



State Street Financial Center One Lincoln Street Boston, MA 02111-2900

www.statestreet.com

July 27, 2018

Association of National Numbering Agencies Via email: industry_consultation@anna-dsb.com

Re: 2019 Fee Model Questions for Industry

Dear Sir or Madam:

State Street Corporation ("State Street") appreciates the opportunity to comment on the Association of National Numbering Agencies ("ANNA") Derivatives Service Bureau's ("DSB") Second Consultation Questions for Industry. Headquartered in Boston, Massachusetts, State Street specializes in the provision of financial services to institutional investors. This includes investment servicing, investment management, data and analytics, and investment research and trading. With \$33.867 trillion in assets under custody and administration and \$2.723 trillion in assets under management, State Street operates in more than 100 geographic markets worldwide, including North America, Europe, the Middle East and Asia (as of June 30th, 2018).

State Street is organized as a United States ("U.S.") bank holding company, with operations conducted through several entities, primarily its wholly-insured depository institution subsidiary, State Street Bank and Trust Company. Our perspective in respect to this response is broadly informed by our State Street Global Markets ("SSGM") group, which operates two multilateral trading facilities ("MTFs") and one systematic internaliser ("SI").

We appreciate the DSB's consideration of our responses to the last consultation in regards to the proposed fee model. As an alternative model to consider, State Street recommends that fees be based on a contracting entity agreement. Specifically, we propose a fee model that includes a fixed user charge in addition to a variable charge based on the number of distinct International Securities Identification Numbers ("ISINs") an institution has asked to be created.

As we have articulated previously, we believe that all stakeholders should have representation on the DSB Product Committee. As custody banks are privy to data from multiple clients, we have the ability to aggregate data and look across our client base. Custody banks are also focused on the overall infrastructure of reference data and play a key role in the post-execution lifecycle of over-the-counter ("OTC") derivatives. State Street is also further suited for a role on the DSB given our role as both an operator of two MTFs and one SI.

Furthermore, we encourage the DSB to further integrate with industry by leveraging existing product and technical advisory committees and by inviting representatives from other organizations (e.g., trade associations) to join the DSB Product Committee. We believe that trade associations, specifically the



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Global Foreign Exchange Division ("GFXD") of the Global Financial Markets Association ("GFMA"), the Association for Financial Markets in Europe ("AFME"), and the International Swaps and Derivatives Association ("ISDA") are best placed to provide industry-wide feedback. Furthermore, as the DSB looks to improve its service, it would also benefit from enhanced governance.

Please feel free to contact Yusuf Nurbhai at ynurbhai@statestreet.com or Guy Kirby at gkirby@statestreet.com should you wish to discuss State Street's submission in greater detail.

Sincerely,

Yusuf Nurbhai Managing Director SSGM Global Link 630/

Guy Kirby
Senior Vice President
SSGM EMEA FX Trading, Sales, & Research

1.1 Appendix 3 - Second Consultation Questions for Industry

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
- 2. 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
- 3. 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)
- 4. As with prior consultations, each organization is permitted a single response
- 5. Responses should include details of the type of organization responding to the consultation and its current user category to enable the DSB to analyse client needs in more detail and include anonymized statistics as part of the final consultation report
- 6. Responses must be received by 5pm UTC on 27th July 2018
- 7. All consultation related queries should be directed to industry consultation@anna-dsb.com

Name		Yusuf Nurbhai, Managing Director, Global Link; Guy Kirby, Senior Vice President, SSGM EMEA FX Trading, Sales, & Research
Email Address		<pre>ynurbhai@statestreet.com gkirby@statestreet.com</pre>
Company		State Street Corporation
Comp	any Type	Financial
User Type		Power
Select	if response should be anonymous	
#	Question for Consultation	Participant's Response
#	Question for Consultation on 1: User Categorization and Fees	Participant's Response
#	1	Participant's Response State Street recommends revising the fee
#	on 1: User Categorization and Fees	·
#	on 1: User Categorization and Fees What specific and objectively verifiable models (if	State Street recommends revising the fee
# Section	on 1: User Categorization and Fees What specific and objectively verifiable models (if any) are you able to propose that reasonably	State Street recommends revising the fee model so that it is based on a contracting
#	what specific and objectively verifiable models (if any) are you able to propose that reasonably address the needs of multi-segment and/or multi-	State Street recommends revising the fee model so that it is based on a contracting entity agreement (including an entity's
# Section	What specific and objectively verifiable models (if any) are you able to propose that reasonably address the needs of multi-segment and/or multi-market trading venues, whilst not placing an	State Street recommends revising the fee model so that it is based on a contracting entity agreement (including an entity's branches and subsidiaries). The fee model can
# Section	what specific and objectively verifiable models (if any) are you able to propose that reasonably address the needs of multi-segment and/or multi-market trading venues, whilst not placing an adverse cost on new or smaller market participants	State Street recommends revising the fee model so that it is based on a contracting entity agreement (including an entity's branches and subsidiaries). The fee model can consist of a fixed user charge plus a variable

be objectively validated against a publicly available dataset (FIRDS - which contains segment level MICs), whilst ensuring that new and/or smaller institutions are not required to fulfil the same fee requirements as trading venues who, because of regulatory requirements, must separate their business amongst numerous entities. The proposed model aims to ensure that a small credit institution or retail bank is not required to pay the same fees as a large derivatives market maker or similarly, that a small, single market trading venue is not required to pay the same fees as a multi-market trading venue. It is likely that a LEI level model (as proposed by some respondents) will place smaller users of the DSB at a significant cost disadvantage.

requested to be created.

What specific and objectively verifiable models (if any) are you able to propose that reasonably address the needs of complex, multi-faceted organizations) whilst ensuring that new and smaller market participants can continue to access the services they currently utilize without being economically disadvantaged at a higher price point. (refer to 2.2.1 above)?

The proposed model aims to ensure that a small credit institution or retail bank is not required to pay the same fees as a large derivatives market maker or similarly, that a small, single market trading venue is not required to pay the same fees as a multi-market trading venue.

ISIN creation for derivatives is limited to Trading Venues and Systematic Internalisers ("SIs"). A small credit institution or retail bank is unlikely to be an SI, as the definition of an SI requires an institution to process substantial transaction volumes in any given sub-asset class.

A small credit institution or retail bank is most likely to be a consumer of ISIN information, and would fall into the Search Only Standard User category proposed in the first consultation. We continue to support the addition of this new user category.

Section 2: Functionality

3.i

2

Industry collaboration: Several respondents requested that the DSB engage users in longer range planning sessions to collaboratively design and deploy additional functionality alongside any service changes and/or enhancements, thus resulting in improved user communication and enabling the DSB to become more integrated with

State Street is generally supportive of a user forum to foster industry collaboration; however, we believe this should be accomplished at no additional cost. State Street believes that FX dealer specific input for the DSB is best sourced via the Global FX Division of the GFMA. We believe strengthened coordination with this group

industry needs

Feedback was also received requesting the following from the DSB:

- the provision of regular touch-points with industry
- the need for DSB driven industry working groups to be set up to facilitate work on certain enhancements
- the creation of a forum for the escalation of issues and/or the prioritization of change requests
- improved access to market knowledge, including specialists with detailed, market segment specific knowledge of the relevant protocols
- introduction of additional templates across the full spectrum of OTC derivative products, especially for more granular indices and complex derivatives
- introduction of ISIN hierarchies that fall outside of the regulatory scope
- automation of existing services such as the proprietary index submission and use process
- o improved alignment with ISDA and the GFMA
- o development of a three-year strategic plan

The proposed structure and composition of the user forum is provided below for industry review and feedback. Based on responses to the first consultation, it is anticipated that:

- the user forum would be driven by institutions seeking additional functionality and service levels from the DSB
- the user forum would comprise a crossfunctional skill set, with a lead representative per organization serving as a conduit into the relevant organization's needs and priorities
- o the user forum would facilitate industry

would increase effectiveness and minimize costs as compared to the user forum proposed by the DSB.

integration as DSB products and services evolve for those user segments seeking enhancements o the user forum would convene monthly (consistent with anecdotal requests received by the DSB), requiring on average a fortnight's work effort to ensure preparatory and followup activities so that expectations were fulfilled in a manner consistent with that required from key market infrastructure providers o the user forum could be resourced based using one of the following approaches, based on industry feedback with respect to desired outcomes: administrative support to collate/ disseminate feedback and set up logistics. The expected cost is €135k p.a. which includes a blended resource set, office, infrastructure and related administrative and financing costs a mix of administrative and some OTC derivative market experience to facilitate logistics and assist with product/service design. The expected cost is €190k p.a. which includes a blended resource set, office, infrastructure and related administrative and financing costs a combination of resources with deep OTC derivative delivery and product development skills to expedite discussions and delivery, with proactive industry engagement. The expected cost is €230k p.a. which includes a blended resource set, office, infrastructure and related administrative and financing costs If yes, do you agree with the goals of the suggested

forum? Please provide your rationale.

3.ii

3.iii	If yes, do you agree with the proposed composition, structure and format? Please provide your rationale.	
3.iv	If yes, which of the three skill sets (proposed above) do you believe is required to support the user forum's goals? Please provide your rationale.	
3.v	If yes, please supply any other views you may have about any specific model you wish to see implemented.	
3.vi	If not, what model do you propose instead (if any)?	
4.i	Responsive enumeration management: The DSB can enable support for faster changes to product definition templates by enabling changes to enumeration lists during availability hours and without the need for industry to engage in a full cycle of redevelopment and testing efforts. The cumulative benefit for the DSB's programmatic users is non-trivial with five recent market changes requiring updates to approximately 1,200 templates in a three-month period. With each programmatic user spending on average two days developing and regression testing each enumeration change and a total of 78 Power Users having to make changes, this translates to approximately 156 days of "lost" time per change, i.e. 780 "lost" days per quarter across all DSB programmatic users. Given that the current pace of industry change looks set to continue considering both benchmark related evolutions and ad-hoc currency re-denominations (based on feedback received from users and regulators), proceeding with the proposed change would result in industry saving approximately 3,120 days of work effort each year. The DSB anticipates that the DSB Product Committee (PC) and TAC respectively will be involved in the design of the required product template and technology implementations, to ensure an optimal implementation approach that	State Street questions why such substantial changes are required to ISIN templates more than six months after MiFID II went live. In regards to the approximately 180 templates requiring re-working, State Street as a foreign exchange dealer and trading venue operator only uses three templates. We are concerned by the high cost proposed by this with minimal benefit to certain users.

	meets industry needs.	
	The proposed solution requires the DSB to implement product template changes whilst the system is live and operational and without incurring any downtime. This requires significant architectural changes to the ISIN engine as well as changes to deployment and monitoring systems and processes.	
	The DSB estimates this will require re-working of the template structure across appx 180 templates to allow for dynamic enumerations. Let's discuss what you're expecting to see in terms of additional detail. The cost is driven by design, documentation, development, QA and deployment effort	
	The DSB estimates build costs within the communal cost recovery ring-fence of €500K - €750K depending on the implementation approach adopted, but does not anticipate any change to ongoing run costs. The financial impact is an increase in annualised fees of €125K - €187.5K for 4 years, whilst the build cost is amortized over a 4-year period, as per the existing accounting provision for the amortization of build costs.	
	Do you concur with the implementation of this functionality in 2019, in particular given the significant amount of effort (and cumulative cost) saved by the industry?	
4.ii	If the DSB implements this functionality, do you agree that the PC and TAC should be involved in the design of the product and technology solutions respectively? If not, please propose your alternative industry engagement model.	
5.i	The DSB received feedback to provide ISIN analytics in machine-downloadable format. Based on this feedback, the DSB proposes to provide the following analytics on a monthly basis: o # of ISIN creates per product template o # of ISIN retrievals per product template	State Street believes the current analytics are sufficient, but we support the addition of new analytics over time at no additional cost.

	(where ISIN is supplied)	
	 # of ISIN searches across all product templates (search by metadata) 	
	 # of ISIN creates per user fee category 	
	 # of ISIN retrievals per user fee category (where ISIN is supplied) 	
	 # of ISIN searches per user fee category (search by metadata) 	
	 # of ISINs submitted to FIRDS per product template 	
	DSB expectation is that such analytics can be provided at no incremental build or run cost, as long as the information is placed on the DSB website once a month, for user download in a csv file format.	
	Is the proposed list of analytics appropriate? Please provide an explanation of your reasoning for any changes you would like to see.	
5.ii	Is the proposed monthly frequency of update appropriate? If not, please provide your reasoning, bearing in mind that more frequent updates may result in an incremental uplift in resource requirements	Yes
5.iii	Is the proposed delivery model of csv file download from the DSB website appropriate? If not, please provide an alternative alongside your reasoning.	Yes
Section	on 3: Service Levels	
6	Several requests were made to enable broader industry representation in the PC to enable improved integration with industry. As a reminder, the PC is currently comprised of an equal number of representatives from the buy-side, sell-side and trading venues	As we have previously stated, we believe that all stakeholders should have representation on the DSB Product Committee, including custody banks, such as State Street. As custody banks are privy to data from multiple clients, we have the ability to aggregate data and look across our client base. Custody banks are also focused on the overall infrastructure of reference data and play a key role in the

		post-execution lifecycle of over-the-counter ("OTC") derivatives. In addition, State Street can add perspectives as a trading venue operator and an SI. Furthermore, we encourage the DSB to further integrate with industry by leveraging existing product and technical advisory committees and by inviting representatives from other organizations (e.g., trade associations) to join the DSB Product Committee.
7	A recommendation was also made that the DSB not become a member of trade associations but instead reach out to the various bodies asking if the DSB can monitor the output of deliberations of various derivatives working groups on an ongoing basis Which specific industry working groups should the DSB reach out to in order to ensure it is able to monitor the output of various discussion fora and thus feed into the product roadmap and Product Committee deliberations on a proactive basis?	The DSB should expand its Product Committee to include direct participation by trade associations, specifically: the International Swaps and Derivatives Association ("ISDA"), the Association for Financial Markets in Europe ("AFME"), the Global Foreign Exchange Division ("GFXD") of the Global Financial Markets Association ("GFMA"), and the International Securities Association for Institutional Trade Communication ("ISITC").
8.i	General consensus was that holiday downtime should be eliminated and that the DSB should look to move to a 24/6.5 or 7/7 model to facilitate a global trading environment. The DSB anticipates that supporting the additional coverage and services would require the following marginal resource increase. Note that the figures below are provided on both an isolated service and combined package basis, with isolated costs overestimating the actual resource requirements given the synergies across the individual items. Isolated service costs — if any given service was to be implanted on a stand-alone basis: Remain operational across all holidays (0.2 FTE technical support uplift) Increase availability hours from 24x6 to 24x6.5 by reducing weekly downtime to	State Street supports the need for the DSB to operate on a cycle that follows the FX trading week (Sydney open on Monday, to US close on Friday), with adequate staffing and availability on holidays.

		between Saturday 20:00 UTC and Sunday	
		08:00 UTC (0.6 FTE technical support uplift)	
	0	Improve email response times for Power	
		Users (2 FTE technical 24 x 6.5 coverage: 2	
		x additional technical support	
	0	Instigate on-call rota for technical support	
		during unavailability hours for addressing	
		system failures (0.5 FTE technical support	
		uplift)	
	0	Move to a monthly release schedule for all	
		Business-as-Usual functionality changes,	
		with the aim of moving to quarterly release	
		cycles by the end of the 2019 (no impact on	
		resourcing)	
	Packag	ed service costs - implementing the service	
		nprovements in I though V above as a	
		istic package will result in the following	
	resour	ce uplifts:	
	0	Technical Support uplift from 6.5 FTE to 10	
		FTE	
	0	Secretariat / Product Management uplift	
		from 2 FTE to 3 FTE	
	0	Implementing this service is expected to	
		cost €700k p.a. which includes resource,	
		office, infrastructure and related	
		administrative costs.	
	Do you	concur that the DSB should be	
		nenting the proposed service level	
	improv	rements as outlined above? Please explain	
	your re	easoning.	
	If not. v	which of the individual service level	We are most interested in improving email
		rements outlined above would you wish to	We are most interested in improving email response times for Power Users (2 FTE
8.ii	-	olemented, if any? Please explain your	technical 24 x 6.5 coverage; 2 x additional
	reason		technical support).

8.iii	Telephone access to technical support during availability hours requires an additional 4.5 x FTE technical Support uplift. Implementing this service is expected to cost €610k p.a. which includes resource, office, infrastructure and related administrative and financing costs. Do you believe telephone access to technical support is required within the cost-recovery ringfence? If yes, what availability hours do you require?	No, we do not advocate for additional phone-based helpdesk support. Instead, as articulated above, focus should be placed on reducing the time needed to respond to email requests from users.
8.iv	Telephone access to product support during London hours requires an additional 1x FTE secretariat / product management uplift. The expectation is that this resource would be able to respond to the more complex questions typically requested by Power Users. Implementing this service is expected to cost €360k p.a. which includes resource, office, infrastructure and related administrative and financing costs.	We do not see the value of telephone access to product support as the current process of emails followed by conference calls as needed are sufficient. Product support is not generally time-sensitive enough to require additional telephone support.
8.v	Do you believe telephone access to technical support is required within the cost-recovery ringfence? If yes, what availability hours do you require?	We do not support the addition of telephone access to technical support.
	Performance SLA – The DSB proposes to implement the following changes to its performance metrics o 500ms latency for 99% of workflows related to	
9	ISIN Record retrieval o 1,000ms latency for 99% of workflows related to ISIN Create Requests	
	o 5,000ms latency for 99% of workflows related to ISIN Search (by metadata)	
	o Implementation of this change has no impact on DSB build or run costs.	
	Are there any other latency metrics that should be part of the DSB performance SLA?	

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	Acceptable Use Throughput – The DSB has two possible approaches to modify the throughput caps: o Modify the throughput caps to allow occasional	
10.i	bursts above the permitted caps of 60 REST APIs per connection and one simultaneous FIX message in flight. Such a change requires a one-off €120K build cost to the monitoring and reporting systems to allow automated tracking of such burst behaviour. There is also the need for some additional system resources, dependent on the amount and duration of the burst period. As an example, the DSB estimates that allowing bursts of one hour in any 24-hour period at double the throughput caps will likely increase the DSB run costs by €75K. In this scenario, the overall result will be an increase in DSB costs of €75K on a recurring basis, plus an additional €30K per annum amortization of the build cost, time-limited to 4 years.	We do not believe either change to be necessary because a power user connecting via FIX can use up to ten connections simultaneously.
	 Double the throughput caps to allow constant higher levels of throughput without regard to the concept of any 'burst mode'. Such an approach requires increased system resources, increasing the run-costs of the DSB by an estimated €420K per annum. There is no build cost for this option. 	
	Should the DSB implement the 'burst mode' approach highlighted above? If yes, is a burst duration of one hour every 24 hours an appropriate initial implementation?	
10.ii	Should the DSB implement an increase in the throughput caps? If so, is a doubling of the existing cap level an appropriate initial implementation?	We do not believe this is necessary.
Section	on 4: Service Resiliency	

Some respondents concurred with the need for the DSB to institute multiple primary based disaster recovery architecture. The DSB expects such an approach will reduce industry downtime during a disaster from 4 hours to between 1-2 hours.

The implementation of such a solution requires a significant change to the DR architecture. The DSB estimates build cost of a primary / primary model at between €1m and €1.5m, with no additional runcost implications. The resulting annual increase in costs within the communal cost recovery ring-fence would be between €250K and €375K per annum for the 4 years of build cost amortization.

If approved, the DSB proposes to implement this approach by working with the TAC to agree the detailed design.

Do you concur with implementation of this approach?

We recommend that the DSB test its existing DR and share the results with the PC and TAC before proceeding with costly changes.

Section 5: Usage and Access Agreement

There has been mixed response on the desire for differentiated agreement terms for intermediaries (e.g. data vendors or other institutions providing enhancement, storage or distribution of DSB Power User Data. Note that DSB Registered User Data (i.e. data drawn exclusively from end of day file downloads) is free to use and/or distribute, subject to third party terms.) vs. End Users.

Do you believe audit rights should be incorporated within the agreement terms for such institutions?

We have concerns about including audit rights within agreement terms for certain institutions.

12.ii

12.i

11

Do you have a view on the specific terms you wish to see excluded/included within the user agreement for intermediaries? Please specify exact language and rationale for your proposal.

Section	Section 6: AOB	
13	Please insert any other comments you wish to provide	