Istra LLC

230 Park Avenue, 3rd Floor
New York, NY 10169
Tel: +1-917-720-3332
Fax: +1-646-975-9238

May 27, 2021

By electronic mail to rule-comments@sec.gov

Vanessa Countryman, Secretary
Securities and Exchange Commission
100 F Street, NE Washington, DC 20549-1090

Re: Notice of Filing of Amendment to the National Market System Plan Governing the Consolidated Audit Trail by BOX Exchange LLC; Cboe BYX Exchange, Inc., Cboe BZX Exchange, Inc., Cboe EDGA Exchange, Inc., Cboe EDGX Exchange, Inc., Cboe C2 Exchange, Inc. and Cboe Exchange, Inc., Financial Industry Regulatory Authority, Inc., Investors Exchange LLC, LongTerm Stock Exchange, Inc., Miami International Securities Exchange LLC, MEMX, LLC, MIAX Emerald, LLC, MIAX PEARL, LLC, Nasdaq BX, Inc., Nasdaq GEMX, LLC, Nasdaq ISE, LLC, Nasdaq MRX, LLC, Nasdaq PHLX LLC, The NASDAQ Stock Market LLC; and New York Stock Exchange LLC, NYSE American LLC, NYSE Arca, Inc., NYSE Chicago, Inc., and NYSE National, Inc. (File No. 4-698)

Dear Ms. Countryman,

Istra LLC ("Istra") appreciates the opportunity to comment on the above-mentioned amended funding proposal (the "Proposal") to the National Market System Plan Governing the Consolidated Audit Trail ("CAT"). Istra, through its wholly-owned subsidiary Pundion LLC, is an automated, quantitative trading firm. We have significant experience providing liquidity in regulated markets around the world, and we feel displayed liquidity and efficient price discovery are essential for any well-functioning market. We support the Securities and Exchange Commission's (the "Commission") efforts to improve the quality and integrity of markets, including the modernization of regulatory data in order to make the market reliable and safe for all investors. Notwithstanding, we have several concerns about the Proposal, most notably:

1. The high, unexpected total cost of the CAT, both the historical spend and projected rate of increase of the budgeted spend, calls into question the viability and design of the CAT from a cost-benefit perspective.
2. The operating model lacks transparency, precluding accountability on the part of the CAT Operating Committee.
3. The cost allocation structure lacks any clear rationale and supporting evidence, raising basic questions of fairness and creating potential unintended, negative effects on market quality.

Alstra LLC

230 Park Avenue, 3rd Floor
New York, NY 10169
Tel: +1-917-720-3332
Fax: +1-646-975-9238

In light of these concerns, we feel it's necessary for the CAT Operating Committee to review all aspects of the CAT project. In particular, a full audit of the historical costs and ongoing budget of the CAT versus its estimated benefits is needed, as well as clear rationale and supporting evidence for the proposed (or an alternative, improved) allocation structure that is transparent and predictable to Participants and Industry Members.

As it relates to the total cost of the CAT and the operating model, we share the significant concerns raised by other commenters. Therefore, this letter focuses on substantial points that we have yet seen raised, along with issues regarding the allocation structure and suggestions for a more fair and simplified methodology.

Total Cost and Design

The proposed new funding model is approximately five times the original CAT NMS Plan costs published in 2014[1]. However, the Operating Committee made no disclosures between 2014 and April 2021, alerting Industry Members of the rising costs of the CAT NMS Plan. Therefore, Industry Members have legitimately relied on this representation. For example, there is no explanation of how the historical and projected costs ballooned, while data storage and CPU processing prices have significantly and reliably declined, as usual. The issues and remedies for this shortfall have been well documented by other commenters.[2]

It has also come to light that options market maker quoting represents the vast majority of CAT messaging. The volume of messages that can be attributed to options begs that the design of the CAT be reexamined to assess if: i) its operation is being weighed down by what are typically compulsory activities across options series with little impact on market quality and traded volume, and ii) its options-related costs are being subsidized by non-options Industry Members (more on this below).

Operating Model and Design

Beyond conflicts of interest[3] and a lack of broad industry input in the Proposal, we also note that the Proposal contemplates a potentially backward-looking measurement period for assigning historical costs to Industry Members. In the absence of a model or data that allows Industry Members to predict their

---

[1] https://www.catnmsplan.com/sites/default/files/2020-02/p600989.pdf

[2] *See* Letter from Michael Blaugrund, Chief Operating Officer, NYSE, Inc., dated May 10, 2021; Letter from Howard Meyerson, Managing Director, Financial Information Forum, dated April 29, 2021; Letter from Kirsten Wegner, Chief Executive Officer, Modern Markets Initiative, dated May 6, 2021

[3] *See* Letter from Kevin Donohue, General Counsel, Tower Research Capital LLC, dated May 12, 2021

Alstra LLC
230 Park Avenue, 3rd Floor
New York, NY 10169
Tel: +1-917-720-3332
Fax: +1-646-975-9238

CAT costs in a changing market, any cost recovery must be made based on future activity, with an allocation scheme and transparent inputs that allow Industry Members to understand the cost of their actions on a more deterministic, real-time basis.

Cost Allocation Structure

Starting from the top, there are myriad issues with the proposed methodology:

1. The 25/75 split between Industry Participants and Industry Members lacks justification. In its attempt to explain the split, the Operating Committee adopts the use of aggregate Industry Member revenue as a reason for SROs to pay a lower share of the total cost of CAT[4]. Subsequently, the Operating Committee acknowledges that this method would be misleading for purposes of cost allocation among brokers as it's impossible to identify the broker revenue related explicitly to CAT[5]. Absent any real rationale for differentiation, a 50/50 sharing of the costs between Industry Members and Participants, on whose platforms all trading activity is eventually executed or reported, is reasonable.

2. The Participant allocation includes a 60/40 split for equities and options, respectively. Curiously, this split is absent from the Industry Member allocation. Given the differences in market structure (e.g., options volume is still dominated by retail and a highly concentrated group of market makers, whereas equities is much more diverse, with liquidity provided by a wide variety of participant types), it's unclear why the Operating Committee sees fit to combine equities and options message traffic for purposes of the Industry Member cost allocation.

   We appreciate that the Operating Committee has provided a comment on the Proposal, which summarizes message counts[6]. In fact, these data demonstrate the issue with the current framework:

   a. In Q4 2020, CAT recorded approximately 9 trillion messages from Industry Members. Nearly 8 trillion (i.e., 88%) of these records were from options market makers.

[4] *See* Notice of Filing of Amendment to the National Market System Plan Governing the Consolidated Audit Trail, p. 19
[5] *See* Notice of Filing of Amendment to the National Market System Plan Governing the Consolidated Audit Trail, p. 22
[6] *See* Letter from Michael Simon, CAT NMS Plan Operating Committee Chair, dated May 5, 2021

Valstra LLC
230 Park Avenue, 3rd Floor
New York, NY 10169
Tel: +1-917-720-3332
Fax: +1-646-975-9238

b. After applying market maker discounts to both equities and options market makers, the adjusted message count becomes approximately 700 million messages. Of these adjusted messages, 0.1% are attributed to options market makers and 4.3% (approximately 31M) to options non-market makers. This results in an adjusted message rate of 4.4% for options, down from 88% of the actual total message count.

c. In other words, equities industry members are expected to pay over 95% (approximately $200 million as opposed to around $10 million from options industry members) of the cost of CAT (excluding the Participants' share and before minimum fees and capping) while only constituting approximately 12% of the message count. If message traffic is indeed the major driver of CAT costs, then it stands to reason that at least 40% of the Industry Member costs be allocated to options (as in the Participants' allocation framework), if not significantly more. To justify the current methodology, the Operating Committee would need to assert an enormous value afforded to the equities market derived from the options market, which hitherto has never been shown to exist.

As mentioned, the entire design of options CAT should be reevaluated if, upon inspection, inconsequential options activity is driving these inflated costs that have led to a grossly unfair cross-subsidy from the equities market participants to options ones.

3. Equities market maker messages are not properly discounted, and discounts are naturally complicated to estimate properly. The Proposal's approach of using a trade-to-quote ratio based upon SIP data seems simple but ignores more complex realities of the market, implying that a much more significant discount (multiple times lower) and a more complex calculation are necessary. Here are two straightforward examples of implicit assumption and oversight that make the current formulation highly inaccurate:

    a. Using a trade-to-quote ratio that includes off-exchange trades assumes that all market makers displaying competitive prices on exchange are equally active off-exchange. This is obviously not the case. Over 40% of volume in NMS securities is executed off exchange, the majority of which (i.e., retail) is subject to extreme levels of segmentation and executed by a small handful of firms. Most market makers (and non-market makers, for that matter) providing lit, accessible quotes on exchange bring value to these and other off-exchange market participants by providing the reference price while receiving no value in return. As such, a true market maker discount calculation should only include trades executed on exchange. Making this simple adjustment, for example, would almost double the discount (i.e., halve the ratio).

230 Park Avenue, 3rd Floor
New York, NY 10169
Tel: +1-917-720-3332
Fax: +1-646-975-9238

b. Using a trade-to-quote ratio derived from the SIP, the Operating Committee ignores the value provided by market making activity in the depth of the book. But while it would be more accurate to include these quotes in the ratio, calibrating a discount formula for the value of a BBO quote versus a depth quote would be incredibly complex and prone to manipulation. Regardless, it's clear that only using SIP BBO changes undercounts the activity and value contribution of equities market makers and further underestimates any market maker discount.

4. Recovering costs based on message traffic is the wrong approach and will discourage liquidity provision and harm market quality, unintentionally picking winners and losers in the process. A message that becomes displayed on an exchange has obvious value to the entire market and not only to the broker (or its customer) providing that liquidity. Taxing that message will naturally discourage its provision. Even the market maker discount, if calculated correctly, is an incomplete and crude way to address this issue since a wide variety of market participants, particularly in equities, provide public value through their displayed quoting.

   Another obvious consequence of getting this wrong will be a reduction in the types of activity that a well-functioning market should encourage, particularly providing displayed orders that narrow the spread, enhance liquidity, and reduce execution cost. These orders are typically placed at or within the existing BBO and generally have lower fill rates than orders in the depth of book or liquidity-removing orders. This is a result of the risk inherent in effectively providing an executable option to the rest of the market. Ironically, this means that the costs will fall disproportionately on the very activities which provide the most value to the market.

   Message-based cost allocation is also negatively biased against more message-intensive business models and activities. For instance, what is the rationale of taxing an order twice if it happens to pass from one industry member to another on the way to an exchange? How is it fair to effectively charge more to trade one security than another due to price differences, structure (e.g., ETPs), volatility, and spread, all of which affect rates of message traffic relative to traded volume?

5. A simpler, more direct approach for allocating costs within an asset class is based on value derived. The best proxy for the value any participant extracts from the market is in the form of that participant's trading activity on a notional basis, which is exactly how the SEC's Section 31 fee functions today. This tax, for the SEC's ongoing regulatory oversight, is a fair exchange and does nothing to discourage liquidity providing orders, whether they are displayed, hidden, near the BBO or in the depth of book, for liquid or illiquid securities, regardless of price, on or off

Valstra LLC

230 Park Avenue, 3rd Floor
New York, NY 10169
Tel: +1-917-720-3332
Fax: +1-646-975-9238

exchange. It seems reasonable that CAT costs could be recovered via a similar methodology or even via the same existing mechanism. The alternative - charging by message - creates an incredible amount of complexity, which can never be fairly discounted away, and picks winners and losers on the basis of factors unrelated to value extraction.

Final Thoughts

That the public comments have been unanimously negative is a sign of the extent of the severe issues with the handling of the CAT project to date and its future viability. The project is wildly over its budget. Its costs are likely unaligned to the regulatory benefits it seeks, and its allocation methodology unrelated to the value any Industry Member extracts from the broader market that the CAT is designed to support.

At a bare minimum, the total cost must be rationalized. Market events that are inconsequential to the regulatory function must be handled so that they do not create unnecessary costs and inherent bias that may affect market quality. Industry Member costs must be allocated fairly based on the value that any participant obtains of the market ecosystem, following the basic design of other participatory taxes.

We appreciate the opportunity to comment and implore the Commission to direct the Operating Committee to reevaluate its operating model and work with its Industry Members on a fair and equitable solution for all market participants.

Sincerely,

Michael Lewin

Michael Lewin
Chief Executive Officer

Cc: The Honorable Gary Gensler, Chair
The Honorable Allison Herren Lee, Commissioner
The Honorable Hester M. Peirce, Commissioner
The Honorable Elad L. Roisman, Commissioner
The Honorable Caroline A. Crenshaw, Commissioner
Christian Sabella, Acting Director, Division of Trading and Markets
David S. Shillman, Associate Director, Division of Trading and Markets