



February 26, 2024,

via Electronic Mail ([rule-comments@sec.gov](mailto:rule-comments@sec.gov))

Ms. Vanessa Countryman, Secretary  
**U.S. Securities and Exchange Commission**  
100 F Street NE., Washington, DC 20549

**Re: National Market System (NMS) Plan Regarding Consolidated Equity Market Data  
(Release No. 34-99403; File No. 4-757)<sup>1</sup>**

Dear Ms. Countryman,

On behalf of Data Boiler Technologies, I am pleased to provide the U.S. Securities and Exchange Commission (SEC) with our comments on the captioned release concerning the latest proposal by the Exchanges and Financial Industry Regulatory Authority, Inc. (FINRA), collectively the Self-Regulatory Organizations (SROs), on a new single Consolidated Tape (CT) Plan (hereafter referred to as “CT-Plan-V2”) governing the public dissemination of real-time consolidated equity market data.

**Our take on the chronology of key events between the large exchange groups and the SEC:**

1. The SEC in August 2021 approved an earlier version of CT Plan, hereafter referred to as “CT-Plan-V1”.<sup>2</sup> The SEC hopes CT-Plan-V1 and the Market Data Infrastructure Rule 614 (MDIR)<sup>3</sup> will bring down the cost of the consolidated equity market data for all investors by introducing more competition through a Decentralized Consolidated Model (DCM).<sup>4</sup>
2. The D.C. Circuit’s Ruling<sup>5</sup> in July 2022 granted the Exchange Groups’ petitions to the first challenged provision in CT-Plan-V1 about non-SRO representation. Section 11A(a)(3)(B) does NOT implicitly permit non-SROs in governance of NMS. Hence, the DCM original idea of “outsourcing”<sup>6</sup> certain SEC authority to the operating committee (two-third SROs and one-third non-SROs) CANNOT be executed.
3. In response to the D.C. Circuit Ruling, the SEC issued Amended Order<sup>7</sup> in September 2023 ordering the SROs to jointly develop CT-Plan-V2 that replaces the three current Equity Data Plans<sup>8</sup> with an extensive list of minimum terms and conditions (T&C). However, it lacks substance to address the divergence between private rights and social costs.<sup>9</sup>
4. The extensive list of minimum T&C prescribed by the SEC does not address the problematic contents contained in CT-Plan-V1, which CT-Plan-V2 retains most, if not all of it. For example, reference to our response to Q39 in the Appendix of our November 12, 2020, comment letter<sup>10</sup> to the SEC, and on page A26 of this proposal, subpart (iv) of Section 5.4, it said “Each Member shall ... transmit all Transaction Reports in Eligible Securities to the Processors as soon as practicable, but not later than 10 seconds, after the time of execution ...” **10 seconds tolerance is OUTRAGEOUSLY CRAZY**, literally over a thousand equities trading activities happen within 50± milliseconds in the US. What constitutes “as soon as practicable” is a big question mark. See later sections in this letter for elaborate discussions.

<sup>1</sup> <https://www.sec.gov/files/rules/sro/nms/2024/34-99403.pdf>

<sup>2</sup> <https://www.sec.gov/files/rules/sro/nms/2021/34-92586.pdf>

<sup>3</sup> <https://www.federalregister.gov/documents/2021/04/09/2020-28370/market-data-infrastructure>

<sup>4</sup> <https://www.linkedin.com/pulse/competing-decentralized-consolidation-model-impractical-kelvin-to/>

<sup>5</sup> [https://www.cadc.uscourts.gov/internet/opinions.nsf/265FAD4E1FDE293F85258876004F2CF9/\\$file/21-1167-1953361.pdf](https://www.cadc.uscourts.gov/internet/opinions.nsf/265FAD4E1FDE293F85258876004F2CF9/$file/21-1167-1953361.pdf)

<sup>6</sup> <https://www.linkedin.com/pulse/new-administration-showcases-what-governance-means-kelvin-to/>

<sup>7</sup> Securities Exchange Act Release No. 98271, 88 FR 61630 <https://www.sec.gov/files/rules/sro/nms/2024/34-98271.pdf>

<sup>8</sup> (1) the Consolidated Tape Association Plan (“CTA Plan”), (2) the Consolidated Quotation Plan (“CQ Plan”), and (3) the Joint Self-Regulatory Organization Plan Governing the Collection, Consolidation, and Dissemination of Quotation and Transaction Information for Nasdaq-Listed Securities Traded on Exchanges on an Unlisted Trading Privileges Basis (“UTP Plan”).

<sup>9</sup> [https://iea.org.uk/wp-content/uploads/2016/07/THE\\_MYTH\\_OF\\_SOCIAL\\_COST.pdf](https://iea.org.uk/wp-content/uploads/2016/07/THE_MYTH_OF_SOCIAL_COST.pdf)

<sup>10</sup> [https://www.databoiler.com/index\\_htm\\_files/DataBoiler%20SEC%20Market%20Data%20CTPlan.pdf](https://www.databoiler.com/index_htm_files/DataBoiler%20SEC%20Market%20Data%20CTPlan.pdf)

### Fundamental problems with the whole proposition of the SEC's market data reform

Per our July 16, 2021, comment letter<sup>11</sup> to the SEC where we proposed paralleling the music industry model, *“Non-SRO would have one-third of the voting power on CT Plan LLC’s Operating Committee ... [is] worse than the repealed §116 of the 1976 Copyright Act<sup>12</sup> that gave equal footing (50/50) to the Performance Rights Organizations (PROs) representing the artists (traders) and musicians (algorithm developers) against the dominant Jukebox operators (Stock Exchanges) ... The division may bog the SIP down due to the bureaucracy...”*

**The D.C. Circuit’s Ruling further weakens the already weak proposition of the SEC’s market data reform.** The SEC’s Amended Order requires *“a two-thirds, rather than a simple, majority of SRO votes, in conjunction with allocating votes by exchange group, prevents a small number of SRO groups from dictating plan action without further support from other SRO members”* is a compromise, rather than striking appropriate balance in the divergence between private rights and social costs.<sup>9</sup> The Operating Committee will continue to be a bureaucracy with countless arguments among SROs and with the Advisory Committee, while market participants continue to suffer from ever higher market data and connectivity costs.

We think the Commission’s original policy goal encouraging “competition” in market data products benefiting all market participants is honorable. Unfortunately, the draft or development of **MDIR and DCM undermined the latency issue** and skewed towards the interests of current subscribers to depth-of-book and additional data of Proprietary Products (PPs). These players want the entire industry to share the cost with them. Performance Optimizers, latency arbitrageurs, alternative investment/ hedge funds, are unlikely to switch to use the Competing Consolidators (CCs) or Securities Information Processors (SIPs) because their demand for PPs is inelastic.

There is the extra-hop latency disadvantage of CCs. Without a secured and synchronized start line, trading venues (TVs) have the upper hand in controlling data supply. Hence, **CCs would never be a reasonable comprise, if not a close substitute, to compete with PPs.** The “same manner and methods” provision under MDIR is merely a standard price list offered by Exchanges. It is not the equivalent to Latency Equalization, nor can it achieve the same results as Market data available Securely in Synchronized time.<sup>13</sup> Few self-aggregators (SAs) and High Frequency Trading firms (HFTs) can justify the outsized investment into telecom and ultra-low latency systems based on pure returns from Alpha trading. *“If you cannot beat them, join them”* is the natural outcome of intense competition amid the latency arms race over an extended period without timely and appropriate intervention. Elites are choosing, and a growing number of market participants will choose, to **collaborate**<sup>14</sup> with HFTs for outsource execution **rather than compete.**

Think from the prospective of the Buy-side, Asset Maximizers, fund companies, retirement and insurance platforms, and Retail Wealth Management, Alpha trades is less important than maximizing Asset Under Management (AUM) to drive their profits. But for compliance purposes, they use the SIPs National Best Bid and Offer (NBBO) as a de facto benchmark to demonstrate Best Execution (BestEx) and disclose as appropriate for Rule 605 order execution and Rule 606 order routing. **NOTE:** it is impractical and impossible for every Broker-dealer to have an automated sweep like shopping for hotel/ air ticket at various travel sites to fulfill the BestEx responsibility.

By **outsourcing trade execution**, investment firms rely on their vendors to help demonstrate BestEx. Execution vendors provided statistics on execution quality are not too far off from the SIPs de facto benchmark currently, whilst investment firms and their vendors can use a **wider range of multiple NBBOs by different CCs to justify or articulate their BestEx.** Large exchange groups and non-SRO market centers are, and will continue, to self-aggregate instead of relying on the SIP,

<sup>11</sup> <https://www.sec.gov/comments/4-757/4757-9071101-246534.pdf>

<sup>12</sup> [https://en.wikisource.org/wiki/United\\_States\\_Code/Title\\_17/Chapter\\_1/Section\\_116](https://en.wikisource.org/wiki/United_States_Code/Title_17/Chapter_1/Section_116)

<sup>13</sup> <https://www.linkedin.com/pulse/market-data-myths-versus-truths-kelvin-to/>

<sup>14</sup> <https://www.linkedin.com/pulse/rebate-tiering-competitive-pricing-different-market-centers-kelvin-to-u6l2e/>

to use their latency advantage to segment order flow away from the smaller trading venues. Market participants who do not self-aggregate either lose a few basis-points each time, or they must rely on certain transaction cost analyzers, liquidity sourcing, and outsource execution services. Not only would benchmark reference price arbitrage persist due to multiple-NBBOs, the **usage value of a CT (SIPs or CCs) would also go down even further.**

It is more favorable to outsource execution, amid broker-dealers are still on the hook for BestEx, they benefit from someone else building the order routing / matching engine and putting together the statistics to illustrate compliance. Given that the Commission has stated *“multiple NBBOs would not vary from today’s self-aggregating practices or is non-novel/ insurmountable”*, the SEC and FINRA will have difficulties in prosecuting BestEx (even with Consolidated Audit Trail (CAT) because of the 50± millisecond timestamp tolerance). Our explanations above and in this section should answer the D.C. Court of Appeal’s questions<sup>15</sup> in May 2022 about *“how the national best bid and offer quote would be appreciably more fragmented under the new Rule than it is under the current regime”* and explains *“why any latency advantages enjoyed by self-aggregators would be more significant under the new Rule than the previous regime.”*

Users of SIPs or CCs for pre-trade have an extra hop latency disadvantage, hence **affecting the demand** of CT. Upon the implementation of MDIR, CCs may replace the SIPs de facto NBBO position and publish different NBBO prices and shares. The expanded core data under MDIR will do little or nothing to encourage competition. SIPs or CCs are largely used for post-trade compliance purposes only. In turn, there is insufficient demand to justify the costs of CCs, and/or **less resources for each CC (or SIP) will improve the functionalities to truly compete with PPs.**

Using revenue/ rebates from the SIPs to pay for zero commission and subsidized investors education programs distorted the market dynamics for objective rate setting. The **relative availability, price, and latency difference of mass market products** (e.g., CT) **versus Trading Venues’ PPs** are crucial.<sup>16</sup> Even if the Have-Nots are willing to commit their limited resources to compete with the Haves in using collocation, it is not widely available and affordable to most market participants. Multicast is not readily available in public cloud. If any existing market data aggregators could spread their fixed cost across a larger base of consumers (in benefiting the industry to strike for a “fairer and non-discriminatory” outcome per the stated goal of MDIR), it would have succeeded a long time ago. Maximizing the life of aged technologies beyond 10 years’ amortization period is in existing aggregators’ best self-interest.

We have repeatedly told policy makers around the world that they must consider Exchanges, Alternative Trading Systems (ATs), Systemic Internalizers (SIs), Single Dealer Platforms (SDPs), and market data vendors as different streaming platforms to have the right focus. The prevailing market problem is **WHO OWNS THE DATA.**<sup>17</sup> **LACK OF STANDARDS** across different market centers’ rebate and incentive systems is the CORE of all issues.<sup>14</sup>

Given the above **extensive list of DEFICIENCIES** in the SEC’s impending market data reform, the timeline is meaningless. No matter how SROs attempt to write and rewrite their CT-Plan-V2, it is **NOT going to be consistent with Rule 608 of Reg. NMS**<sup>18</sup> **and the purposes of Section 11A of the Securities Exchange Act**<sup>19</sup> – *“... in the public interest and appropriate for the protection of investors and the maintenance of fair and orderly markets ... [ensure] the availability to brokers, dealers, and investors of information with respect to quotations for and transactions in securities ... support the prompt, accurate, reliable, and fair collection, processing, distribution, and publication of information with respect to quotations for and transactions in NMS stocks, and the fairness and usefulness of the form and content of such information ...”*

<sup>15</sup> [https://www.cadc.uscourts.gov/internet/opinions.nsf/F6450AF20E3C34AC8525884C004E0670/\\$file/21-1100-1947763.pdf](https://www.cadc.uscourts.gov/internet/opinions.nsf/F6450AF20E3C34AC8525884C004E0670/$file/21-1100-1947763.pdf)

<sup>16</sup> <https://www.linkedin.com/pulse/up-and-running-consolidated-tape-versus-market-structure-kelvin-to-itlac/>

<sup>17</sup> [https://www.databoiler.com/index\\_htm\\_files/DataBoiler%20Copyright%20Licensing.pdf](https://www.databoiler.com/index_htm_files/DataBoiler%20Copyright%20Licensing.pdf)

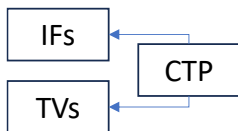
<sup>18</sup> <https://www.law.cornell.edu/cfr/text/17/242.608>

<sup>19</sup> 15 U.S.C. 78k-1 <https://www.law.cornell.edu/uscode/text/15/78k-1>

### Highlight of key problems with CT-Plan-V2

**First**, we are disappointed that CT-Plan-V2 retained problematic contents contained in CT-Plan-V1. For example, the **10 seconds tolerance for SRO members to send data to CT Processor (CTP) is unacceptable.**<sup>10</sup> Large Exchange Groups may persuade the industry to make compromises and turn to their favors in adopting a near real-time CTP “cloud” solution, when it is indeed unfair to latency disadvantaged market participants. It is worth rethinking whether data should be required to be sent to CTP or the whole concept of “Trade Reporting”. Instead of “SEND,” “OBTAIN” or Read-Only permission to “wiretap” data legally at its source is a better approach. “Wiretapping is the **fastest**, the approach would **take out the intermediaries**, and has the following advantages:

- **Benefits of Consistency** – economy of scale for centralized data management, minimize data-in-motion for cybersecurity and privacy protection, data quality is no longer a problem because what being shared is fair to everyone, avoid conflicts/ arbitrations between multiple versions of truths.
- **Prevent single point of failure** – when one intermediary is down, X # of Investment Firms (IFs)’ data would be missing, while one IF’s connection with CTP or SIP is down, implication is far less. When CTP or SIP is down, experience will be consistent for everyone, rather than some have the information, and some do not. Multiple CCs under DCM – MDIR is indeed a problem in case one CC is down. Subscribing to more than one CCs to mitigate the down scenario costs money, but no one wants to face disadvantage. To be equitable, when the CTP is down, all PPs should be down in synch until recovery.
- **Values of Bespoke Model connecting to everyone** – enable the direct administration and enforcement of rights and obligations, mass customization through the powerful infrastructure, no melding nor favoritism by intermediaries to distort or subjectively allocate incentives.



**Next** issue – CBOE submitted a comment letter<sup>20</sup> to the SEC on January 26, 2024, stating that *“While CBOE participated in the drafting and submission of the Plan solely to comply with the requirements of the Amended Order, CBOE believes that the Plan is fundamentally flawed because its allocation of votes violates the Securities Exchange Act of 1934 and is arbitrary and capricious under the Administrative Procedure Act (APA).”* Regardless of the CT-Plan-V2 is inherently having **“fundamental flaws”** as pointed out by CBOE, or allegedly, the flaws are by design, this illustrates that SROs failed to reach consensus at time of filing the CT-Plan-V2 to the SEC.

Weighted voting rights are a detriment to the simplicity and efficiency in delineating rights and obligations. CT Plan LLC as a private entity should be no exception, or else it convolutes the commercial law practices, if it is not already distorted by some of the listing practices with weighted voting rights. Reference to our response to Q11 in Appendix of our November 12, 2020, comment letter<sup>10</sup> *“... for profit LLC typically takes risk in exchange for potential revenue and profit. Because of CT Plan’s role and public purpose, it should be a non-profit rather than LLC.”* The Commission argued, *“disproportionate influence that the exchange groups have on the governance of the Equity Data Plans”* and *“prevents a small number of SRO groups from dictating plan action without further support from other SRO members.”* Yet, it does NOT mean the SEC or SROs should, or can, allocate votes and/or set rate by **subjective preference**.

Rights delineation by personal preference of authorities induces potential bribery. Also, crypto exchanges may expand and file to become an equity exchange or acquire medallions from large exchange groups to obtain seats at the table of CT Plan LLC. **Bureaucracy is easy to create and accumulate, but never easy to roll it back.** The Commission’s requirement of *a two-thirds, rather than a simple, majority of SRO votes, in conjunction with allocating votes by exchange group”* will cause **stagnation rather than encourage innovation and investment in improving the SIPs or CCs’ performance.** The SEC’s proposal does NOT strike *“balance between ensuring that plan action has broad support among members of the operating committee while also preventing a single SRO group or unaffiliated SRO from vetoing plan action.”*

<sup>20</sup> <https://www.sec.gov/comments/4-757/4757-417779-985642.pdf>

**Third**, we disagree with the provisions in Exhibit D – Distribution Cost Allocation and **Revenue Sharing**. Per our February 9, 2024, comment letter to the UK Financial Conduct Authority,<sup>21</sup> putting data in-motion from one place to another incurs cost. If it offers no commercial value or serves no public interest, it should be minimized in all circumstances. SROs are currently required to connect to the SIP. **Multiple CCs present a dilemma** as to how many is enough or is there a limit before the SROs may charge for recovery of connectivity. Yet, if SROs may not be paying their **royalty dues to content creators** (broker-dealers) in the first place, then their rent seeking on market data and connectivity is not justified.

This article<sup>22</sup> by NASDAQ has certain merits with respect to *“the SIP treats all quotes and trades equally ... that’s not fair either. In fact, many say the SIPs support fragmentation, rewarding venue competition more than quote competition.”*

**Quote and trade contributions** should be rewarded differently. In several responses to the SEC and in conversations with the industry we have recommended that revenue sharing should parallel the music industry format. We think **“one second”** for frequently traded securities versus thinly traded stock is not equivalent. There is **no rationale** provided to justify point (i) in page A-56 of this proposal, about Quote Credits, *“A Member shall earn one ‘Quote Credit’ for each second of time (with a minimum of one full second) multiplied by dollar value of size that an automated best bid (offer) transmitted by the Member to the Processors during regular trading hours is equal to the price of the NBBO in the Eligible Security and does not lock or cross a previously displayed ‘automated quotation’ (as defined under Rule 600 of Regulation NMS). The dollar value of size of a quote shall be determined by multiplying the price of a quote by its size.”*

The entirety of Exhibit D revenue sharing scheme is nothing more than SROs meeting **behind closed door in dividing the cake of SIPs/CCs revenue**. The dominant Exchange groups, *“that have consolidated equity market share of more than 15% during four of the six calendar months preceding an Operating Committee vote,”* are asking for doubling their votes compares to smaller SROs. Amid the Commission stated in its Amended Order that *“the requirement for a two-thirds majority strikes an appropriate balance between ensuring that plan action has broad support among members of the operating committee while also preventing a single SRO group or unaffiliated SRO from vetoing plan action”*, we doubt the effectiveness of CT-Plan-V2 to improve the governance of NMS.

It is understandable that the large exchange groups want to preserve their existing turf. However, we encourage them to take a step back to **consider the greater good of the overall industry**. If all SROs can come to consensus to take this opportunity to revitalize and realign incentives and capabilities with non-SRO market centers, i.e., ATS, SIs, and SDPs, the overall pie will grow and bigger piece for everyone.

Using the prevailing rates in the music industry as a hypothetical case study,<sup>23</sup> 50% of performance royalty is allocated to the “publishers”, 45% is allocated to the “featured artists”, and 5% is allocated to the non-featured supporting team. There are upsides for the Performance Optimizers, Asset Gathering firms (HUNTER type of firms). They can help reduce the number of unknown unknowns in the markets, create better algorithms and more “hit songs” that deepen market liquidity. Equally, there will be opportunities for the FARMER type of firms (i.e., Asset Maximisers, Retails, Wealth Advisory). To grow their AUM and improve profitability (e.g., by offloading some of the traders and algo developers’ costs to be paid for by the royalty system, aggregating and attracting new investors).

In the meanwhile, the **CT-Plan-V2** as currently proposed does not impose usage terms and essential elements, such as the security and synchronization of SIPs/CCs with PPs. Again, it is NOT consistent with Rule 608 of Reg. NMS<sup>18</sup> and the purposes of Section 11A of the Securities Exchange Act.<sup>19</sup> Thus, it **should be rejected**.

<sup>21</sup> [https://www.databoiler.com/index\\_htm\\_files/DataBoiler%20FCA%2020240209%20CP2333.pdf](https://www.databoiler.com/index_htm_files/DataBoiler%20FCA%2020240209%20CP2333.pdf)

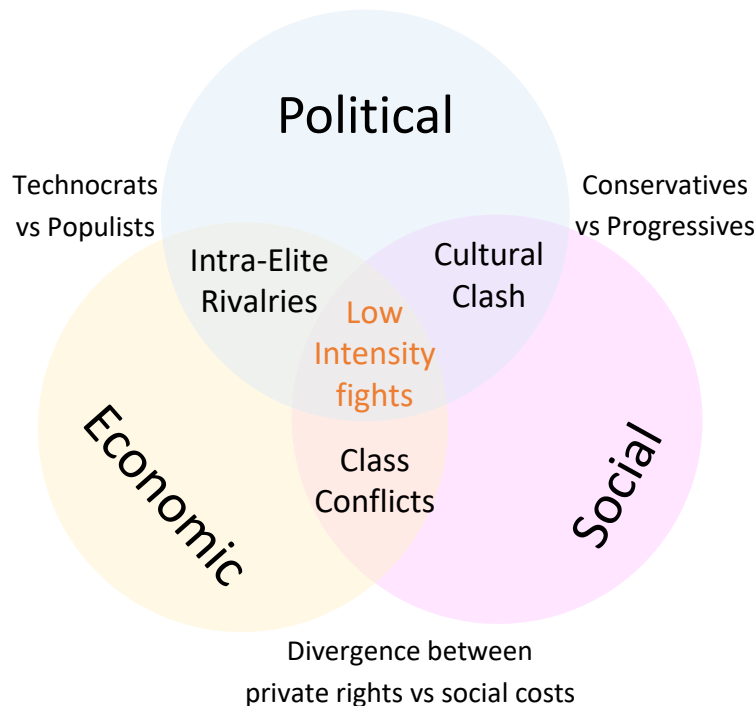
<sup>22</sup> <https://www.nasdaq.com/articles/whos-really-setting-prices>

<sup>23</sup> [https://www.databoiler.com/index\\_htm\\_files/DataBoiler%20BIG%20OPP.pdf](https://www.databoiler.com/index_htm_files/DataBoiler%20BIG%20OPP.pdf)

**Right course policy actions**

A true overhaul to the market ecosystem must assess the divergence between private rights and social costs;<sup>9</sup> focus on growing the overall pie; avoid further “frowning” of the smile curve;<sup>24</sup> and drive innovation to spur new economic opportunities. Success criteria of market data reform should include the following:

- G1) Encourage innovators to come forward to operate a SIP or CC in the short term.
- G2) Affect competitive pressures for existing sellers of market data, resulting in cheaper, higher quality and more accessible data for its users, where SIP or CC is a product of reasonable compromise, if not a close substitute, to TVs’ PPs on day 1 (short term), and the overall markets show improvements in trading volume, veracity (price discovery), velocity in filling orders, and varieties (diversified market participation instead of concentrated trading between Elites), i.e. collectively the 4Vs, by year 5 (long term).
- G3) Achieve better market data by reforming rules on the content and timing of pre- and post-trade data in the long term.
- G4) Minimize “low intensity fights” in the governance of CT (see below diagram that adopted from Prof. Peter Turchin’s model),<sup>25</sup> policy makers should refrain from regulatory price control<sup>26</sup> and consider adopting 4-Part test<sup>27</sup> that was taken directly from the music industry’s copyright laws for objective rate setting.



The SEC is largely leaving the formulation of the CT Plan up to the SROs is indeed an act of “outsourcing”.<sup>6</sup> One of three governance features (*include representatives of six classes of equity market participants ... collectively controlling on-third of the committee’s voting power*) set out by the Commission under CT-Plan-V1 cannot be executed due to the D.C. Circuit’s

<sup>24</sup> <https://www.linkedin.com/pulse/smile-curve-changes-securities-value-chain-evolves-kelvin-to/>

<sup>25</sup> <https://forwardobserver.com/breaking-down-the-conflict-of-low-intensity-conflict/>; please also see footnote 9 regarding the divergence between private rights vs social costs.

<sup>26</sup> <https://www.cato.org/commentary/problems-price-controls>

<sup>27</sup> <https://www.govinfo.gov/content/pkg/FR-2016-05-02/pdf/2016-09707.pdf>

Ruling.<sup>5</sup> The remaining two governance features (allocating the votes held by the SROs according to an SRO's corporate affiliation; and the CT Plan administrator be "*independent,*" meaning "*not . . . owned or controlled by a corporate entity that separately offers for sale its own proprietary-data products*") are insufficient to enable CCs to compete with PPs.

The non-SRO advisory committee does not have any outsourced authority from the SEC, nor authority to govern the management of CT Plan LLC. To ensure accountability of SROs, appropriate use of incentives and consequences for wrongdoing, such as require the secure and synchronization of CCs and PPs and prohibit gaming of the atomic clock, is necessary. As illustrated in above diagram, the balance of power across different market centers, the Elites (i.e., the Haves), versus the Have-nots would determine the level of **intra-elite rivalries, cultural clashes, class conflicts**, and what an acceptable tolerance of **low-intensity fight** is. Again, the relative availability, price, and latency difference of mass market products (CT) versus TVs' PPs are crucial. The SEC should appropriately use its authority under the Exchange Act to facilitate the establishment of the NMS in accordance with and in furtherance of Congress's specific objectives:

- (A) Do NOT approve CT-Plan-V2 and ditch regulatory price control<sup>28</sup> through MDIR and/or the CT Plan. Consider policy actions listed in (B) to (H) below. If the SEC prefers to "outsource"<sup>6</sup> certain authorities to the SROs, rather than using its explicitly granted authority by Congress under Section 11A(c)(1)(B) to directly prescribe rules "*to assure the prompt, accurate, reliable, and fair collection, processing, distribution, and publication of information with respect to quotations for and transactions in NMS securities*", then the Amended Order to SROs needs further revisions, i.e. incorporating our recommendations in (B) to (H) to the requirements to the SROs, who in turn impose the same or similar standards and requirements to their members and data redistributors.
- (B) Mandate the "Availability" of market data across SIPs/ CCs and PPs be SECURED and Synchronized in accordance with an atomic clock.<sup>29</sup>
- (C) Require market centers (Exchanges, ATs, SIs, SDPs) and data redistributors to maintain a connectivity disparity ratio between the fastest PP and the slowest mass market product (< 2.5 to 4 times) to ensure consolidated market data evolves along with the ecosystem.
- (D) Affirm data ownership rights belong to the "content creators"<sup>30</sup> (i.e. broker-dealers are analogous to publishers of contents, while market centers and data redistributors are analogous to "streaming platforms");<sup>17</sup> the SROs will adopt a COPYRIGHT LICENSING MECHANISM<sup>23</sup> where their members and their data redistributors will also be subjected to the same 4-Part Test standards<sup>27</sup> for objective rate setting.
- (E) So long as streamers pay their corresponding copyrights royalties (set in accordance with the 4-Part Test<sup>27</sup> standards) to content creators, the pricing of streaming subscriptions will be determined by the open market. Price-fixing and collusion would be prohibited under Antitrust laws.
- (F) Prohibit market centers from offering any PPs that the maximum capacity cannot be concurrently used by at least 20% of all market participants. The offering of PPs must be accompanied by at least a mass market product (e.g., SIPs/ CCs) that is available and affordable by 80% of all market participants.
- (G) The affordability or hierarchical pricing of PPs should be in proportion with the performance improvement over mass market products, meaning allowing any current users of mass market products to have choice for an upgrade to the next level of PPs that can reasonably be used to compete with peer subscribers of same or similar product if they are

<sup>28</sup> <https://www.cato.org/commentary/problems-price-controls>

<sup>29</sup> <https://www.linkedin.com/pulse/market-data-available-securely-synchronized-time-kelvin-to/>

<sup>30</sup> see the Facebook case <https://www.ft.com/content/a00ecf9e-2d03-11e8-a34a-7e7563b0b0f4>

willing to pay a price premium not over 30%. All PPs' pricing, including any cross-subsidization or bundling of services, must be transparent and disclosed publicly.

(H) In time of market volatility, price gouging rules<sup>31</sup> may be introduced to curb potential exploitation and ensure market makers provision of liquidity in both good and tough times.

### Other Remarks

Most SROs that vote on the CT Plan offer PPs that generate significant amount of revenue for their bottom line. Overall it is not in the exchanges' interest to ensure that the CT feeds are delivered timely, without latency. They have no interest in ensuring that the data sent to the SIP (or eventually the CCs) is published in synch with their PPs. Nor are they interested in lowering the pricing for CT data. The phenomenon of high fees for SIPs and use the revenue to offer rebates back to the SROs, market training programs and such is unhealthy.

In the past decade or so, our industry has experienced too much short-sightedness, gimmicks to get ahead of others, alleged conflict of interest in order-routing,<sup>32</sup> dodge regulatory oversight,<sup>33</sup> use synthetic created trades to bypass scrutiny,<sup>34</sup> misaligned incentives and distorted rebates; all favoring the elites. Caution that the "Have-Nots" may want to sway policies in their favor rather than committing their limited resources to compete in an arms race with the "Haves."

Policy makers should not skew the markets in anyone's favor, while leveling the playing field by adopting the above (A) through (H) recommendations that give smaller players and average investors a fighting chance to fairly compete with the larger counterparts. Until PPs and SIPs/CCs data is available SECURELY in SYNCH, demand and prices for PPs will remain high and not within reach of the 'have-nots'. Dark Pools, Liquidity Sourcing/ Execution/ other "Tools" Sellers filled gaps to fabricate the fragmented market in the past, yet they are bandages in the value chain smile curve<sup>24</sup> that ought to be replaced by permanent sustainable fixes of NMS. What really made our industry stagnate and inequitable are bandages-over-bandages of bureaucracy that widened the gap between the 'haves' and 'have-nots'.

We recommend rejecting the CT-Plan-V2 and revisiting MDIR. Orderly function of markets depends on balancing different constituents' interests, efficiency in resolving disputes and weeding out "defects", as well as common interests where individual's short-term sacrifices yield greater good in the long-term for the individual and all participants in the network.

Feel free to contact us with any questions and please keep us posted where our expertise might be helpful.

Sincerely,

**Kelvin To**

Founder and President

**Data Boiler Technologies, LLC**

CC: The Honorable Gary Gensler, Chairman  
The Honorable Hester M. Peirce, Commissioner  
The Honorable Caroline A. Crenshaw, Commissioner  
The Honorable Mark T. Uyeda, Commissioner  
The Honorable Jaime Lizárraga, Commissioner  
Dr. Haoxiang Zhu, Director, Division of Trading and Markets

This letter is also available at: [https://www.DataBoiler.com/index\\_htm\\_files/DataBoiler%20SEC%2020240226%20V2CTPlan.pdf](https://www.DataBoiler.com/index_htm_files/DataBoiler%20SEC%2020240226%20V2CTPlan.pdf)

<sup>31</sup> [https://en.wikipedia.org/wiki/Price\\_gouging](https://en.wikipedia.org/wiki/Price_gouging)

<sup>32</sup> <https://www.thetradenews.com/baml-slapped-second-time-42-million-fine-masking-orders/>

<sup>33</sup> <https://ftalphaville-cdn.ft.com/wp-content/uploads/2013/03/REPORT-JPMorgan-Chase-Whale-Trades-3-15-131.pdf>

<sup>34</sup> <http://www.theage.com.au/news/business/theory-grows-that-socgen-trader-did-not-act-alone/2008/02/11/1202578693509.html>