DSB's second consultation in 2018[1], the DSB increased the availability of its service from 24x6 to 24x6.5 by reducing weekly downtime to between Saturday 20:00 UTC and Sunday 08:00 UTC.

The DSB proposes to preserve the 24x6.5 service hours but to change the period of the weekly downtime from between:

Saturday 20:00 UTC and Sunday 08:00 UTC

to

Sunday 00:30AM UTC and Sunday 12:30PM UTC

The rationale for the proposal is to provide a zero-cost solution to a technical error scenario experienced by some DSB Power Users.

The details of the error scenario and the rationale for the change can be found on slides 11 and 12 of the DSB's Technology Advisory Committee (TAC) March 2019 presentation[1]. The TAC has agreed in principle to the change, subject to broader industry agreement that the change will not cause undue difficulties for other users. Further details on the TAC deliberation can be found on page 6 of the TAC minutes[1]

CP1 Question: Should the DSB's downtime hours be change to between 00:30AM Sunday UTC and 12:30PM Sunday UTC?

CP2 Question 20: Do you concur with the DSB's proposal to change the DSB's downtime hours to between 00:30AM Sunday UTC and 12:30PM Sunday UTC?

Industry Responses

The responses received to the question posed in the second consultation are set out below.

	Yes	No
	5	**0**
Trade Associations	2	
DSB Users	3	

All respondents were in support of changing the downtime hours. The comments received were as follows:

- We support DSB's proposed downtime hours to be between 00:30AM Sunday UTC and 12:30PM Sunday UTC
- We support the TAC recommendation on this
- Yes, we have no concerns with the proposed change
- (we have) no particular view on this, but in general would support the TAC recommendation

Analysis of Responses

The feedback was fully in support of altering the downtime hours as proposed.

DSB Next Steps

The DSB will implement the change to the downtime hours. The DSB's assessment of the responses received was reviewed at the TAC meeting on the 12th August 2019 where the TAC agreed with the DSB's proposal, with one caveat that the DSB will agree the implementation timeline with the TAC members before the next TAC meeting in October 2019.

Decision 20: Proceed with the change to alter the downtime hours at no additional cost. The DSB will agree the implementation timeline with the TAC prior to the next TAC meeting in October 2019.

5.5 CYBERSECURITY

The DSB consulted on 5 proposed changes related to the DSB's cyber-security governance arrangements, based on user and regulatory feedback received in the past 12 months. The responses are summarised below, together with the DSB's analysis and proposed next steps.

CYBER SECURITY		NEXT STEPS	COST IMPACT	COST IMPACT
5.5.1	GUI Multi-Factor Authentication	Closed	• 2020: None • 2021-2024: €95K pa • 2025-: €45K pa	• 2020: None • 2021-2024: None • 2025-: None
5.5.2	Secure SDLC	Taken forward	• 2020: €90K pa • 2021-: None	• 2020: €90K • 2021-: None
5.5.3	ISO 27001/2 for Cyber Breach Risk	Taken forward	• 2020: €90K • 2021-: None	• 2020: €90K • 2021-: None
5.5.4	ISO 27018 for PII Breach Risk	Closed	• 2020-: None	• 2020-: None
5.5.5[9]	On-Boarding of CISO	Taken forward	• 2020-: €290K pa	• 2020-: €290K pa
TOTAL			• **2020: €470K** • **2021-2024: €385K pa** • **2025-: €335K pa**	• **2020: € 470K** • **2021-2024: € 290K pa** • **2025-: € 290K pa**

[9] Please see section 5.5.5 for details of a DSB checkpoint that may impact cyber-security costs in the years 2021 onwards

5.5.1 Q5.1 – GUI MULTI-FACTOR AUTHENTICATION

CP1 Description: The DSB utilizes a traditional userid / password mechanism for authentication to the DSB GUI. Whilst such a mechanism is common practice, the latest industry best practice now utilizes multi-factor authentication (MFA) to provide an additional layer of security.

The Applied Cybersecurity Division of the US National Institute for Standards and Technology (NIST) provides a useful description of MFA and how it works6.

The DSB notes that most industry and government guidelines on cyber- authentication recommend the use of MFA and therefore the DSB would like to receive feedback on whether a migration to MFA should be considered in 2020.

CP1 Question: Should the DSB GUI support multi-factor authentication to match best practice cyber-authentication guidelines?

CP2 Question 21: Do you concur with the DSB's proposal to implement a minimal MFA solution for the GUI?

Industry Responses

The responses received to the question posed in the second consultation are set out below.

	Yes	No
	4	**4**
Trade Associations	2	2
DSB Users	2	2

Respondents who did not wish the DSB to implement a minimal MFA solution for the GUI cited 4 primary themes:

- We do not support implementing a minimal MFA solution for the GUI
- The costings and the scale of even a minimal MFA solution are too high at this point in time, since the DSB does not hold PII data, so the risks are more localised and bespoke
- MFA and the proposed cost, might not be the best solution for the risks identified: the core system should be isolated and protected at any access point, not just the GUI access. Internal support functions should be clearly separated from the core functionality and require their own protection. An attacker impersonating a more privileged user to not pay its fair share is highly unlikely because of the reputational risk associated with it and in the GUI environment in any case this is unlikely to have much impact
- Our position is that the DSB should already have implemented all best practices with respect to cybersecurity within the existing cost structure

Respondents who wanted the DSB to implement a minimal MFA solution for the GUI, listed the following as the rationale:

- We welcome highest standards of security
- We support a minimal MFA solution as long as the user experience is not compromised

- Yes, we concur

Analysis of Responses

The responses were reviewed at the TAC meeting of 12th August 2019. Given the mixed responses and some detailed comments against, the DSB proposed to drop the proposed implementation of MFA. Reasons provided by the DSB included the DSB's desire to prioritize improvements in process and governance over point solutions such as the GUI MFA implementation.

The DSB noted that other proposals within the cyber-security section of the consultation paper were related to such process and governance matters and therefore the DSB believed these other proposals should be treated as higher priority. Given the mixed industry response to the MFA GUI proposal and the detailed comments against, the DSB proposed to drop the proposed MFA implementation from its 2020 roadmap.

The TAC concurred with the DSB assessment to drop the GUI MFA implementation. The DSB proposed to add this item as an unprioritized backlog task for future review by the TAC. There were no objections to this approach.

DSB Next Steps

The DSB will park this item and hold it on a backlog for future possible discussion by the TAC.

Decision 21: The DSB will not proceed with the implementation effort for the GUI multi-factor authentication.

5.5.2 Q5.2 – SECURE SDLC

CP1 Description: The DSB IT system development and maintenance processes follow a standard Software Development Life Cycle (SDLC), which includes separate phases for design, development, testing and deployment.

Security testing of DSB software occurs via regular third-party penetration testing in its User Acceptance Test environment and is not currently embedded within the full SDLC process.

The DSB has been asked whether it will implement current best practice to embed security considerations throughout the entire SDLC by following approaches such as NIST 800-647 in order to provide:

- Early identification and mitigation of security vulnerabilities and misconfigurations;
- Awareness of potential engineering challenges caused by mandatory security controls;
- Identification of shared security services and reuse of security strategies and tools; and
- Facilitation of informed executive decision making through comprehensive risk management in a timely manner.

CP1 Question: Should the DSB's Software Development Life Cycle (SDLC) be extended to embed security considerations throughout the SDLC?

CP2 Question 22: Do you concur with the DSB's proposal to move forward with analysis of Secure SDLC?

Industry Responses

The responses received to the question posed in the second consultation are set out below.

	Yes	No
	5	**2**
Trade Associations	4	
DSB Users	1	2

The majority of responses received were in favour of proceeding with the analysis. Respondents who did not wish the DSB to undertake the analysis of Secure SDLC cited 2 primary themes:

- We do not support analysis of Secure SDLC considering the cost estimated by DSB
- The DSB should already have implemented all best practices with respect to cybersecurity within the existing cost structure

Respondents who wanted the DSB to undertake the Secure SDLC analysis listed the following as the rationale:

- Yes, we welcome highest standards of security
- We support moving forward with the analysis
- Yes, we concur

- Yes, in line with our answer CP1/5.2, (we) support the DSB moving forward with the analysis

Analysis of Responses

Addressing the articulated concerns:

- *Costs out-weigh benefits*
  The responses did not make clear why costs outweighed benefits. In the absence of further information from responders, the DSB believes the best approach is to include a cost-benefit analysis to the terms of reference of the analysis in order to provide industry with a more informed view on the cost/value trade-off involved in any future implementation.

- *DSB should already have implemented best practices within existing cost structure*
  As a result of industry feedback that the DSB's services needed to be available several months before start of MiFID II, the DSB's overriding priority was to create a production-ready service by end of Q3 2017. The DSB did not implement a secure SDLC process in order to guarantee shortest time to market and therefore maximum time for industry testing. Appropriate resiliency against cyber-threats was provided, based on external third-party penetration testing and other proprietary in-house security measures. However, the DSB acknowledges that such an approach falls short of best practice, which is the reason the DSB has been consulting industry to bring such processes up to best practice standards.

The DSB's assessment of the responses received was reviewed at the TAC meeting on the 12th August 2019 where the TAC agreed with the DSB's proposal.

DSB Next Steps

The DSB will undertake the analysis working closely with the TAC. If completed in time, the findings of the analysis will be fed into the 2020 consultation exercise.

Decision 22: The DSB will proceed with the analysis of Secure SDLC.

5.5.3 Q5.3 – ISO 27001/2 FOR CYBER BREACH RISK

CP1 Description: The DSB currently follows its own proprietary framework for addressing the risk of information security incidents. Conformance to the framework is reviewed annually by the DSB management team and this is validated by an annual third-party assurance programme.

The DSB has been asked whether it will implement an industry standard framework for addressing the risk of information security incidents, such as ISO/IEC 27001 (Information security management systems – Requirements) and ISO/IEC 27002 (Information technology — Security techniques — Code of practice for information security controls). The purpose of ISO certification would be to allow the DSB to be formally audited and certified compliant to a widely accepted international standard that guarantees management systematically examines the organization's information security risks, taking account of the threats, vulnerabilities, and impacts.

CP1 Question: Should the DSB explore adopting the ISO 2700X standard as its framework for addressing information security risks?

CP2 Question 23: Do you concur with the DSB's proposal to move forward with the analysis phase for the implementation of the ISO27001/27002 framework?

Industry Responses

The responses received to the question posed in the second consultation are set out below.

	Yes	No
	4	**3**
Trade Associations	3	1
DSB Users	1	2

Respondents who did not wish the DSB to undertake the analysis for the implementation of the ISO27001/27002 framework cited 3 primary themes:

- To reiterate CP1/Q5.3, MiFID TVs do not see the use case because DSB users would only use login/password, which can show email address that include name/surname/company name. Apart from this, DSB isn't holding any kind of PII, however implementing ISO 27001 just for this alone doesn't seem justifiable
- We do not support analysis considering the cost estimated by DSB
- Our position is that the DSB should already have implemented all best practices with respect to cybersecurity within the existing cost structure

Respondents who wanted the DSB to undertake the analysis for the implementation of the ISO27001/27002 framework listed the following as the rationale:

- We welcome highest standards of security

- We support DSB further looking into this and doing the initial analysis. The analysis should include a cost benefit comparison and an evaluation of whether the proposed ISO 27001/27002 framework is the right framework for the size and activity of the DSB
- We concur

Analysis of Responses

Addressing the articulated concerns:

- *Relevance of ISO27001/2 given the low amount of PII data held by the DSB*
  The DSB notes that this comment was also made in response to the first consultation paper and therefore has placed the original DSB response below:

  There may be some confusion between the scope of the ISO 27001/2 standards and ISO 27018. The latter is related to risk of PII data breach and is not in scope of this question. The PII breach issue is addressed via Q5.4 of the CP1 consultation (see section 5.5.4).

  The DSB's proposal under this question is to utilize ISO 27001/2 standards for implementation of a systematic approach to securing the DSB's systems against cyber-attack using an international standard for its processes and controls. A successful cyber-attack may disable the DSB's ISIN search and creation service, regardless of the level of PII held in the system. Hence the DSB's view of the need for the implementation of appropriate security standards. The DSB's implementation of cyber-security today utilizes its own proprietary processes and controls.
- *Costs out-weigh benefits*
  The responses did not make clear why costs outweighed benefits. In the absence of further information from responders, the DSB believes the best approach is to include a cost-benefit analysis to the terms of reference of the analysis in order to provide industry with a more informed view on the cost/value trade-off involved in any future implementation.

- *DSB should already have implemented best practices within existing cost structure*
  As a result of industry feedback that the DSB's services needed to be available several months before start of MiFID II, the DSB's overriding priority was to create a production-ready service by end of Q3 2017. Appropriate cyber-security practices were implemented using proprietary processes in order to guarantee shortest time to market and therefore maximum time for industry testing, while providing appropriate resiliency against cyber-threats. However, the DSB acknowledges that such proprietary processes fall short of best practice, which is the reason the DSB has been consulting industry to bring such processes up to best practice standards.

Industry responses were reviewed at the TAC meeting on the 12th August 2019 and the TAC concurred with the DSB's proposal.

DSB Next Steps

The DSB will undertake the analysis working closely with the TAC. The terms of reference for the analysis will include a cost/benefit analysis and also validation that the chosen framework is

appropriate for the DSB. If completed in time, the findings of the analysis will be fed into the 2020 consultation exercise.

Decision 23: The DSB will move forward with the analysis phase for the implementation of the ISO27001/27002 framework which will include a cost/benefit analysis and framework ratification.

5.5.4 Q5.4 – ISO 27018 ADOPTION FOR PII BREACH RISK

CP1 Question: Should the DSB explore adopting the ISO 27018 standard as its framework for addressing data breach risks on Personally Identifiable Information?

CP2 Question 24: Do you concur with the DSB's proposal to take no further action?

Industry Responses

The responses received to the question posed in the second consultation are set out below.

	Yes	No
	5	**0**
Trade Associations	2	
DSB Users	3	

Analysis of Responses

All respondents were in support of the DSB's proposal to take no further action.

DSB Next Steps

The DSB will take no further action with respect to this question.

Decision 24: The DSB will take no further action with respect to exploring the adoption of ISO 27018.

5.5.5 Q5.5 – ON-BOARDING OF CISO

CP1 Description: In late 2017, the Financial Stability Board (FSB) provided a stock take of publicly released cybersecurity regulations and guidance. Whilst such guidance is not directly applicable to the DSB, the DSB does undertake periodic reviews of regulatory guidance on cybersecurity given the in-direct impact as a vendor to regulated entities.

The FSB paper described the creation of the role of Chief Information Security Office within 38 of the 56 regulatory schemes reviewed (page 22), with 34 of the schemes also addressing the independence of the cybersecurity function from other business lines.

The DSB's cybersecurity function is currently integrated within the core management team in order to achieve a lean management team.

CP1 Question: Should the DSB explore adding a new role of Chief Information Security Officer to its management team?

CP2 Question 25: Do you concur with the DSB's proposal to on-board a part-time CISO with a full-time security engineer?

Industry Responses

The responses received to the question posed in the second consultation are set out below.

	Yes	No
	4	**3**
Trade Associations	3	1
DSB Users	1	2

The DSB received mixed responses both in support and against the proposal. Respondents who did not wish the DSB to on-board a part-time CISO with a full-time security engineer cited 3 primary themes:

- We do not support on-boarding a part-time CISO considering the cost estimated by DSB
- In view of the public and transparent nature of the data in question, we do not see the use case currently for a Chief Information Security Officer
- Role did not seem large enough to warrant a full-time headcount. DSB has indicated currently this role is integrated into the management team. The proposed change to appoint an independent CISO so as to align with best practices outlined by the FSB's cybersecurity regulations does not seem to warrant the additional cost of €290,000 per year to support this

Respondents who wanted the DSB to on-board a part-time CISO with a full-time security engineer listed the following as the rationale:

- Yes, we welcome highest standards of security
- Yes, we concur

- We suggest for the DSB to initially cover this function through consultancy to get a better handle on the long-term need

Analysis of Responses

Addressing the articulated concerns:

- *Costs out-weigh benefits*
  The responses did not make clear why costs outweighed benefits. In the absence of further information from responders, the DSB believes the best approach is to provide a check-point after one year with a review by the TAC of the benefits achieved during 2020 of having the CISO relative to the costs incurred.

- *Relevance of CISO given the low amount of PII data held by the DSB*
  The DSB notes that this comment was also received in the first consultation response and has therefore placed the DSB's original response below:

  The DSB views the data breach element of cyber-security as only one element of the CISO role.

  The DSB views the role of the CISO as the protection of the system as a whole, with data protection being just one element. The CISO role will be to provide an independent management view focused on ensuring the DSB has robust defences and processes to prevent cyber-attacks that could impair the functioning of what is viewed by industry and regulators as a critical market infrastructure.

- *Role should be part-time*
  The DSB concurs with this position and its proposal is to hire a part-time CISO along-side a full-time security engineer. The part-time effort was deliberated in the TAC meeting of 18th June 2019 and the TAC concurred with the DSB's resource mix.

Considering the responses in favour:

- *Role should be reviewed to ensure validate long-term need*
  The DSB concurs with this approach, as a means to establish whether the role is necessary and if so, the long-term resource-mix that provides best value.

Industry responses were reviewed at the TAC meeting on the 12th August 2019 and the TAC concurred with the DSB's proposal. The TAC also affirmed the importance of a check-point to determine whether the role was necessary and if so, the best resource-mix.

DSB Next Steps

The DSB will on-board a part-time CISO and full-time security engineer with a check-point review by the TAC after one year to determine whether the role is required in the long-term and if so, the ideal resource-mix.

Decision 25: The DSB will progress with the hire of a part-time CISO and a full-time security engineer. The DSB will undertake a review with the TAC after one year to assess the long-term needs.

6 Update on User Fee Survey and Group Wide Agreement Forum

The DSB consulted on user fees in relation to the timeline for annual fee determination including any associated cost adjustment that may be required; fee discounts for entities requesting multiple or group wide agreements, as well as establishment of a DSB Agreement Forum, based user feedback received in the past 12 months. The responses are summarised below, together with the DSB's analysis of the responses and proposed next steps.

6.1 User Fee Survey

CP2 Question 26: The current timeline for determination of annual fees is the first working day of December (DSB Charges Policy – paragraph 2.41). Communication of the fees is published two days following the fee determination i.e. within the first week of December.

When do you need the annual fees for the following year to be communicated?

- July
- August
- September
- October
- November
- December (unchanged)
- No opinion

Industry Responses

The responses received to the question posed in the second consultation are set out below.

	Yes - July	Yes - Nov
	2	**3**
Trade Associations		
DSB Users	2	3

Analysis of Responses

There is consensus from the responses to the User Fee Survey in March 2019 (results summarised in CP2, section 6[10]) and responses to CP2 to bring the fee calculation and publication timeline forward, earlier than the current December timeline however, there was no consensus on the timeframe that would be most appropriate.

Comments included that the current process and procedure is adequate but also indicated having annual fee figures as early as possible would allow for appropriate budget planning. It was also stated that if bringing the dates forward resulted in uncertainty of the estimated annual cost, a change to the timelines was not supported.

[10] https://www.anna-dsb.com/download/2020-industry-consultation-paper-2/

DSB Next Steps

As stated in CP2, the DSB cannot commit to implement a revision to the annual fee user determination timeline in 2020 as part of this final report based on the limited time available to make changes. However, based on the feedback received, there is merit for further analysis to be undertaken to determine whether and by how much the annual user fee determination timeline can be brought forward.

Additionally, the Number of Infrequent Users, Number of Standard Users and Number of Power Users feed into the Fee Model Variables[11] which are fixed at the end of the first working day in December. The late date for fixing these numbers is due to the user termination notice period being sixty (60) days prior to the end of the current Initial Invoicing Period or Invoicing Period. Adjusting the termination notice period to ninety (90) days will improve the possibility of bringing the user fee calculation forward. Therefore, this proposal has been included in the current review of the DSB Access and Usage Agreement for 2020 (clause 16.6) published on 19 August 2020. The deadline for industry feedback on the proposed DSB Access and Usage Agreement and Policies is Monday 2 September 2019. Please direct feedback to industry_consultation@anna-dsb.com

With respect to publication of the 2020 annual user fees, similar to last year, the DSB will provide estimate 2020 annual user fees and costs in early October 2019 to assist users with budget planning.

Decision 26: DSB will undertake analysis to determine whether and by how much the annual user fee determination timeline can be brought forward and will confirm feasibility by end of Q1 2020.

[11] https://www.anna-dsb.com/fee-model-variables/

CP2 Question 27: The current cost recovery model results in DSB fees being set in way that incorporates adjustments related to the following year's service provision, based on industry consultation feedback and input from both industry committees.

By bringing the fee determination period forward, the DSB may need to allow for some level of build & run related uplift. This is because the outcome of industry consultation may not be known at the time of fee determination if the timeline is brought forward.

What level of cost adjustment should be accommodated?

- 0-4%
- 4-858%
- 8-12%
- No opinion

Industry Responses

The responses received to the question posed in the second consultation are set out below.

	Yes: 0%-4%	No
	5	0
Trade Associations		
DSB Users	5	

Analysis of Responses

Responses to both the User Fee Survey and CP2 indicated a clear preference for cost adjustment, if required, to be 0-4%. Only one comment was received noting, as a general principle, that cost increases are not supported, recommending that they be kept to a minimum.

DSB Next Steps

The DSB has a continued focus on cost-efficiency which has resulted in 2017 and 2018 service provision being delivered under budget, the DSB statutory accounts[12] are available on the DSB website.

The consideration to allow for some level of build & run related uplift is specific to bringing the fee determination period forward, linked to CP2 Question 26 above. The responses received will be factored into the analysis to be undertaken in relation to CP2 Question 26.

Decision 27: The responses received will be factored into the DSB analysis to be undertaken in relation to CP2 Question 26.

[12] https://www.anna-dsb.com/financial-accounts/

CP2 Question 28: Industry consensus in 2018 resulted in the DSB making no changes to the way in which user fees were determined for 2019.

Do you believe this should remain the case?

- Yes
- No
- No opinion

Industry Responses

The responses received to the question posed in the second consultation are set out below.

	Yes	No
	3	**4**
Trade Associations	2	
DSB Users	1	4

Analysis of Responses

There was split view in both the earlier User Fee Survey and the CP2 responses as to whether the fee model should remain unchanged. An earlier comment from a trade association noted the current process and procedure to be adequate for the purposes stated whilst another stated that a discount should be introduced for entities requesting multiple or group wide agreements whilst.

As part of any additional user fee related feedback for CP2 Question 30, there was support from a user for an alternative fee model whereby fees are based on a contracting entity agreement (including an entity's branches and subsidiaries) and includes a fixed user charge in addition to a variable charge based on the number of distinct ISINs an institution has asked to be created.

DSB Next Steps

No changes will be made to the 2020 fee model. However, given the split view, the DSB will revisit interest in this topic as part of next year's consultation.

With respect to multiple or group wide agreements, this topic will be considered as part of the Agreement Forum addressed in CP2 Question 30.

Decision 28: No changes will be made to the 2020 fee model however, interest in this topic will be revisited as part of next year's consultation.

CP2 Question 29: The current fee model is designed to ensure that all users of the service, irrespective of size or whether a multi-faceted organisation, can reasonably access the services under fair and equitable terms. Based on this model, the applicable annual fee is applied to each user who executes the DSB Access and Usage Agreement regardless if they have an existing agreement/s in place.

Please note, any amendment to the fee model including discounted fees for those users with multiple agreements means the revenue reduction will need to be recovered by the user base to ensure cost recovery of the service.

Do you believe a fee discount should be made available for entities requesting multiple or group wide agreements?

If yes, above, what level of discount should be applicable? Please select.

- No
- Yes, 15%
- Yes, 20%
- Yes, 25%
- Yes, 50%
- No opinion
- Other

Industry Responses

The responses received to the question posed in the second consultation are set out below.

	Yes	No
	4	**5**
Trade Associations	2	
DSB Users	2	5

Analysis of Responses

A split view was received with a majority of those in favour of discounts for entities with multiple agreements, having multiple agreements in place.

Several comments were received recognising that any introduced discount would require the revenue reduction to be recovered buy the user base. It was noted by two trade associations that smaller users should not incur higher fees to support large global institutions and another user stated there does not seem to be a huge benefit to implementing a discount for users with multiple agreements if the discount would be reallocated across the user base to be recovered. One further comment suggested it is reasonable to provide fee discounts for entities requesting multiple or group wide agreements.

One recommendation was for consideration to be given on a case by case with each individual firm however, this approach would go against the DSB principle of providing fair and equitable terms across all users.

DSB Next Steps

Given the favourable response to establish the DSB Agreement Forum (CP2 Question 31), this topic can be included for discussion with recommendations and/or proposals to be included in the annual industry consultation in 2020.

Decision 29: Include the topic for discussion in the DSB Agreement Forum with recommendations and/or proposals to be included in the annual industry consultation in 2020

CP2 Question 30: Please provide any additional user fee related feedback you wish to provide.

Industry Responses

Three comments, summarised below, were received which touched on feedback previously captured in this document –

- reiterating that smaller users should not incur higher fees to support large global institutions (covered in CP2 Question 29)
- support for an alternative fee model whereby fees are based on a contracting entity agreement (including an entity's branches and subsidiaries) that includes a fixed user charge in addition to a variable charge based on the number of distinct ISINs an institution has asked to be created (covered in CP2 Question 28)
- Request for the DSB to focus on core functionalities and surprised that almost two years post go-live, costs continue to increase (covered in CP2 Question 1 & 2)

With respect to the last bullet, it is key to highlight that the proposals contained within the annual consultations are a result of user requests and industry feedback arising during the prior 12-month period.

The DSB aims for its service evolution to be aligned with industry and regulatory expectations and requirements. The aim of the annual industry consultation process is to ensure the DSB's broad spectrum of users have an opportunity to shape the development and review process, which includes awareness of the associated costs, so the cost benefit analysis can be considered as part of users' feedback.

6.2 DSB Agreement Forum

CP2 Question 31: Do you concur with the DSB's proposal to form the DSB Agreement Forum and present its findings within the annual DSB consultation in 2020? If not, what is your specific alternate proposal (if any)?

Industry Responses

The responses received to the question posed in the second consultation are set out below.

	Yes	No
	5	**0**
Trade Associations	3	
DSB Users	2	

Analysis of Responses

All respondents to this question were in favour of the establishing the DSB Agreement Forum and for the findings to be presented within the annual DSB consultation in 2020. Specific comments stated it was a reasonable way forward and another requested for inclusion of all DSB user types independent of size to be represented.

DSB Next Steps

The DSB will proceed with the proposal set out in the second consultation paper[13] which is to move forward with establishment of the DSB Agreement Forum with those participants who have expressed an interest as well as ask for any other interested parties to express their interest by 1st September 2019. Once established, the DSB Agreement Forum will commence work in Q4 2019 with the aim for recommendations to be included in the annual industry consultation in 2020.

Decision 31: DSB to proceed with the proposal set out in the second consultation paper.

Expressions of interest to participate in the DSB Agreement Forum should be directed to secretariat@ANNA-DSB.com

[13] https://www.anna-dsb.com/2020-user-fee-and-user-agreement-consultations/

7 Appendices

7.1 Appendix 1 - Cost Basis 2019

Annual user fees recover the DSB overhead costs. The total estimated annual overhead upon which the cost-recovery fees were calculated is €9.14m, which is in line with the amount previously communicated[14]. The fee calculation was based on the contracts in force as of 3 December 2018 and the user categories those contracts represent. Excess revenues caused by additional contracts signed after 1 January 2019 will go to defraying user fees for the next contract year.

The tables below show the breakdown of the Estimated Total DSB Cost of €9.14m on 3 December 2018, following feedback received as part of the industry consultations in 2018 and include a 20% margin for financial sustainability:

Category (Recurring)	Description	Amount
Technology & Operations	Operation of the DSB platform including technical and asset class support	€5,369K
Management	Senior management team including MD, MSP management team and CFO	€1,430K
Administration	Administrative costs and overheads such as office space, travel and expenses and administrative support functions	€829K
External consultants	External oversight and legal, professional & communication	€414K
Previous Year Operating Expenditure Adjustment	**Reflects the budgeted reduction in user fees**	**-€283K**
Total		**€7,759K**

Category (Time-limited)	Description	Amount
Start-up costs	Amortization of start-up costs over the first 4 years	€1,142K
Financing costs	Start-up loan interest costs repaid over 4 years	€240K
Contingency	An annual contingency fund to cover unplanned costs during the initial few years of operation. For example, if industry were to request the DSB to provide additional services within the cost-recovery mandate	€0K
Total		**€1,382K**

[14] https://www.anna-dsb.com/fee-model-variables/

7.2 Appendix 2 - Principles for Excess Fee Income Redistribution

The following principles will guide the use of any excess fee income received by the DSB – primarily generated because of late joiners and/ or mid-cycle upgrades:

- 100% of the excess fee income will be passed back to DSB Standard and Power Users
- The mechanism used to address any excess fee income received by the DSB should be simple and transparent

Excess fee income earned will be used to reduce the fees of the DSB for the following year and will form part of the variables set one month before the start of the annual subscription period. The DSB assumes that most users will roll their annual contracts with the utility.

Respondents agreed with the principle of using excess revenue to reduce user fees for the following year. There were additional suggestions around ensuring any excess is minimized through the calculation of initial fees and offsetting on a firm-by-firm basis.

Through the fee model explained in this consultation, the DSB is focused on ensuring that minimal funds are raised although this is balanced against the need for financial stability of a key market utility. Reallocation on a firm-by-firm basis will only be considered fair if the DSB also accounts for the exact amount of data and the number of ISINs being used by each firm. Not only would this analysis be an additional cost, it potentially would also skew the charges against those who 'acted first' to create ISINs that were then used by the broader community. The DSB prefers to keep the return of excess fees simple and reduce the upcoming year's entire cost base.