2019 questions to industry

The following questions are based on queries and feedback received from industry since the DSB went live in October 2017. The purpose of the consultation is to obtain industry's view is to ensure that the DSB focuses its attention on those potential changes which are the most valuable. The features identified as most desired by industry (because of this first round of consultation) will be subsequently analyzed in greater detail. Additional detail on costs and functionality will be provided as part of the second consultation to allow industry to feedback on whether it wishes the DSB to proceed with the implementation in 2019.

Proposed Format for Industry Responses to the DSB Consultations

- Consultation responses should be completed using the form below and emailed to industry consultation@anna-dsb.com
- The option is provided for respondents to stipulate whether the response is to be treated as anonymous. Note that all responses are published on the DSB website and are not anonymized unless specific requests are made
- Where applicable, responses should include specific and actionable alternative solution(s) that would be acceptable to the respondent to ensure that the DSB can work to reflect the best target solution sought by industry (within the governance framework of the utility)
- As with prior consultations, each organization is permitted a single response
- Responses should include details of the type of organization responding to the consultation and
 its current user category to enable the DSB to analyze client needs in more detail and include
 anonymized statistics as part of the second consultation report
- Responses must be received by 5pm UTC on 13th June 2018
- All consultation related queries should be directed to industry consultation@anna-dsb.com

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| Com | pany | Bank of America/Merrill Lynch |
| Com | pany Type | Buy Side Investment Firm |
| User | Туре | Power |
| Sele | ct if responses should be anonymous | |
| Section 1: User Categorization and Fees | | |
| # | Question for Consultation | Participant's Response |
| 1 | Do you agree with the proposed user categorization? If not, what alternative(s) do you propose? Wherever possible please refer to public data made available by the DSB in your response. | This does not really impact us as a Power User |
| 2 | Do you concur with the proposed user fee model? If not, what alternative do you propose? Wherever possible please refer to data made available by the DSB both as part of this consultation and publicly. | As long as there is transparency to the methodology |
| 3 | The DSB currently offers identical terms to all users in a particular category. Should the license terms for commercial intermediaries be | We do not have a strong opinion |

| | different from other user license terms? If so, please specify alternative terms for commercial intermediaries. The DSB's user fee model assumes continued use over the year. Do you have workflows that require one-off DSB connectivity? If so, please | |
|------|--|--|
| 4 | could you provide examples e.g. one-time data consumption, one-off bulk creation of OTC ISINs, etc. | No |
| 5 | What additional user categories and/or charging models do you want the DSB to provide, if any? | None |
| Sect | ion 2: Functionality | |
| | The DSB currently provides for web-interface (GUI) users to download search results in JSON (machine readable) format. | |
| 6 | a. Do you believe the DSB should extend the types of download formats considering the diverse user base (ref. section 2 of the DSB consultation presentation)? | Yes, there should be additional formats that the users can download. |
| | b. If yes, do you believe that csv (comma separated values) is a reasonable alternative format for downloaded search results? If not, please provide preferred alternatives. Note that the csv format is specifically suggested due to user requests since launch. | DSB should provide both options: JSON output would allow the developers to analyse and prepare their implementation and csv would allow business analysts to review the details at a glance. |
| 7 | The DSB currently provides two automated integration methods (ReST and FIX APIs) but has also received interest for Excel API integration to allow easier manipulation and access to OTC derivatives reference data. | |

| | a. Do you think the DSB sh Excel API integration as option? b. If Excel API integration is provided, should the fur include both ISIN creations search/retrieval, or is a functionality sufficient? please provide the approach the functionality. | to be ctionality n and ubset of the f a subset, opriate scope of | T |
|---|---|---|---|
| | c. Should the DSB consider integration options – proof otherwise - such as an Ausers to more easily obto human readable format explain what type of API suit your needs. | PI that enables ain data in a This is not necessary for our purposes. PIf yes, please would best | |
| 8 | The DSB currently updates its predemplates (request and response enumeration list or value change a new reference rate, underlying currency could need to be added this may result in a two- to four development, testing and deploteach occasion (depending on the change), which in turns requires follow a similar process. Do you believe this approach nealtered or is the current process market satisfactory for your purposes. | changes and get sign-off from our downstream clients. The timeline for SONIA did not align to the timings here. The dependency on ISDA and the Product Committee for the implementation schedule is the DSB's current problem. If the FED publishes a schedule for a rate change, the DSB should notify their stakeholders of the aligned DSB timeline. Similarly with all rate, currency, index | |
| 9 | The DSB currently provides end- record files in JSON format on a | | |

| | has received some requests to also make | consolidated, on-demand data specific to |
|----|---|---|
| | available (a) consolidated, on-demand data for | users in a particular period. |
| | any user-defined period and (b) such | · |
| | consolidated snapshots to be provided in | |
| | comma separated value (csv) format to allow a | |
| | broader set of users to be able to consume the | |
| | data in a less technology intensive manner. | |
| | Do you concur with this view? If yes, please | |
| | could you provide examples of how this | |
| | additional functionality would aid your | |
| | integration with the DSB. | |
| | The existing DSB GUI ISIN search functionality is | |
| | targeted at technical users who understand the | |
| | Lucene programming language (see here: | |
| | https://www.anna-dsb.com/download/dsb- | |
| | search-1-3/). This means organisations and end- | |
| | users with small IT departments may not be | We do not fall into this category so we do |
| 10 | able to take advantage of the full search | not have an opinion on the benefits of the |
| 10 | capabilities of the DSB GUI. | proposed enhancements. |
| | | proposed emaneements. |
| | Bearing in mind the additional development | |
| | effort that would be required, should the DSB | |
| | enhance its GUI to allow non-technical users to | |
| | search for ISINs by any attribute across any | |
| | product template? | |
| | Some user feedback has been received asking | |
| | the DSB to provide analytics that would allow | |
| | users to have real-time insight into ISIN | |
| | creation trends within the DSB. | |
| | a. Do you concur? | No |
| | | The purpose of the DSB is to issue ISIN's not |
| 11 | | provide analytics. |
| | b. If yes, what analytics would you like to | Any trend analytics on the creation of an ISIN |
| | see the DSB make available to the | particularly on a real-time basis – would |
| | market? | need to be vetted by our business and |
| | | compliance line to assure that no proprietary |
| | | information is being provided that can |
| | | potentially create an arbitrage opportunity |
| 1 | | or trading advantage. |

| 12 | What additional user workflows, if any, do you want to see the DSB support? | Workflows for all OTC instruments need to be created to assure we can issue ISINs on all valid instruments. Workflows to support Reference Rate, Currency and Domain data additions and changes which we can ticket and track. As it stands when we become aware of a change our only outlet is to send an email to the secretariat. |
|------|---|--|
| Sect | ion 3: Service Levels | |
| | Are you satisfied with the DSB's current client service levels? | Not really |
| 13 | a. If not, what more do you believe the DSB could do to improve the level of service available to you? | The move to 'BAU' has started before the full set of EMIR/MiFID templates have been delivered. We need a forum to extend the project driven interface: industry wide sessions lead by the DB or reinstate the BAML calls and BAML will invite other industry players like JP, Morgan Stanley and Goldman. It takes too long to release changes to templates which are critical to ensure accurate reporting under MiFID II. |
| | b. The DSB has received requests from users to provide named account managers for single point of contact for queries. The DSB currently does not have personnel providing such a function and would need to hire additional staff to fulfil this need. | At BAML we had an excellent named contact and were able to work with the DSB to implement a robust solution. It might be sensible to extend this to a wider audience as above. The need for specific account managers may |
| | Do you believe the DSB should have account managers? If yes, please explain why and provide your proposal for an appropriate ratio of account | be mitigated by offering street=wide or asset class specific forums that allow DSB users to address questions and concerns. |

| | managers to users for each category of DSB user. | In the even Account Managers are made available the ratio should be proportional to the DSB User Type. |
|----|--|--|
| c. | The DSB has received requests from users to provide telephone support in addition to the existing email-based support. The DSB currently does not have the personnel to provide such a function and would need to hire additional staff to fulfil this need. Do you want the DSB to enhance its support model to also include a phone-based helpdesk during operating hours? If yes, please explain why this is needed, with reference to the categories of DSB users that you believe telephone support should be made available to. If a phone based model is required, do you believe an external ticketing system should be implemented to track calls made to the DSB? | It would be sensible to look at the support model of other industry wide providers. The DSB is unusual in NOT having a support line. |
| d. | What else (if anything) could the DSB do more/ less to better service your institution's needs? | As above, a regular touch point would make life easier. Even as we move into 'real BAU', there is constant change. Apart from introducing a support line place that covers telephone\on-line chat\email support, the DSB could look to set up industry working groups to discuss and prioritize all issues raised to the support teams. This will then also help the industry to be aware what items will be released and when. A clear and detailed 'help to guide' for each template would be good as this will clarify to the industry on their usage and prevent issues where different investment firms |

| | | receive a different ISIN for the same |
|----|---|---|
| | | transaction. |
| | | |
| | | |
| | | |
| | The comment DCD newformering CLA is to muccose | |
| | The current DSB performance SLA is to process | |
| | 99% of all messages across all workflows within | |
| | 1,000ms. The DSB proposes a more targeted | |
| | performance SLA based on 3 individual | |
| | workflows: | |
| | a. ISIN Record retrieval workflow: 99% of | |
| | all lookups (via an ISIN identifier) to | |
| | occur within 500ms | |
| | b. ISIN Create Request workflow: 99% of | |
| 14 | all ISIN create requests to be processed | |
| | within 1,000ms (both for ISIN creation | |
| | and return of existing ISIN where the | |
| | ISIN already exists) | |
| | c. ISIN Search workflow: 99% of all | |
| | searches (via wildcard attributes) to | |
| | occur within 5,000ms | |
| | Is the proposed revision to the model and | |
| | latency metrics appropriate? If not, what do | |
| | you believe is more appropriate and why? | |
| | The DSB has received user requests to stay | |
| | abreast of upcoming market changes and | |
| | enable the DSB to provide timely | It is clear that the DSB has not been able to |
| | implementation timelines (e.g. SONIA reform, | react to information provided from the |
| | introduction SOFR, currency code updates, | • |
| 15 | reference data requirements for FTRB, etc.). At | sources – e.g. the Bank of England on the |
| 15 | this time the DSB is not integrated within | SONIA reform. |
| | existing industry fora which has resulted in user | That is the biggest issue. If the provider |
| | feedback to the DSB that some notifications to | publishes a schedule, the DSB should be able |
| | the DSB of impending industry changes have | to respond |
| | occurred late, resulting in the late creation of | |
| | associated ISINs. | |
| | | |

| | a. Do you believe the current level of DSB integration with industry is sufficient? If no, please provide examples of how the DSB can be better integrated with industry. | This could be improved as we do need a quicker time-to-market especially when changes only impact the enumeration list. The turn-around time here should be maximum of 2 days not weeks. |
|----|---|--|
| | b. Should the DSB explore membership of industry bodies to better integrate with user expectations and workflows? If yes, which bodies (for example AFME, EVIA, FISD, FIX, ICMA, ISDA, SIIA), bearing in mind that membership will | I do not see the benefit of the DSB going to the industry forums. The DSB user community all go to these forums. BAML has notified the DSB of coming changes with a slow response. |
| | require additional resources and potentially expenditure on membership fees? | As above, it is not the lack of information, it is the inability to act. |
| | c. Are there any other actions the DSB should take for better integration with industry? | Engage with your user community to share information and be seen to act on it. |
| 16 | The DSB introduced a new web-site (www.anna-dsb.com) in 2018 that contains amongst other items, the DSB's performance SLAs, the DSB User Agreement, the DSB's availability hours, all technical documentation and all DSB notifications. | Verified use and test cases for each of the templates. It would be good if the DSB run a session on the web-site or provided a full overview. |
| | What additional transparency information would you like to see made available and why? | |
| 17 | The current DSB availability hours is 24*6, from Sunday 12 noon UTC to Saturday 12 noon UTC and reflects the DSB's mandate to support RTTS-23 reporting. The DSB has heard that in some circumstances this may not be sufficient; e.g., where OTC-ISINs are being created to allow for RTS-2 reporting. Bearing in mind that additional availability hours will require additional resources: | |
| | a. Are the current availability hours appropriate? | No The service should be available whenever the |
| | b. If not, what are the most appropriate availability hours? | OTC markets are open. The reporting of |

| | c. What should be the downtime period for holidays (if any)? | RTS-23 should not be the basis for the availability of ISIN generation. While in the early stage it was understandable that ANNA focus on MIFID-2/RTS-23, the service should be evolving to the stage where it can generate an ISIN for any OTC product regardless of MIFID-2/RTS-23 reporting requirements. No downtime at holidays – even Christmas is a working day in Turkey (for example) |
|----|---|---|
| 18 | Programmatic Users are currently able to submit up to 60 messages per minute via ReST and have one message in flight via FIX. Details are: A. FIX connected Users streaming messages to the DSB Service must not have more than 1 message (comprised of create or search or any other message) per connection pending acknowledgement from the DSB Service at any given time; B. Users connecting via REST API (as set out in the Connectivity Policy) are permitted to make up to 60 API calls (comprised of create or search or any other calls) per minute per connection subject to the overall cap set out in the acceptable use policy; Do you believe the DSB should revisit these thresholds? If yes, do you believe the rate should increase or decrease given that programmatic users may have up to 10 simultaneous API connections? Please provide acceptable alternative thresholds if you believe that the current values should be amended. | The thresholds should be revisited or some type of throttling should be put into place. As it stands there are times where large bursts of ISIN requests will need to be made. |
| 19 | Programmatic Users are currently subject to the following weekly caps to ensure that the DSB infrastructure continues to offer stability: | The thresholds numbers should be revisited. The numbers are fairly arbitrary and do not appear to factor in business conditions that |

| A. | Users connected via an API (FIX or |
|----|---|
| | ReST) must not send more than 200 |
| | invalid messages a day or more than |
| | 1,000 in a calendar week across all API |
| | connections; |

may require increased loads under a given situation.

B. Users connected via an API undertake not to send the DSB Service more than 100,000 search requests or 50,000 ISIN creation requests in any given calendar week across all API connections.

Do you believe the DSB should revisit these thresholds? If yes, do you believe the rate should increase or decrease given that users are able to have up to 10 simultaneous API connections? Please provide acceptable alternative thresholds if you believe that the current values should be amended.

Technical Support Outside Availability Hours:

In order to save on staffing costs, the DSB does not currently monitor the system outside the mandated availability hours. Instead, support staff start their rotas one hour before the availability start time. Consequently, a system failure during the unavailability hours that lasts longer than one hour will impact the DSB uptime SLA. The DSB is aware that the risk of system failure is typically higher at start of week because of system restarts that typically occur during this period.

Therefore, the DSB has considered two options to address this risk:

- Institute an on-call rota during the 24hour unavailability period so that serious failures are picked up on a reactive basis and worked on as soon as they occur.
- Institute an additional set of support rotas for the unavailability hours, to ensure continuous proactive

Consultation Paper 1 – response deadline is 5pm UTC on 13th June 2018

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| | monitoring of the system. This option will also result in the 24x7 availability of the technical support function. a. Do you agree that the risk outlined above should be addressed by the DSB? b. If yes, do you have a preference on which option provides the optimal outcome bearing in mind that the reactive support option (1) will likely incur less costs to implement than implementing the proactive 24x7 availability of technical support in | Yes |
|------|---|--|
| | option (2)? c. Are there any other options that the DSB should explore to mitigate the risk outlined above? | n/a |
| Sect | tion 4: Service Availability Current scheduled weekly downtime is 12 noon | |
| 21 | UTC Saturday to 12 noon UTC Sunday. a. Is this appropriate? | Is a 24 hour downtime window needed? Ideally would like as little downtime as possible. |
| | b. What should be the downtime period for holidays (if any)? | None – there are no global holidays |
| 22 | Multiple Primary Regions: The existing DSB Disaster Recovery (DR) architecture is based on a single primary Amazon Web Services (AWS) Region in the EU that is in continuous use, and a second passive DR Region in the US that is only used if there is a disaster in the AWS EU Region. This means the DR site is only actively tested for effectiveness once a year as part of an annual | configuration would be key to this approach to assure transparency of the fail over. |
| | DR test. The DSB would like to understand industry appetite for a revised architecture that allows for both AWS regions to be primary, by implementing a system where the primary region flip-flops between the two regions on a | In the event DSB chooses to stay with a single primary AWS, we would like to see a DR test include a minimum of a full weeks run on the contingency service. |

| | regular basis (for example, every week or | | | |
|---|--|---|--|--|
| | month). | | | |
| | Such an approach will ensure that both Regions are fully in sync on a continuous basis, thereby lowering the risk of failover to DR uncovering issues only at the time of failover. | | | |
| | Do you believe the DSB should move to such a primary / primary architecture across the two AWS Regions as a means of increasing the robustness of the DSB's DR plans? What other factors should the DSB consider for its DR plans? (e.g. is the preservation of connectivity configuration if the primary were to flip-flop an important consideration for API users?) | | | |
| 23 | Multi-cloud DR: The DSB's operations are hosted entirely on the AWS cloud across two separate AWS Regions, utilising 3 separate Availability Zones within each Region. The DSB believes this architecture mitigates all risks apart from a total outage of the cloud operator itself. Mitigating this remaining risk will require the DSB to consider a multi-cloud hosting model to remove the dependency on a single operator (AWS). Do you believe the DSB should mitigate the risk of collapse of an entire cloud operator by | This is the most desired infrastructure as it mitigates the vast majority of the DR risks. | | |
| | moving to a dual-cloud deployment? | | | |
| Section 5: DSB Access and Usage Agreement | | | | |
| 24 | The DSB does not currently incur penalties for failing to meet SLAs and has received some comment on this. Do you have a view on how this should work given the DSB's cost-recovery mandate? | There may not be formal penalties, but we need to make sure the DSB remains accountable and committed to provide a quality service even if this costs the users more. | | |
| 25 | Uncapped fee amount – there has been commentary about the uncertainty in the DSB's current fee model. Do you have a view on | No – as long as there is transparency on the model. | | |

| | alternative models that could be applied across the spectrum of DSB user types? | | | | |
|------|--|--|--|--|--|
| 26 | Agreement can be changed unilaterally – Do you have a view on how the DSB could address the risk that unforeseen events require a contract change, especially given the start-up nature of the utility which increases likelihood of such risks? | We agree that there may be times that the contract needs to be changed unilaterally, however, we would request sufficient notice is given and time for users to review so we can assess the impact to us. | | | |
| 27 | The DSB Access and Usage Agreement requires intermediaries to supply details of any client who should be a paying member of the DSB. Do you have a view on whether this is appropriate? If you disagree with the DSB's current approach, please propose an alternate mechanism that could be instituted to ensure that users who sign DSB contracts are not disadvantaged by users who abuse the system by going through an intermediary but not paying. | We think this is appropriate | | | |
| Sect | Section 6: AOB | | | | |
| 28 | What other operational enhancements would you like to see the DSB make? | Complete the requirement to allow the industry to request an ISIN for all OTC products. | | | |
| 29 | What additional services would you like to see the DSB provide? Please provide examples or business cases where relevant. | Our understanding was the DSB would be able to provide an ISIN for <i>any</i> OTC derivative. We would like the functionality expanded past the RTS-23 reporting requirements so ISINs may be assigned to any asset class. | | | |
| 30 | What are the top three changes you would like to see the DSB make to better serve your institution's needs (including any that may have | Deliver the templates and functionality to enable an ISIN to be requested for all OTC products. Where certain products cannot be supported by DSB, provide a clear guide as to what the | | | |

| | been listed above)? Listed in order of | interim expectation should be and in this |
|----|--|---|
| | preference. | way we have consistency in the industry. |
| | | |
| | | |
| | Please insert any other comments you wish to | |
| 31 | provide | |
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