

UNITED STATES OF AMERICA  
before the  
SECURITIES AND EXCHANGE COMMISSION

In The Matter of:

The Application of BLOOMBERG L.P.

For Review of Amendments of the CTA Limiting  
Access to its Services

Admin. Proc. File No. 3-18316

**BLOOMBERG L.P.'S MOTION TO STAY  
CTA'S FEE AMENDMENT**

**MOTION TO STAY**

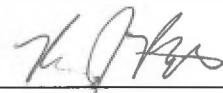
Pursuant to §11 of the Securities Exchange Act and Rule 401 of the Commission Rules of Practice, Bloomberg L.P. (“Bloomberg”) respectfully requests that the Commission stay the Amendment to the CTA/CQ National Market System plan published November 14, 2017, Release No. 34-82071 (“Amendment” or “Release”), by the Consolidated Tape Association (“CTA”).

The Amendment limits access to CTA services in violation of §11A by imposing unfair and unreasonable fees unrelated to the exchanges’ costs; by arbitrarily and capriciously extending non-display and access fees to Bloomberg’s Server Applications Program Interface (“SAPI”) display service; and by unnecessarily burdening competition and unfairly discriminating against Bloomberg. The Amendment’s massive fee increase diserves the public interest and irreparably harms Bloomberg and its customers, while a stay pending Commission review of the Amendment would not harm CTA.

Dated: February 6, 2018

Respectfully submitted,

SIDLEY AUSTIN LLP



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Michael D. Warden  
Benjamin Beaton  
Daniel J. Feith  
1501 K Street, NW  
Washington, D.C. 20005  
(202) 736-8000  
[mwarden@sidley.com](mailto:mwarden@sidley.com)  
[bbeaton@sidley.com](mailto:bbeaton@sidley.com)  
[dfeith@sidley.com](mailto:dfeith@sidley.com)

*Counsel for Bloomberg L.P.*

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**BRIEF IN SUPPORT OF BLOOMBERG'S MOTION TO STAY  
CTA'S FEE AMENDMENT**

Bloomberg respectfully submits this brief in support of its motion to stay CTA's Amendment.

**INTRODUCTION**

The Amendment under review unilaterally increases fees for consolidated top-of-book data from \$136 to \$9,136 per month for a typical customer. The fees apply to data that CTA alone may sell, and that all broker-dealers must buy. The Amendment targets a single service sold by a single vendor—Bloomberg's Server Applications Program Interface (“SAPI”). And it stands to benefit competing vendors, including the corporate sister of CTA's administrator, NYSE.

Under Section 11A of the Exchange Act, exchanges must make market data available at fair, reasonable, and non-discriminatory rates. Given the absence of competition for consolidated top-of-book data, this standard demands that the Commission ensure fees remain reasonably related to the cost of collecting and disseminating the data. *See, e.g., NetCoalition v. SEC*, 615 F.3d 525, 534-36 (D.C. Cir. 2010) (*NetCoalition I*).

Yet CTA has never even claimed, much less demonstrated, that its newly-increased fees bear any relationship to the exchanges' costs. Nor has it justified extending access and non-display

fees to a display service like Bloomberg SAPI. SAPI may be used only by authorized human subscribers viewing displayed data. Accordingly, CTA has recognized for more than a decade that SAPI is a display service. Although CTA previously justified its 2013 and 2014 access and non-display fees based on the use of data feeds to power computerized “black box” trading, CTA now asserts that those fees should apply to SAPI, a display service viewed by humans. CTA’s stated basis for this about-face is restoring “competitive balance among vendors.” Release 24. That assertion, however, is factually unsupported and legally irrelevant. Indeed, the Amendment may create a discriminatory competitive *imbalance* by singling out SAPI for fees apparently not borne by similarly situated services.

Allowing CTA to impose these fees for its monopoly data will irreparably harm Bloomberg and its SAPI customers, interfere with investors’ access to information and services, and allow profit-driven exchanges to pick winners and losers in the market. The Commission should stay enforcement of the Amendment pending review of its lawfulness under §11A.

## BACKGROUND

### I. Core Market Data

This proceeding concerns consolidated core data, “the heart of the national market system.” Regulation NMS, 70 FR 37496, 37503 (June 29, 2005) (quoting H.R. Rep. No. 94-229, at 93 (1975)). Core data consists of (1) the price, size, and exchange of the last sale; (2) each exchange’s current highest bid and lowest offer, and the shares available at those prices; and (3) the national best bid and offer (*i.e.*, the highest bid and lowest offer currently available on any exchange). *Id.* at 37558. Congress found this “accurate, up-to-the-second information” about the prices of securities transactions, bids, and offers is essential to giving “each investor … the opportunity for the best possible execution of his order.” S. Rep. 94-75, at 7, 9 (1975). Broker-dealers *must* freely provide their best bids and offers to the exchanges, Reg. NMS Rules 601(b), 602(b); exchanges

*must* provide core data to a central processor, Rule 603(b); and broker-dealers *must* purchase the consolidated data to satisfy their best-execution obligations and compete in the market, Rule 10b-10; *NetCoalition I*, 615 F.3d at 529.

This core or “top-of-book” data is inherently a monopoly product: through an “exclusive” securities information processor (SIP), exchanges offer a single stream of data available nowhere else. Exchange Act §3(a)(22)(A)-(B). Congress recognized that an exclusive processor “is, in effect, a public utility” over which the Commission has “a special oversight and regulatory role.” S. Rep. No. 94-75, at 11-12. Given the data’s importance to investors, “one of the Commission’s most important responsibilities is to preserve the integrity and affordability of the consolidated data stream.” 70 FR at 37503. The “fees charged by a monopolistic provider of a service (such as the exclusive processors of market information)” must therefore “be tied to some type of cost-based standard in order to preclude excessive profits if fees are too high.” Regulation of Market Information Fees and Revenues, 64 FR 70613, 70627 (Dec. 17, 1999).<sup>1</sup>

CTA is the exclusive processor for securities listed on NYSE (Network A) and on several other exchanges, including those affiliated with NYSE (Network B). *Id.* at 70615-16. NYSE administers Networks A and B on CTA’s behalf. It distributes the data at fees published in national market system plans. The Commission reviews those fees to ensure they are “fair and reasonable” and “not unreasonably discriminatory.” Rules 603(a)(1)-(2), 608; Exchange Act §§6(b) & 11A(a)(2), (b)(5).

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<sup>1</sup> The Commission is separately reviewing whether prices for “depth-of-book” data are competitively constrained. *In re SIFMA*, No. 3-15350. Depth-of-book data consists of unconsolidated information regarding limit orders posted on individual exchanges. The suggestion in CTA’s notice of appearance that this case be held pending a decision in *In re SIFMA* ignores the differences between core and non-core data, *see Netcoalition I*, 615 F.3d at 529-30, and offers no argument for abeyance.

## II. Bloomberg's Display and Data-Feed Services

Investors receive real-time market data in two basic ways: display services and data feeds. McManus Decl. ¶4. Display services deliver data for viewing by humans on a screen.<sup>2</sup> The quintessential display use is viewing data on a terminal screen before executing trades. Data feeds, by contrast, allow data to be used for any purpose, even by computers without human intervention or viewing. *Id.* The quintessential non-display use is automated, algorithmic, or black box trading. 79 FR 60536, 60538 (Oct. 7, 2014).

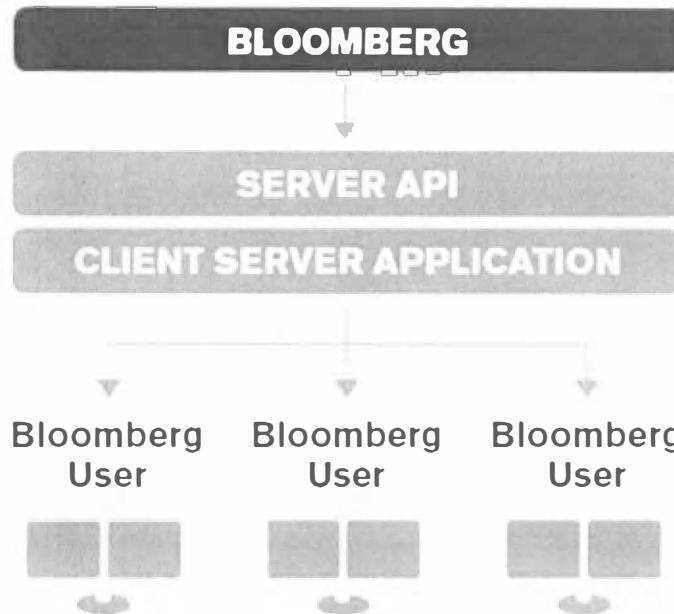
Market data reaches the investing public primarily through data vendors, including Bloomberg, Thomson Reuters, ICE Data Services (“IDS”), and others. Bunnell Decl. ¶¶ 3, 7, 10. IDS is owned by Intercontinental Exchange, NYSE’s parent company, which purchased IDS’s predecessor in 2015 for \$5.2 billion.

This Amendment concerns Bloomberg’s SAPI service, which functions in connection with the Bloomberg Terminal (“Terminal”) display service. The Terminal software displays real-time market data, news, and analytics on the desktops, laptops, or smartphone devices of authorized Bloomberg subscribers. McManus ¶4(a). SAPI supplies the same data for display on the same devices with which the same subscribers view the Bloomberg Terminal. On those devices, SAPI users can view data on third-party and customer proprietary applications not available in the Terminal, allowing them to choose the best ways to use data to inform their investment decisions. Bunnell ¶¶17-18. Like the Terminal, SAPI supports *only* applications that display data to authenticated subscribers logged into the Terminal on a display device. ¶¶4-6. The principal

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<sup>2</sup> This brief uses “market data” and “data” to include “derived data” created from consolidated core data and displayed on a device. Release 5 n.12.

difference between the Terminal and SAPI is that SAPI supplies data to display devices via a customer server, not directly, as illustrated below:

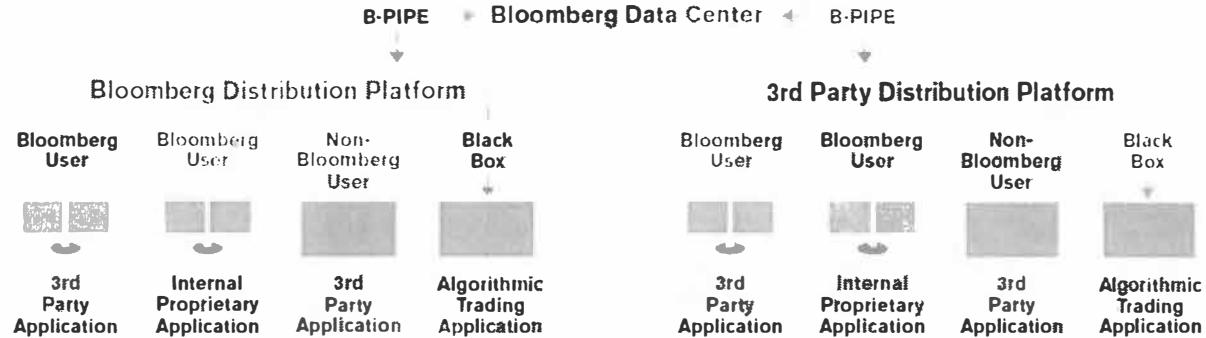


Bunnell Ex. B.

SAPI provides users and their firms several technological benefits. First, all displays and applications connected to the server receive consistent data, ensuring that separate applications utilize the same real-time information. Second, SAPI efficiently downloads data once to a central server for distribution to the devices of authorized users, not redundantly to different users' devices. Third, applications installed in a central location can be maintained and controlled more effectively than those installed on multiple individual devices. McManus ¶¶7-12. These benefits all facilitate the viewing of real-time data on a screen by humans. Bunnell ¶19.

Bloomberg also offers a data feed known as the Bloomberg Market Data Feed, or B-PIPE. B-PIPE does not have to be used in connection with a device running Bloomberg Terminal, or by an authorized Terminal subscriber. Customers may use B-PIPE for automated, algorithmic, or

other “black box” applications. ¶9. And unlike SAPI, B-PIPE customers may authorize any number of users, even if they are not Terminal subscribers. McManus ¶23.



Bunnell Ex. C.

Bloomberg has strong incentives to ensure SAPI subscribers do not use data in ways that require a B-PIPE subscription. B-PIPE subscriptions are considerably more expensive than SAPI subscriptions. And the data SAPI supplies includes proprietary data that Bloomberg provides only to paid subscribers. Bunnell ¶16. To protect these interests and ensure that SAPI is used only for display purposes, Bloomberg contractually prohibits “any non-user-based, non-display application, including but not limited to any automated algorithmic trading application” on SAPI. McManus ¶19. It also limits SAPI data consumption to levels typically employed for display rather than black box use. And on the compliance front, Bloomberg has contractual rights to audit SAPI usage and requires SAPI customers to regularly certify that they are using SAPI only for authorized purposes. ¶17. Bloomberg takes further measures to ensure SAPI is used only for display purposes by reviewing and registering third-party applications and working closely with customers on installation and development of their applications. ¶¶19-21.

SAPI customers also must implement Bloomberg’s technological controls to ensure that only authorized, entitled Terminal subscribers access and view data. The controls require SAPI users to log into the Bloomberg Terminal using biometric identification and a unique alphanumeric

identifier. ¶22(a)-(b). Customer servers then connect to Bloomberg’s entitlement-verification system, which verifies the user’s identity and entitlements, and ensures the user is logged onto only one device at a time. ¶22(c). SAPI technology monitors the amount of subscribers’ data downloads and reports excessive usage so Bloomberg can enforce consumption limits. ¶22(d).

Thomson Reuters, FactSet, and IDS offer display services and/or data feeds that compete with Bloomberg’s services. Thomson Reuters offers Eikon desktop, Eikon Server API, and the Elektron data feed. Bunnell ¶¶7, 10. IDS “compete[s] with … suppliers of financial market data, such as Bloomberg,” by offering “trading applications, desktop solutions and data feeds.” 2016 ICE Annual Report 9, 55, *at* <http://ir.theice.com/~/media/Files/I/Ice-IR/annual-reports/2016/2016-annual-report.pdf>.

### **III. CTA Recognizes SAPI as a Display Service**

From SAPI’s introduction in 2004 until CTA’s recent about-face, CTA consistently acknowledged that SAPI is a display service, not a data feed. In 2004, CTA and Bloomberg updated their vendor agreement for Network A data to expressly recognize that SAPI is a part of the Bloomberg display service, and that B-PIPE is the *only* Bloomberg service constituting a data feed (or comparable uncontrolled service). Kotovets Decl. ¶¶5-6. In 2005, CTA and Bloomberg updated their Network B vendor agreement with an identical acknowledgment that SAPI is part of Bloomberg’s “interrogation display services,” rather than a data feed. ¶¶10-11. And in 2010, they again agreed that SAPI is not “a data feed or other type of service where control over the use of Market Data and the reporting of uses and display devices cannot be directly maintained by [Bloomberg],” and that B-PIPE is the “only” Bloomberg offering fitting this description. ¶13.

CTA continued to treat SAPI as a display service after increasing fees for data feeds in 2013 and establishing new fees for “non-display” uses of market data “delivered via … data feeds” in 2014. ¶¶ 16, 19. CTA justified its far higher non-display fees based on the proliferation of non-

display usage, especially automated and algorithmic trading, which “allow[ed] users to automate functions, to achieve greater speed and accuracy, and to reduce costs of labor.” 79 FR at 60538. CTA explained that firms deriving “great value” and “considerable profit” from “apply[ing] trading algorithms to [market] data without widespread data access by the firm’s employees” would pay fees that “reflect the value of the data” that they receive. *Id.* at 60537-38. These non-display fees, CTA said, would “offset the revenue losses attributable to the reduction in professional subscriber device rates” by human users. *Id.* Between 2014 and late 2016, Bloomberg and CTA continued to treat SAPI as a display service, without CTA voicing any concern.

#### **IV. CTA Targets SAPI with Access and Non-Display Fees**

In the fall of 2016, CTA (through NYSE) contacted Bloomberg to inquire whether SAPI amounted to non-display use. After receiving assurance that SAPI remained a display service, CTA nevertheless announced in December 2016 that it had filed a “no-fee change amendment,” which purportedly “clarif[ied]” the definition of “non-display use” and the applicability of the access fee. Kotovets ¶¶21-26. The amendment did not mention SAPI, but CTA sent a letter to Bloomberg asserting that the amendment rendered SAPI a non-display use and data feed. ¶29. CTA’s letter did not attempt to reconcile this new assertion with its longstanding position that SAPI was a display service, not a data feed. After opposition from Bloomberg, SIFMA, small-to-mid-sized firms, and others, however, CTA withdrew the amendment without explanation. ¶32.

CTA nevertheless reissued the same changes by filing the Amendment at issue here. Like the withdrawn proposal, the Amendment radically alters the definition of “non-display use” and the applicability of the access fee:

	2013/2014	2017
<b>Non- Display Use</b>	Using data “delivered via … data feeds, for a purpose other than in support of a data recipient’s display or further internal or external redistribution.” 79 FR at 60538.	“Any use of data that does not make data visibly available to a data recipient on a device.” Release 11.
<b>Access Fee</b>	Data feeds only. 78 FR at 44987.	Data used (1) for non-display or (2) in “a manner that …can be manipulated and disseminated to one or more devices, display or otherwise, regardless of encryption or instructions from the redistribution vendor regarding who has authorized access to the data.” Release 13.

Unlike the withdrawn proposal, however, this Amendment lays bare CTA’s motives. It identifies just one affected service—SAPI—and admits that the new definitions aim to impose non-display and access fees on SAPI users. Release 9-11.

The Amendment’s impact on SAPI and SAPI customers would be enormous. Customers currently pay CTA between \$19 and \$45 per SAPI user per month for Network A securities and \$23 per user per month for Network B securities, in addition to Bloomberg’s charge for SAPI. Kotovets ¶18. Under the Amendment, SAPI customers would pay CTA at least \$6,000 more per month in non-display and access fees for Network A and \$3,000 more per month for Network B.<sup>3</sup> For a typical SAPI customer, who uses SAPI for Network A and B on two devices, CTA fees will soar from \$136/month to at least \$9,136/month, a 6,617% increase. Bunnell ¶27. In order to impose these extreme fee hikes, CTA has demanded Bloomberg hand over its SAPI customer list. Kotovets ¶34.

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<sup>3</sup> Because SAPI bundles last-sale and bid/ask data, customers pay both fees. The increase would double for customers using two of CTA’s three categories of non-display use. Release 6.

## ARGUMENT

Until the Commission adjudicates Bloomberg’s challenge to the lawfulness of this Amendment under §11A, it should stay enforcement of the Amendment to prevent CTA’s unprecedented fees from harming investors and destroying a valuable service. Bloomberg is entitled to a stay because (1) it is likely to succeed on the merits; (2) it faces irreparable harm; (3) no other party will suffer substantial harm; and (4) a stay would serve the public interest. *See Institutional Networks Corp.*, Release No. 20088, 1983 WL 04184, at \*4 n.24 (Aug. 16, 1983) (*Instinet I*). A stay is particularly warranted given Bloomberg’s “unusually strong showing on one of the factors,” the likelihood of success. *Davis v. Pension Benefit Guar. Corp.*, 571 F.3d 1288, 1291-92 (D.C. Cir. 2009). Thus, the motion “does not necessarily have to make as strong a showing on another factor.” *Id.*; *see In re Mohammed Riad*, Release No. 32174, 2016 WL 3648316, at \*1 (July 8, 2016). The “express language of §11A(b)(5)(A) confers broad discretion upon the Commission to issue a stay” in these circumstances to “preserv[e] the status quo between the [SIP] and the aggrieved party until the Commission has the opportunity to decide the merits of the dispute.” *Bunker Ramo*, Release No. 14606, 1978 WL 197047, at \*3-4 (Mar. 24, 1978).

### I. Bloomberg Is Likely to Succeed on the Merits

The Commission must set aside any limitation on access to services offered by a SIP unless it finds that the limitation is “fair and reasonable,” equitable, and nondiscriminatory. §11A(b)(5)(B). Just as the Commission’s determination is subject to arbitrary-and-capricious review in court, a SIP must provide the Commission with a “substantial basis” to justify its fees, supported by reasoned decisionmaking and record evidence. *NetCoalition I*, 615 F.3d at 532, 541, 544; *cf. NetCoalition v. SEC (NetCoalition II)*, 715 F.3d 342, 347, 353 (D.C. Cir. 2013) (acknowledging APA review of market-data fees); *Exchange Services, Inc.*,

Release No. 34-22245, 1985 WL 548404, at \*3 (July 10, 1985) (arbitrary-and-capricious review of SRO decision).

This Amendment violates §11A in at least three ways. It (1) imposes fees that bear no relationship to the exchanges' costs of collecting and distributing data, (2) arbitrarily and mistakenly classifies SAPI as a “non-display use” and “tantamount to a data feed,” and (3) unfairly discriminates against Bloomberg and its customers.<sup>4</sup>

**A. CTA's Fees Are Not Cost-Based**

An exclusive processor must make consolidated data available on “fair and reasonable terms.” §11A(c)(1)(C). The Commission has long recognized that a “fair and reasonable” fee for core data must be reasonably related to the exchanges’ costs of producing and disseminating the data.

This requirement reflects that core data is a monopoly product that, by law, broker-dealers must purchase.<sup>5</sup> Commission oversight, not competition, is the only force that can constrain the prices exchanges charge. The Commission therefore “has determined that … core data fees should bear some relationship to cost.” *NetCoalition I*, 615 F.3d at 529 n.2; *accord NetCoalition II*, 715 F.3d at 345.<sup>6</sup> “[B]ecause the mandatory nature of the core data distribution regime leaves little room for competitive forces to determine products and fees, the [exchanges’] cost of producing the data should be at least a factor in deciding whether a proposed fee is fair and reasonable.” SEC

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<sup>4</sup> The Amendment is also procedurally invalid under Rule 608. CTA failed to offer meaningful cost-benefit or economic-impact analysis, did not publish the text of its rule changes, and inappropriately designated as immediately effective a change that should have required Commission approval.

<sup>5</sup> 73 FR at 74780 (trade-through and best-execution requirements).

<sup>6</sup> The exchanges have not identified competitive or other constraints for consolidated top-of-book fees.

Brief, *NetCoalition I*, Nos. 09-1042, -1045 (Jan. 4, 2010). The courts and the Commission have repeatedly endorsed this requirement.<sup>7</sup>

The Commission has enforced this requirement particularly stringently when a SIP competes with vendors by selling data to end-users. In those circumstances, *Instinet II* held that “[t]he exclusive processor’s fees should be based strictly on the expenses it incurs in providing the information to vendors.” 1984 WL 472209, at \*11. “To the extent such fees are not cost-based,” the Commission explained, “value-of-service ratemaking is a price-discrimination device, used either to maximize a monopolist’s profit or to subsidize certain interests.” *Id.* (alterations omitted). CTA’s actions trigger these precise concerns: NYSE, CTA’s administrator and member, shares a corporate parent with IDS, Bloomberg’s competitor.

Remarkably, despite the requirement to consider costs, CTA’s Amendment is wholly silent on that score. CTA never acknowledges a relationship between costs and fees. Nor does it mention the exchanges’ costs: not in absolute, incremental, directional, or relative terms. CTA merely asserts its “belie[f]” that the Amendment “is fair and reasonable.” Release 22. But CTA’s unsupported “belief”—even if it were correct—cannot establish that the exchanges’ costs justify the proposed fees. *See NetCoalition I*, 615 F.3d at 538 (rejecting unsupported assertion that NYSE

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<sup>7</sup> See *NetCoalition I*, 615 F.3d at 536 (core-data fees must be cost-based); *Bunker Ramo*, Release No. 15372, 1978 WL 171128, at \*1-2 (Nov. 29, 1978) (costs relevant to lawfulness of market-data fees); *Instinet II*, Release No. 20874, 1984 WL 472209, at \*4-5 (Apr. 17, 1984) (rejecting SIP’s data fee based on “value-of-service” rather than “the costs of collecting, validating and processing quotations”), *aff’d sub nom. Nat'l Ass'n of Sec. Dealers, Inc. v. SEC*, 801 F.2d 1415 (D.C. Cir. 1986); 64 FR at 70619 (“One standard commonly used to evaluate the fairness and reasonableness of fees, particularly those of a monopolistic provider of a service, is the amount of costs incurred to provide the service.”); Concept Release Concerning Self-Regulation, 69 FR 71256, 71273 (Dec. 8, 2004) (“the total amount of market information revenues should remain reasonably related to the cost of market information”); Regulation NMS, 70 FR 37496, 37504 (June 29, 2005) (“requir[ing] all [exchanges] to participate jointly in disseminating data through a single consolidator … affords little opportunity for market forces to determine” fees); ArcaBook Order, 73 FR 74770, 74779-80, 74786 (Dec. 9, 2008) (“mandatory nature of the core data disclosure regime leaves little room for competitive forces to determine products and fees”).

“believes that the proposed market data fees would reflect an equitable allocation of its overall costs...”). On this basis alone, the Amendment is invalid. Moreover, even if CTA had tried to offer a proper justification, it is inconceivable that the costs of collecting and distributing this data could warrant a 6000% increase for typical customers.

CTA also offers no data or analysis regarding the revenues it will receive from the new fees. *See* 64 FR at 70628. The Amendment insists only that CTA “is not motivated by a plan to increase fees or revenues.” Release 22. *Motivation*, however, is irrelevant to whether fees are economically fair and reasonable. The Amendment is indisputably a fee increase for SAPI subscribers. A typical customer would see fees rise from \$136 to \$9,136 per month. *See* Release 23 (acknowledging “potential revenue increase” unless customers switch from SAPI to a different service).<sup>8</sup> CTA claims it is unable to “conduct a precise analysis”—or apparently any analysis—“of what changes to revenue would accrue” from its Amendment. It merely asserts that CTA “generally do[es] not believe that this proposed amendment would result in a material increase in revenue.” *Id.* at 22-23. But the implausible notion that a 6,000% increase will have no revenue impact does not excuse CTA’s obligation to justify its revenues in relation to its costs.

The Amendment attempts to justify the fee increase as a means of restoring “balance” among *data vendors*. Release 9. This has nothing to do with the *exchanges’* costs and revenues. Because CTA offers no cost-based justification for the fees this Amendment will generate, it has failed to show that those fees are fair and reasonable.

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<sup>8</sup> CTA stresses that non-professional users would experience no fee increase. Release 3. This is irrelevant. There are no non-professional SAPI users. Bunnell ¶29 n.4. It also recognizes that the increase would affect hundreds of Bloomberg customers, but mistakenly believes “Bloomberg is referring to ... a person as opposed to a firm.” Release 22-23. Bloomberg has hundreds of SAPI customer firms, which may authorize multiple end users to use SAPI.

## **B. CTA Arbitrarily Redefined Its Fees**

The Amendment is arbitrary and capricious in at least two respects: it (1) redefines non-display use and access fees in a manner that contradicts CTA’s prior justifications for these fees and (2) rests on repeated factual errors about SAPI. CTA has not “articulate[d] a satisfactory explanation for its action” or “rational[ly] connect[ed] … the facts found and the choice made.” *NetCoalition I*, 615 F.3d at 532-33.

**1. Departure from 2013/2014 Amendments.** CTA characterizes the extension of non-display and access fees as a “clarification” of its 2014 non-display amendment. But the Amendment in fact contradicts the reasoning underlying the 2013 and 2014 amendments—a paradigmatic illustration of arbitrary and capricious action.<sup>9</sup> In 2014, CTA justified new non-display fees by arguing that the number of display devices (and associated revenues) had decreased as technological advances had allowed traders to “automat[e] many functions,” especially “automated and algorithmic trading.” 79 FR at 60538. CTA explained that non-display devices “consume large amounts of data,” and “can process the data far more quickly than any human being looking at a terminal.” *Id.* The 2014 definition of “non-display use” reflected these concerns about computers replacing humans, explicitly defining the term to incorporate the use of a data feed to deliver data used without any display to a human:

Non-Display use refers to accessing, processing or consuming [data], whether delivered via direct and/or redistributor data feeds, for a purpose other than in support of a data recipient’s display or further internal or external redistribution.

*Id.*

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<sup>9</sup> SIFMA challenged the 2014 amendment on several grounds, including the lack of cost-based justification. *See* File No. 3-16220. The Commission has not yet ruled. Bloomberg’s current challenge, however, does not depend on the invalidity of that amendment. Even assuming it was lawful, CTA’s 2014 reasoning does not justify the 2017 amendment.

This distinction echoed CTA’s 2013 amendment raising access fees, which likewise applied only to data feeds. That amendment relied on the use of data feeds for non-display applications “that apply trading algorithms to the data, but that do not require widespread data access by the firm’s employees.” 78 FR 44984, 44987 (July 25, 2013). It did not apply the fees to data delivered in formats that controlled who could use the data.

Far from “clarifying” these definitions, the 2017 Amendment contradicts them.

As to the non-display fee, CTA extends that fee to SAPI only by abandoning the crucial distinction between data displayed to a human and data used only by a computer. Release \_\_. CTA purports to limit the non-display fee to data that is not “visibly available to a data recipient on a device.” Release 11. But it ignores that SAPI is a display service that cannot be used for non-display purposes. McManus ¶¶16-22. Similarly, SAPI use does not involve trading “far more quickly than any human being looking at a terminal,” 79 FR at 60538, precisely because SAPI is used by a “human being at a terminal.” CTA silently abandons its previous requirement that non-display use involve data “delivered via … a data feed,” which had underscored the connection between non-display use and automated or black box trading. Now, CTA collapses the two concepts: any non-display *use* would, after the fact, render the *delivery* a data feed. Release 8-9. CTA’s position that this merely clarifies the 2014 amendment is belied by its own conduct: For more than a decade—both before and after that amendment—CTA treated SAPI as a display service. Kotovets ¶20. This disconnect between the 2014 amendment and its *post hoc* extension to SAPI reveals the 2017 Amendment for what it is: a naked gerrymander of the term “non-display” to reach a display service.

As to the access fee, the previous definition from 2013 likewise focused on “data feeds” that perform “non-display functions” such as “black bo[x]” and “algorithm[ic]” trading. 78 FR at

44987. But the new definition applies whenever data can be “used by the subscriber as an input into its own systems and software,” Release 14, even for display use. The Amendment applies access fees in two circumstances: (1) if data is used for non-display purposes (which makes the non-display fee redundant); or (2) if “data can be manipulated and disseminated … regardless of encryption or instructions from the redistribution vendor regarding who has authorized access” (which might stretch far beyond data feeds, at CTA’s whim). Release 13. CTA’s open-ended standard does not define what it means for data to be “manipulated and integrated into [subscribers’] own systems.” Release 7. Conceivably, CTA could claim *any* computerized system can “manipulate” or “integrate” data, *see* McManus ¶¶25-26—a risk CTA acknowledges by explicitly exempting Excel without any reasoned explanation. *See* Release 8.<sup>10</sup>

CTA’s redefinition rests on a single concern: supposed competitive imbalance among vendors based on differing interpretations of the 2014 amendment. CTA offers no evidence of any imbalance, identifies no products or vendors purportedly affected, and cites no authority for setting fees based on vendor competition. Even if an imbalance existed, CTA’s “clarification” is stunningly overbroad: it radically expands fees. That redefinition abandons the familiar distinction between data feeds and display devices, contradicts the 2014 amendment’s focus on algorithms replacing eyeballs, and reverses its longstanding treatment of SAPI. This departure from “past practices and official policies,” without “offer[ing] a reasoned explanation for” redrawing these fundamental categories, is arbitrary and unlawful. *Am. Wild Horse Preservation Campaign v. Perdue*, 873 F.3d 914, 923 (D.C. Cir. 2017); *Bell Atl. Tel. Cos. v. FCC*, 206 F.3d 1, 6-8 (D.C. Cir.

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<sup>10</sup> CTA arrogates to itself “the right to make the sole determination as to whether a data recipient’s use is subject to the Non-Display Use fee or the device fee.” Release 13. This further exemplifies the Amendment’s arbitrary and capricious nature.

2000) (vacating classification scheme that “yield[ed] intuitively backwards results” that were inexplicably inconsistent with prior agency decisions).

**2. CTA’s Mischaracterization of SAPI.** The Amendment also relies on a series of factual errors about SAPI. CTA claims that SAPI is “tantamount to a data feed because it is a delivery format that is not controlled either in the entitlements or how the data is displayed.” Release 14. This assertion ignores the strict contractual, biometric, and technological controls that ensure SAPI is used only for display purposes and only by authorized users. McManus ¶¶16-22. Indeed, as described above, CTA has long recognized that use of SAPI data is controlled, has never raised concerns that SAPI’s controls are inadequate, and provides no such evidence now. Nor did CTA audit Bloomberg regarding its subscribers’ data use following the 2014 amendment. Kotovets ¶19. CTA has consistently recognized that B-PIPE, not SAPI, is Bloomberg’s data feed. CTA’s effort to redefine “access fee” specifically to target SAPI “runs counter” to the evidence and must be set aside. *Motor Vehicle Mfrs. Ass’n v. State Farm*, 463 U.S. 29, 43 (1983); *see, e.g.*, *Hawaiian Dredging Constr. Co. v. NLRB*, 857 F.3d 877, 883, 885 (D.C. Cir. 2017) (vacating decision that “fail[ed] adequately to address the evidence” and “offered no reason for rejecting” evidence inconsistent with agency’s conclusion).

CTA also claims that “a customer would not need” SAPI if it “only needs the display features” because “the functionality made available by [SAPI] is not at its core a display product.” Release 10-11 (SAPI customers “presumably … us[e] the data for purposes other than just display”). This too is mistaken. Customers may use SAPI data only in display applications. *Supra* 4-7. The advantages SAPI offers—an array of third-party display applications, data consistency, and technological efficiencies—serve only to enhance display usage by humans. McManus ¶¶7-15.

Finally, CTA asserts that SAPI permits non-display use by “allow[ing] customers to run server-based applications on market data.” Release 10. But whether an application is “server-based” or desktop-based has no bearing on whether it facilitates display use. McManus ¶14. Those terms merely indicate whether the application is stored on a server or on the individual user’s desktop device. The critical fact is that SAPI delivers data exclusively for use in display applications, just like the Bloomberg Terminal, which CTA recognizes is “a display product.” *Id.*

### **C. CTA’s Amendment Is Unfairly Discriminatory**

CTA’s only asserted rationale for this Amendment is the purported need to “level the competitive imbalance that currently exists” among vendors under the 2014 amendment. Release 21. As noted above, this has no bearing on whether fees are cost-justified under the Act. CTA, moreover, offers no support for this assertion, identifying no market-data vendor or offering that is unfairly disadvantaged relative to SAPI. *NetCoalition I*, 615 F.3d at 540; *Susquehanna Int’l Group v. SEC*, 866 F.3d 442, 447-48 (D.C. Cir. 2017) (action “unsupported by substantial evidence”).

To the contrary, evidence indicates that the Amendment will unfairly disadvantage SAPI. Thomson Reuters markets its Eikon SAPI service by suggesting it is *not* subject to non-display or access fees. Bunnell ¶23.<sup>11</sup> If true, that suggests the current competitive landscape is level, and that imposing new fees only on Bloomberg SAPI—the only offering CTA identifies—will unfairly discriminate against it. And if CTA imposes the fees on all vendors’ SAPI customers, it would unjustifiably burden competition by targeting a low-cost source of essential market data with high new fees.

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<sup>11</sup> Thomson Reuters’ comment letter supports CTA’s redefinition of data feed to cover Bloomberg SAPI. *See* File No. SR-CTA/CQ-2017-04. But the letter never states that its Eikon service is treated as a data feed.

That risk of anticompetitive discrimination is heightened by the relationship between NYSE, which administers CTA, and IDS, a Bloomberg competitor. As the Commission has previously recognized, even the potential for anticompetitive motives warrants heightened scrutiny of fee amendments. *See Instinet II*, 1984 WL 472209, at \*11 (invalidating Nasdaq fees imposed on the offerings of a competing vendor).<sup>12</sup>

## **II. Bloomberg Will Face Irreparable Harm in the Absence of a Stay**

Allowing CTA to impose this Amendment on SAPI will irreparably harm Bloomberg. An over-6,000% fee increase on the typical SAPI customer will fundamentally change SAPI's price point and cause many customers to terminate their subscriptions and purchase alternative data services. Bunnell ¶28. The erosion of this customer base will irreparably damage SAPI. Because of substantial switching costs, former SAPI customers will face hurdles to re-purchasing SAPI if and when the fees are later invalidated (as is likely to be the case for the reasons discussed above). Data contracts require multi-year commitments and large up-front payments, on top of which firms must bear associated costs of removing prior technology, purchasing and installing new hardware and software, and training users on new systems. ¶33. This permanent loss of customers, revenues, and position in the data marketplace for SAPI constitutes irreparable harm to Bloomberg. *See Instinet I*, 1983 WL 404184, at \*7 (recognizing that loss of "potential customers," "revenues," and "competitive advantages" constitutes irreparable harm). Competitors affiliated with NYSE or chosen by NYSE to serve on the CTA Advisory Committee, meanwhile, have their own economic

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<sup>12</sup> *See also Instinet II*, 1984 WL 472209, at \*10 (even potential anti-competitive motivations by a SIP "requires the Commission to scrutinize [the SIP's] fees carefully to ensure that they do not have inappropriate competitive effects"); *cf.* 73 FR at 74782 ("[A]n exchange proposal that seeks to penalize market participants for trading in markets other than the proposing exchange would present a substantial countervailing basis for finding unreasonable and unfair discrimination and likely would prevent the Commission from approving an exchange proposal.").

interest in pushing SAPI customers into the higher-cost data-feed segment, in which competing offerings are more popular. Bunnell ¶11; *see also* Disclosure of Payments by Resource Extraction Issuers, Release No. 67717, 2012 WL 5286931, at \*12-13 (Sept. 12, 2012) (“immediate, serious competitive disadvantage” constitutes irreparable harm).

Bloomberg will also be irreparably injured if it must disclose to NYSE, a corporate sibling of a direct competitor, its confidential list of SAPI customers. As the Commission recognized in *Instinet II*, a data vendor should not be required to surrender its confidential customer list to a competing exchange because “[c]ustomer lists are proprietary and often can be extremely valuable to a vendor’s competitors.” 1984 WL 472209, at \*13. The harm from disclosure, moreover, is irreparable because once proprietary information is released, its confidentiality and value cannot be recovered. *See Extraction Payments*, 2012 WL 5286931, at \*13. A stay is necessary to prevent CTA from forcing Bloomberg to take this irreversibly harmful step.

### **III. A Stay Will Not Harm Other Parties**

Denial of a stay also “poses a particular danger of irreparable injury to public investors and members of the securities industry who utilize [SAPI].” *Bunker Ramo*, 1978 WL 197047, at \*5. In addition to losing SAPI’s technological benefits, McManus ¶¶7-11, customers priced out of SAPI will lose the ability to view and analyze market data through the third-party and proprietary applications that they have determined best serve their investment decisions. More basic desktop services sold by Bloomberg and its competitors do not offer a comparable range of benefits and applications for viewing and analyzing market information, while data feeds like B-PIPE carry higher subscription costs and significant additional administrative expenses. Bunnell ¶¶18, 30-31. Furthermore, the technological and administrative expenses associated with switching from SAPI to another vendor or service represent sunk costs that SAPI customers cannot recover, even if the proposed amendment were later invalidated. Indeed, switching back to SAPI would entail

*additional switching costs.* *Id.* ¶33; *Extraction Payments*, 2012 WL 5286931, at \*11 (recognizing that sunk costs, “once incurred, cannot be recouped even if Petitioners’ suit ultimately is successful”).

Conversely, a stay will not harm CTA. CTA has stated it does not know whether the Amendment will materially increase its revenue. Release 22-24. Nor has it offered evidence regarding increased costs or the concerns that purportedly animated the 2014 amendment. Furthermore, CTA apparently has not publicly notified customers of any price change since publishing the Amendment. Tellingly, it waited more than two years after the 2014 amendment to propose the changes at issue, and an additional six months after the withdrawal to refile.

#### **IV. A Stay Will Serve the Public Interest**

The Amendment abuses CTA’s government-sanctioned monopoly over information that Congress and the Commission have recognized is critical to the investing public. Congress declared the “public interest” to include ensuring “the availability to brokers, dealers, and investors of information with respect to quotations for and transactions in securities” and “the practicability of brokers executing investors’ orders in the best market.” §11A(a)(1)(C). To advance these interests, Congress directed the Commission to facilitate the establishment of the national market system, the “heart” of which are the systems for disseminating consolidated core data. *See* §11A(a); S. Rep. No. 94-75, at 9. The widespread availability of consolidated core data “in a useful form and on fair and reasonable terms” is “an essential aspect of the Commission’s efforts to facilitate a national market system.” *Instinet I*, 1983 WL 404184, at \*5. The proposed amendment directly contravenes these goals. A 6,000% fee increase on SAPI undoubtedly will limit the access of investors, funds, and traders to this critical market data in the form that many small and mid-size firms have found useful and cost-effective. It will impede capital formation by

forcing many firms to purchase more expensive market data they do not need, or by entirely discontinuing the trading supported by SAPI.

The Amendment also reduces incentives to develop innovative market-data services. Tools such as SAPI—and the third-party and proprietary applications that SAPI supports—entail significant investments by technology and investment firms in means to deliver, present, and use market data to provide value to investors. Those firms will continue investing in new technologies only if motivated by sufficient financial incentives. CTA, however, seeks to exploit its monopoly position by harvesting the value Bloomberg and other innovators created in developing tools like SAPI and these third-party applications. *See Instinet II*, 1984 WL 472209, at \*17 (“By providing subscribers with [core data] at relatively inexpensive prices, vendors will be encouraged to develop improved formats for presenting the information,” which is a “goal consistent with, and in furtherance of, the Act’s NMS objectives”); *id.* (finding that “market forces should guide what displays are offered by vendors” and that “the NASD should not be allowed to influence those decisions by imposing particular tariffs, unrelated to costs, on different types of displays”). Indeed, in its 2014 amendment, CTA admitted that the non-display and access fees are designed to “correspond to the different benefits different categories of users derive from their different uses of the market data made available under the Plans.” 79 FR at 60541.

The broader context of this Amendment is equally disturbing. It is part of a larger trend of for-profit exchanges raising prices for market data ever higher, thereby exploiting their market power over data that has both no substitute and highly inelastic demand due to regulatory constraints. *See A Financial System that Creates Economic Opportunities: Capital Markets* 63-64 (2017) (noting that “[c]ompetitive pressure among broker-dealers and limited constraints on exchange pricing power has allowed exchanges to regularly raise prices” for market data), *at*

<https://www.treasury.gov/press-center/press-releases/Documents/A-Financial-System-Capital-Markets-FINAL-FINAL.pdf>. This trend has led the Treasury Department to recommend that the Commission scrutinize exchange data fees more closely under §11A and demand greater transparency from the exchanges. *Id.* at 63-64; *see also* Larry Tabb, The Market Data Deathmatch: The Increasingly Brutal Fight over Equity Market Data Costs, (Jan. 26, 2016) (noting that exchanges' data-fee revenues from 2011 to 2016 increased 62% due to "large fee increases" and warning that, "[i]f costs are not reined in, it will almost certainly harm our markets," "leaving investors with a less liquid and effective market"), *at* <https://research.tabbgroup.com/report/v14-004-market-data-deathmatch-increasingly-brutal-fight-over-equity-market-data-costs>.

The Commission should heed that recommendation here. The Amendment concerns monopoly data vital to the interests of the investing public. It targets a single Bloomberg service and its customers with thousands of dollars in increased monthly fees to benefit for-profit exchanges, including one whose corporate sibling competes with Bloomberg. And it does so by abandoning, without explanation, CTA's long-standing treatment of SAPI specifically and display devices generally.

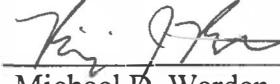
## CONCLUSION

Given the serious questions raised about the Amendment's lawfulness under §11A, the Commission should grant a stay to prevent harm to Bloomberg and its customers during consideration of the Amendment's validity.

Dated: February 6, 2018

Respectfully submitted,

SIDLEY AUSTIN LLP



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Michael D. Warden  
Benjamin Beaton  
Daniel J. Feith  
1501 K Street, N.W.  
Washington, D.C. 20005  
(202) 736-8000  
[mwarden@sidley.com](mailto:mwarden@sidley.com)

*Counsel for Bloomberg L.P.*

UNITED STATES OF AMERICA  
before the  
SECURITIES AND EXCHANGE COMMISSION

In The Matter of:

The Application of Bloomberg L.P.

Admin. Proc. File No. 3-18316

For Review of Amendments of the CTA Limiting  
Access to its Services

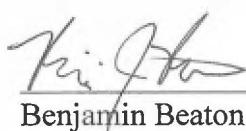
**CERTIFICATE OF SERVICE**

I hereby certify that on February 6, 2018, I caused a copy of the foregoing Motion for a  
Stay of CTA's Fee Amendment to be served by hand on the parties listed below.

Brent J. Fields  
Secretary  
U.S. Securities and Exchange Commission  
100 F Street, N.E.  
Washington, D.C. 20549

Douglas W. Henkin  
Seth T. Taube  
Joseph Perry  
Baker Botts LLP  
30 Rockefeller Plaza  
New York, NY 10112  
douglas.henkin@bakerbotts.com

Dated: February 6, 2018

  
\_\_\_\_\_  
Benjamin Beaton

UNITED STATES OF AMERICA  
before the  
SECURITIES AND EXCHANGE COMMISSION

In The Matter of:

The Application of Bloomberg L.P.

Admin. Proc. File No. 3-18316

For Review of Amendments of the CTA Limiting  
Access to its Services

**CERTIFICATE OF COMPLIANCE**

Pursuant to Rule 154(d) of the Commission's Rules of Practice, I hereby certify that the foregoing Motion for a Stay of CTA's Fee Amendment contains 6,986 words, according to the word-processing system used to prepare the brief, exclusive of the cover page, table of contents, and table of authorities.

Dated: February 6, 2018

  
\_\_\_\_\_  
Benjamin Beaton

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SECURITIES AND EXCHANGE COMMISSION  
(Release No. 34-82071; File No. SR-CTA/CQ-2017-04)

November 14, 2017

Consolidated Tape Association; Notice of Filing and Immediate Effectiveness of the Twenty-Second Charges Amendment to the Second Restatement of the CTA Plan and the Thirteenth Charges Amendment to the Restated CQ Plan

Pursuant to Section 11A of the Securities Exchange Act of 1934 (“Act”),<sup>1</sup> and Rule 608 thereunder,<sup>2</sup> notice is hereby given that on October 19, 2017, the Consolidated Tape Association (“CTA”) Plan participants (“Participants”)<sup>3</sup> filed with the Securities and Exchange Commission (“Commission”) a proposal to amend the Second Restatement of the CTA Plan and the Restated CQ Plan (“Plans”). The amendment represents the twenty-second Charges Amendment to the CTA Plan and the thirteenth Charges Amendment to the CQ Plan (“Amendments”). The Amendments seek to amend the Plans’ fee schedule as well as the Non-Display Use Policy to clarify the applicability of the non-display fee, the device fee, and the access fee. The Participants believe that some vendors are mischaracterizing their customers’ usage and creating artificial loopholes to avoid the Non-Display Use and access fees pursuant to amendments filed in October 2014 (“2014 Fee Amendments”)<sup>4</sup> in an attempt to obtain an advantage over other vendors. The Participants believe that the distinction between the device fees, the Non-Display

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<sup>1</sup> 15 U.S.C. 78k-1.

<sup>2</sup> 17 CFR 242.608.

<sup>3</sup> The Participants are: Bats BYX Exchange, Inc.; Bats BZX Exchange, Inc.; Bats EDGA Exchange, Inc.; Bats EDGX Exchange, Inc.; Chicago Board Options Exchange, Incorporated; Chicago Stock Exchange, Inc.; Financial Industry Regulatory Authority, Inc.; Investors Exchange LLC; Nasdaq BX, Inc.; Nasdaq ISE, LLC; Nasdaq PHLX LLC; The Nasdaq Stock Market LLC; New York Stock Exchange LLC; NYSE Arca, Inc.; NYSE American LLC; NYSE National, Inc.

<sup>4</sup> See Securities Exchange Act Release No. 73278 (October 1, 2014), 79 FR 60536 (October 7, 2014) (“2014 Fee Amendments”).

Use fees, and the access fee was set forth in the 2014 Fee Amendments, and many vendors are fully complying with that distinction. The Participants state that some vendors appear to be ignoring the import of the 2014 Fee Amendments in order to gain an advantage over other vendors, allowing them to profit from new or existing customers by offering them lower fees than such customers could obtain from vendors who apply the 2014 Fee Amendments correctly. The Participants state that the proposed amendment is designed to close this loophole by removing any perceived ambiguity in the 2014 Fee Amendments.<sup>5</sup>

The Participants previously submitted an amendment to clarify the application of the Non-Display Use Policy.<sup>6</sup> That amendment elicited comment letters, some opposing and some supporting the amendment.<sup>7</sup> The Participants believed that the opposing comments either misunderstood or misconstrued the purpose and application of that amendment. In order to provide additional explanation of the reasons behind and the impact of the clarification of the Non-Display Policy, the Participants withdrew that amendment and are now submitting this amendment in its place.

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<sup>5</sup>

The Participants would apply this proposed amendment prospectively to meet any concerns that the existing policy was insufficiently clear.

<sup>6</sup>

See Securities Exchange Act Release No. 80300 (Mar. 23, 2017), 82 FR 15404 (Mar. 28, 2017).

<sup>7</sup>

See Letter from David Craig, President, Thomson Reuters, dated April 21, 2017 (“Thomson Reuters Letter”); Letter from Anonymous, dated April 20, 2017; Letter from Jay Froscheiser, VP, DTN/Schneider Electric, dated April 19, 2017; Letter from Melissa MacGregor, Managing Director and Associated General Counsel, SIFMA, dated April 18, 2017 (“SIFMA Letter”); Letter from Greg Babyak, Head of Global Regulatory and Policy Group, Bloomberg, dated April 18, 2017 (“Bloomberg Letter”); Letter from Brad Ward, dated April 17, 2017; Letter from Marcus Mitchell, dated April 17, 2017.

In order to correct misinformation regarding the applicability of the Non-Display Use and access fees, the Participants believe that it is important to clarify that Non-Professional Users<sup>8</sup> are not subject to Non-Display Use, access, or device fees, regardless of the type of data product they receive. Rather, as provided for on the Fee Schedules, the only charge applicable to Non-Professional Users is the \$1.00 monthly charge and this charge is applicable to any use of the data by a Non-Professional User. While a vendor may make available to a Non-Professional User a data product that could result in Non-Display Use or access fees being assessed against a Professional Subscriber, if the subscriber is a Non-Professional User, that Non-Professional User still would only be subject to the \$1.00 monthly charge for such use.<sup>9</sup> Therefore, the Participants believe this proposed amendment will have no effect on the fees paid by Non-Professional Users.

Pursuant to Rule 608(b)(3) under Regulation NMS,<sup>10</sup> the Participants designate the amendment as establishing or changing a fee or other charge collected on their behalf in connection with access to, or use of, the facilities contemplated by the Plans. As a result, the amendment becomes effective upon filing with the Commission.

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<sup>8</sup>

As defined in Exhibit B to the Agreement for Market Data Display Services, a Non-Professional User is “any natural person who receives market data solely for his/her personal, non-business use and who is not a ‘Securities Professional,’” meaning that the person is not (1) registered or qualified with the SEC, the CFTC, any state securities agency, any securities exchange/association, or any commodities/futures contract market/association, (2) engaged in the functions of an investment advisor as those are described in Section 202(a)(11) of the Investment Advisers Act of 1940, or (3) employed by a bank or other organization exempt from registration under Federal or state securities laws to perform functions that would require them to be so registered or qualified if they were to perform such functions for an organization not so exempt. The CTA’s Non-Professional Subscriber Policy can be found at <https://www.ctaplan.com/policy>.

<sup>9</sup>

The Administrator will update its reporting process to ensure that Non-Professional Users would continue to be subject to only the \$1.00 monthly charge regardless of use or data delivery method to such customer.

<sup>10</sup>

17 CFR 242.608(b)(3)(i).

The Commission is publishing this notice to solicit comments from interested persons on the proposed Amendments. Set forth in Sections I and II is the statement of the purpose and summary of the Amendments, along with the information required by Rules 608(a) and 601(a) under the Act, prepared and submitted by the Participants to the Commission.

I. Rule 608(a)

A. Purpose of the Amendments

1. Background

The 2014 Fee Amendments

The Participants amended the Plans' fee schedules in October 2014 to establish fees for Non-Display Uses of data and reduce the device fees assessed on Professional Subscribers.<sup>11</sup>

The 2014 Fee Amendments responded to long-term changes in data-usage trends. In formulating the 2014 Fee Amendments, the Participants studied the optimum allocation of fees among market data users and consulted with industry representatives that sit on the Plans' Advisory Committee and with other industry participants.

The 2014 Fee Amendments realigned the Plans' fees more closely with the ways in which data recipients consume market data. To reflect the changes in consumption of market data, the Participants reduced the rates that Professional Subscribers paid for each of their display devices while establishing fees for non-display consumption of data, referred to as Non-Display Use.

For example, among other fee reductions, the Professional Subscriber fee was reduced for individuals and firms having only one or two devices, with a ten percent decrease in the fees charged to these subscribers. The other tiered device rates for Professional Subscribers also were reduced. The monthly device fees currently range from \$19 to \$45 for Network A and is \$23 for

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<sup>11</sup>

See supra note 4.

Network B. Additionally, in the 2014 Fee Amendments, the Participants retained the monthly \$1.00 Non-Professional User fee as a cost-effective rate for retail investors.

The 2014 Fee Amendments created Non-Display Use fees in recognition of the increasingly large amounts of data being made available and the significant value vendors and their subscribers could derive from using data received in a non-display manner. Non-Display Use was defined in the 2014 Fee Amendments as any use accessing, processing, or consuming real-time Network A or Network B quotation information or last sale price information for a purpose other than in support of a data recipient's display or further internal or external redistribution.

The 2014 Fee Amendments provided a non-exhaustive list of examples of Non-Display Use,<sup>12</sup> including:

- Trading in any asset class;
- Automated order or quote generation and/or order pegging;
- Price referencing for algorithmic trading;
- Price referencing for smart order routing;
- Operations control programs;
- Investment analysis;
- Order verification;
- Surveillance programs;

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<sup>12</sup>

Non-Display Use does not apply to the creation and use of derived data. Derived data is generally understood by the industry to consist of pricing data or other information that is created in whole or in part from consolidated quotation or last sale price information, but which cannot be reverse engineered to recreate such information or be used to create other data that is recognizable as a reasonable substitute for such information. For instance, using consolidated quotation information or last sale price information to value portfolios or create indexes would not be considered Non-Display Use.

- Risk management;
- Compliance; and
- Portfolio Valuation.

The Participants established three categories of Non-Display Use of market data:

- Category 1 applies when a data recipient makes Non-Display Use of real-time market data on its own behalf.
- Category 2 applies when a data recipient makes Non-Display Use of real-time market data on behalf of its customers.
- Category 3 applies when a data recipient makes non-display uses of real-time market data for the purpose of internally matching buy and sell orders within an organization.

The Non-Display Use Fee is \$2,000 per category for Network A and \$1,000 per category for Network B. Data recipients can be charged for each of the three categories of Non-Display Use they utilize. Importantly though, if a data recipient makes Non-Display Use of real-time market data on behalf of its customers (a Category 2 use), its customers are not charged the Category 2 Non-Display Use fee or the access fee. Instead, the data recipient (who in this example could be a broker-dealer using the data for smart order-routing) is charged the Category 2 Non-Display Use fee once and is charged the access fee once, but its customers are not charged either fee for the Non-Display Use by the broker-dealer on their behalf. Category 3 is the only Non-Display Use fee that can be charged multiple times; that possibility arises only if a subscriber operates more than a single ATS, exchange, or ECN, and the fee is charged once per ATS, exchange, or ECN.

### Access Fees

CTA currently charges an access fee to any subscriber with access to data feeds. This fee is charged based on the receipt of data, rather than how the data is used. If a subscriber is receiving a data feed, i.e., information transmitted in a format that is not controlled or can be manipulated and integrated into their own systems, that subscriber is subject to access fees. Access fees are therefore distinct from the separate charges on the Fee Schedule that are based on how the data is used, including device fees and Non-Display Use fees.

### Mischaracterization of Usage by Certain Vendors

Following the 2014 Fee Amendments, the Participants became aware that certain vendors were characterizing the usage of their customers as subject to solely the device fees despite the fact that the vendors were not delivering the data in a controlled format. Rather, the data was being delivered in a format that enabled their customers to integrate the data into their own systems and software for Non-Display Use. The Participants understand that certain vendors use this characterization to offer their customers the ability to avoid the non-display and access charges due under the Plan to the detriment of other vendors who properly characterized how they delivered the data as being subject to access fees and their customers' usage as being subject to the Non-Display Use fees. The Participants believe that this characterization is clearly contrary to the language and purpose of the 2014 Fee Amendments.

It is important, therefore, to understand the different types of data products that can be provided by a vendor, generally falling into two categories.

The first category consists of data distributed in a form that only enables it to be visibly displayed on a device such that the data recipient can only see the consolidated quotation and last sale information without being able to integrate the data into the recipient's own systems and

software; the proposed amendment will have no effect on what users of this type of product pay. The device fee contemplates that once that data has been visibly displayed via a graphical user interface, it can be exported via a data delivery exchange to a format such as Excel for further display use. For example, for a Professional Subscriber, use of Bloomberg's Excel add-in features, would be subject to the existing device fee, currently set at a maximum of \$45 per unit, and would not be considered Non-Display Use. As described above, this category would not subject a subscriber to any access fees.

The second category consists of data being provided to a subscriber in a format that enables the subscriber to incorporate the data into the data recipient's systems and software. This type of subscriber is essentially doing through a vendor what it could do if the subscriber accessed data directly from CTA: The vendor is functionally acting as a pipe through which the data is delivered to the subscriber. This type of delivery of data is subject to access fees, and, depending upon usage, non-display fees.

The Participants are concerned that certain vendors are providing subscribers with a level of access to market data that allows the subscriber to use the market data for Non-Display purposes, yet those vendors are not reporting that delivery of data as a data feed.<sup>13</sup> The Participants understand that vendors failing to properly report are taking advantage of

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The CTA Network Administrator requires all customers and vendors that wish to receive market data via an uncontrolled data feed to complete an Exhibit A, available here: <https://www.nyse.com/publicdocs/ctaplan/notifications/trader-update/Exhibit%20A%20-%20CTA%20-%20Internal%20and%20External%20Distribution.pdf>. Among other information, vendors that redistribute data must report data feeds provided to subscribers. Any subscriber that makes a non-display use of CTA or CQ data must then complete a Non-Display Use of CTA/CQ Market Data – Customer Declaration, which is available here: <https://www.ctaplan.com/publicdocs/ctaplan/notifications/trader-update/CTA%20Non%20Display%20Declaration%20Form.pdf>.

understandings of use that pre-dated the 2014 Fee Amendments by continuing to report that their customers were subject only to the lower device fees rather than as data feeds applicable to Non-Display Use and access fees that others were paying in accordance with the existing fee schedule. In other words, those vendors are not applying the 2014 Fee Amendments, but rather continuing to report what constitutes a data feed delivery and non-display use as a device use only. This misinterpretation of the 2014 Fee Amendments has not only upset the balance struck by the Participants in the 2014 Fee Amendments between who should be subject to the device fees versus the Non-Display Use fees, it has also upset the competitive balance among vendors. The Participants are filing this proposed amendment in order to definitively remove any ambiguity with regards to the applicability of the Non-Display Use and access fees to eliminate this imbalance.

In connection with the previously submitted amendment regarding Non-Display Use, certain commenters raised concerns about a potential increase in the price of a particular data product being offered in the marketplace, the Bloomberg Server Application Program Interface product (“Bloomberg SAPI”). Bloomberg argued that those using the Bloomberg SAPI should not be subject to the Non-Display Use and access fees because the output of the server-based application is displayed to users whose device or user ID has been entitled by Bloomberg.<sup>14</sup> But Bloomberg’s focus solely on how the data might be disseminated by some SAPI users is misplaced and exemplifies the issue that the Participants are attempting to resolve with this proposed amendment.

As described above, the access fee is charged to those data recipients who obtain data in a manner that enables the recipient to integrate that data into their own systems or software,

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<sup>14</sup>

See Bloomberg Letter at 4-5.

regardless of whether and how the recipient chooses to use that data. And the Non-Display Use fee is applicable whenever data is used in a manner that does not make the data visibly available to a data recipient on a device. This is exactly what Bloomberg concedes the Bloomberg SAPI permits when Bloomberg states that the Bloomberg SAPI allows customers to run server-based applications on market data. For example, when Bloomberg first reported use of the Bloomberg SAPI service to the Network Administrator, Bloomberg represented that “[s]ubscribers to Bloomberg’s API service typically use the application for the following purposes: pricing engines, portfolio valuations, order management programs, risk compliance engines, and program trading applications.”

Prior to 2014, such use was subject to device fees but only because Non-Display Use fees did not exist. However, consistent with the 2014 Fee Amendments, any such use constitutes Non-Display Use according to the definitions that went into effect in 2014 and should be subject to the Non-Display Use and access fees; the provision of such data via the Bloomberg SAPI does not obviate that fact. Use of encryption or entitlements are not designed to restrict such use because they only control access to the data, not use of the data, and it is the latter that determines whether Non-Display Use and access fees apply.

SIFMA, in its letter commenting on the previous proposed amendment, also focused on the applicability of the Non-Display Use and access fees on Bloomberg’s SAPI. But SIFMA mischaracterized the Bloomberg SAPI as “the quintessential display product.”<sup>15</sup> While Bloomberg has a display product, i.e., Bloomberg Terminal, the functionality made available by the Bloomberg SAPI is not at its core a display product. The ability to integrate consolidated quotation and last sale information into a data recipient’s “server-based applications” clearly

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<sup>15</sup>

See SIFMA Letter at 2.

demonstrates the incongruence between SIFMA's description and the Bloomberg SAPI data product's overall functionality. Customers that choose to subscribe to both the Bloomberg Terminal and the Bloomberg SAPI presumably are doing so because they are using the data for purposes other than just display of the data. Indeed, the Participants understand that is why Bloomberg charges its subscribers substantial amounts for the Bloomberg SAPI over and above the amounts Bloomberg charges for use of one its terminals alone. If in fact a customer only needs the display features, which would include use of Excel add-in features, such a customer would not need the Bloomberg SAPI. The customer could end its use of the Bloomberg SAPI and then would not be subject to Non-Display Use or access fees. For the avoidance of doubt, a hypothetical Bloomberg customer that only used Bloomberg Terminals and not the Bloomberg SAPI would not be affected in any way by the proposed amendment. Bloomberg itself implicitly conceded this: although it rents out more than 300,000 terminals, it claimed the previous proposed amendment would impact only "hundreds" of its customers.<sup>16</sup>

B. Proposed Amendments to Plans' Fee Schedules

1. Amended Definition of Non-Display Use

To distinguish between the two categories of use of data, the Participants are proposing to amend the definition of "Non-Display Use" in footnote eight of the Plans' fee schedules to explicitly state that any use of data that does not make data visibly available to a data recipient on a device is a Non-Display Use. The Participants are proposing to make a parallel amendment to footnote two of the Plans' fee schedules to state that the device fee will only be applicable

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Compare Bloomberg website touting 325,000 global terminal subscribers, <https://www.bloomberg.com/company/bloomberg-facts/> with Bloomberg Letter at 1 (claiming that "hundreds" of customers would be affected).

where the data is visibly available to the data recipient; any other data use on a device will be considered Non-Display Use.

In the 2014 Fee Amendments, the Participants recognized the relative values of non-display versus display data usage. With the proliferation of automated and algorithmic trading, non-display uses consume large amounts of data and perform a wide variety of functions. The black boxes and application programming interfaces utilized by these firms process data far more quickly, and as a result, the relative value between non-display and display data usage is pronounced. The disparity in value between non-display and display data usage led the Participants to decrease the Professional Subscriber device charges in the October 2014 Non-Display Filing while establishing the Non-Display Use fees. However, if a vendor distributes data for Non-Display Use but reports that its subscribers are subject only to device fees, such interpretation would disrupt the balance struck by the Participants in lowering the device fees while establishing the Non-Display Use fees.

The Participants believe that amending the fee schedule will create a clear understanding of when the Non-Display Use fee is applicable. The Participants believe that the proposed amendment is consistent with the 2014 Fee Amendments and therefore would clarify the change made by the 2014 Fee Amendments.

To notify data recipients of the amended definition, the Participants will be updating the CTA Market Data Non-Display Use Policy. The CTA Market Data Non-Display Use Policy describes the applicability of the Non-Display Use fee to specific uses of real-time Network A and Network B last sale information and quotation information. The CTA Market Data Non-Display Use Policy currently reflects the applicability of the Non-Display Use fee as established by the 2014 Fee Amendments. The Participants are amending this policy to include the updated

definition of Non-Display Use as reflected in the Plans' amended fee schedules. The CTA Market Data Non-Display Use Policy is also being updated to specify that Redistributors that provide market data to their customers and/or data recipients for Non-Display Use of the data must submit an access request to the Administrator, and must require that the customers and data recipients of such market data complete an Exhibit A for the data use request.<sup>17</sup>

The Participants are also amending footnote two and footnote eight of the Plans' fee schedules to make clear that the Participants reserve the right to make the sole determination as to whether a data recipient's use is subject to the Non-Display Use fee or the device fee and, if subject to the Non-Display Use fee, the category of such Non-Display Use, consistent with the 2014 Fee Amendments and this amendment.

## 2. Amended Definition of Access Fee

To further clarify that the applicable fees that would be assessed are based on how data is used, the Participants are proposing to amend footnote ten of the Plans' fee schedules to clarify when the access fee is applicable. The access fees for Network A range from \$750 to \$1,750 and for Network B range from \$400 to \$1,250. The Participants are not proposing to modify the current access fees. Instead, the Participants are proposing to amend footnote 10 in the Plans' fee schedules to provide the access fee would be applicable if: (1) the data recipient uses the data for non-display; or (2) the data recipient receives the data in such a manner that the data can be manipulated and disseminated to one or more devices, display or otherwise, regardless of encryption or instructions from the redistribution vendor regarding who has authorized access to the data. In other words, if a subscriber has access to the data in a manner that enables that

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Exhibit A can be found on the Plans' website at <https://www.nyse.com/publicdocs/ctaplan/notifications/trader- update/Exhibit%20A%20-%20CTA%20-%20Internal%20and%20External%20Distribution.pdf>.

subscriber to engage in Non-Display Use of the data, the subscriber should be subject to the access fee. This amendment would make clear that the fees are based on the level of functionality made available by the vendor rather than any particular method of transmission that could potentially be modified to avoid the access fees. The Participants believe that this proposed amendment is consistent with how access fees are currently charged and would remove any ambiguity for subscribers.

For example, if a subscriber is receiving a stream of consolidated quotation and last sale information from a vendor, and that stream of data can then be used by the subscriber as an input into its own systems and software, then the subscriber will be subject to the access fee because it is able to make Non-Display Uses of the data. Additionally, if a subscriber is able to access a vendor's servers, choose what data to download onto its own system, and then incorporate that data into the subscriber's system and software, then the subscriber will be subject to the access fee. If, however, a subscriber is accessing a platform provided by a third-party where the data is being incorporated into and manipulated by the third-party's software, then the subscriber accessing that platform will not be subject to the access fee; instead, the third-party software provider will be subject to the access fee.

This proposed amendment is designed to make the applicability of the access fee depend upon the functionality made available by a vendor rather than get into a technical discussion of whether a form of transmission constitutes a "data feed" per se. In essence, if the data is delivered in a format that allows for non-display use, then such data delivery is tantamount to a data feed because it is a delivery format that is not controlled either in the entitlements or how the data is displayed. This approach to defining the applicability of the access fee will ensure that vendors that are providing the same level of functionality to their subscribers are not permitted to charge

differing fees. As a result, the Participants believe that the revised definition will place all vendors on an equal footing so as to maintain a balanced, fair, and equitable competitive landscape.

3. Limited Scope of Proposed Amendment

So as to avoid any misplaced concern, the Participants reiterate that the Non-Display Use and access fees are not applicable to a Non-Professional User, and therefore the proposed amendments are not applicable to Non-Professional Users. As previously stated, the 2014 Fee Amendments established fees for Non-Display Uses of data and reduced the device fees assessed on Professional Subscribers. Therefore, regardless of whether a Non-Professional User is receiving a data product that could be subject to the Non-Display Use and access fees, a Non-Professional User's vendor would only be charged \$1.00 for the data product being made available to a Non-Professional User.<sup>18</sup> While the Participants cannot control the pricing charged by vendors for usage of the vendors' data products, such Non-Professional User's fees would not change in any way as a result of this proposed amendment.

Further, it is important to note the distinction between the fees charged to a brokerage platform that receives data and uses it for multiple purposes (including providing displays to its customers) versus the fees charged to display-only users who simply access that platform to view the data. Although it is true that the firms providing these types of platforms could be charged Non-Display Use and access fees because of their receipt and use of data for multiple purposes, that does not mean that the customers of such a platform would be charged the same fees. If a

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Unlike Professional Subscribers, Non-Professional Users are not directly billed by the Network Administrator, but instead the vendors providing the quotation and last sale information to Non-Professional Users are billed for any usage. The fee schedule states as much in connection with the Non-Professional User fee. None of the other fees contain this reference to charging vendors for use by Non-Professional Users because such users are not charged those fees.

customer has access to uncontrolled data on a platform, then the firm running the platform would be charged an access fee. Additionally, if the platform made Non-Display Use of that data, then the firm would also be charged a Non-Display Use fee, and if the use was on behalf of both itself and its customers, it would be charged a Category 1 and a Category 2 Non-Display Use fee.

However, customers accessing that display platform only to view the data would not be charged either the Non-Display Use fee or the access fee. As such, even if the platform had 500 users, the firm providing the platform would be charged only once for its Non-Display Use on behalf of its customers, but the customers would not be individually assessed the Non-Display Use or access fees. Instead, a Professional Subscriber would be charged at most \$45 per unit for accessing the firm's platform.

**B. Governing or Constituent Documents**

Not applicable.

**C. Implementation of the Amendments**

Pursuant to Rule 608(b)(3)(i) under Regulation NMS, the Participants have designated the proposed clarification as establishing or changing fees and are submitting the amendment for immediate effectiveness.

**D. Development and Implementation Phases**

See Item C above.

**E. Analysis of Impact on Competition**

The amendments proposed herein do not impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Securities Exchange Act of 1934 (the "Act"). Additionally, the Participants do not believe that the proposed amendments introduce terms that are unreasonably discriminatory for the purposes of Section 11A(c)(1)(D) of

the Act. The Participants have submitted this amendment to simply clarify the applicability of the Non-Display Use and access fees established in the 2014 Fee Amendments.

As explained in the 2014 Fee Amendments, the Non-Display Use fees were established in response to the proliferation of the use of data for dark pools and other non-display trading applications. In conjunction with the establishment of Non-Display Use fees, the Participants reduced the rates for Professional Subscriber display devices in hopes of fostering the widespread availability of real-time market data. At the same time, the Non-Display Use fees allowed those who make Non-Display Uses of data to make appropriate contributions to the costs of collecting, processing, and redistributing the data. The clarification proposed herein maintains the balance struck by the Participants in reducing the device fee while establishing the Non-Display Use fees.

Additionally, the Participants believe that the amendment will have a positive effect on competition because the amendment will ensure that all vendors are classifying their customer's usage in the same manner. Following the 2014 Fee Amendments, the Participants believe that certain vendors have been mischaracterizing the usage of their customers as being subject solely to the device fees despite the fact that the data was being delivered in an uncontrolled form that enabled their customers to integrate the data into their own systems and software for Non-Display Use. This mischaracterization led to certain vendors offering their customers lower fees, to the detriment of other vendors who properly characterized their customers' usage as subject to the Non-Display Use and access fees. By eliminating the ambiguity in the Plans' fee schedules, the Participants believe that all vendors will be subjected to and subject their customers to similar fees for similar uses of data.

Without detailed information from vendors,<sup>19</sup> the Participants are unable to calculate the actual number of subscribers that are going to be affected by the proposed amendment; however, due to the limited application of the Non-Display Use and access fees, the Participants believe that the change will not be widespread. First, the proposed amendment would have no effect on Non-Professional Users regardless of the type of data product the Non-Professional User was receiving; such users would only be charged \$1.00 for use of market data. Second, the Participants believe that some users might be receiving a data product in a format that provides a level of access to data that they do not need based on how they are using the data. If a subscriber were not making Non-Display Uses of market data, then such subscriber would not need the enhanced service and could switch to a display-only data product that would be subject to the lower device fees. Because the subscriber was not making Non-Display Uses of the market data, the switch would cause the subscriber to be in exactly the same position as it is today – it would be able to continue using the market data in the same manner as it previously viewed it while paying only the device fee. Finally, the Participants believe that only a small number of vendors are not correctly reporting their customers' usage of data, and this proposed amendment is intended to close an unintended loophole that certain vendors are exploiting.

In connection with the previously proposed amendment, Bloomberg claimed that the proposal was an unfair burden on competition because Bloomberg is “asked to disclose all of its customers to the Exchange, including the specific method by which they consume data.” Bloomberg claimed that such a request is to obtain “confidential information under the guise of the SRO cloak,” implying that this information will be used to market exchanges’ proprietary

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As previously mentioned though, Bloomberg, in its comment letter on the previously filed amendment, stated that although it rents out more than 300,000 terminals, it only claimed the proposed amendment would impact “hundreds” of its customers.

data products.<sup>20</sup> As described above, however, this data is already required by the administrator as a necessary part of its administrative functions to be able to audit fees billed to data users, and is not being requested by an individual exchange for its own benefit. As it always has been the case, other than non-professional subscribers, the administrator directly bills customers of vendors that have been reported by a vendor as a professional device user or using the data for non-display purposes. As a result, the information being requested is necessary to carry out the administrator function. Direct billing, and therefore the need for this information, long predates even the 2014 Fee Amendments. It is unclear why Bloomberg and other commenters believe that the proposed amendment has anything to do with this longstanding (and heretofore unchallenged) requirement.

Moreover, the administrator is subject to information barriers which prevent it from disclosing confidential customer information with the exchange's business units.

**F. Written Understanding or Agreements relating to Interpretation of, or Participation in, Plan**

As previously stated, the Participants have amended the CTA Market Data Non-Display Use Policy to implement the proposed Amendments. A copy of the changes to the Non-Display Use Policy is attached to the Amendment.

**G. Approval by Sponsors in Accordance with Plan**

Section XII (b)(iii) of the CTA Plan provides that "[a]ny addition of any charge to . . . the charges set forth in Exhibit E . . . shall be effected by an amendment to this CTA Plan . . . that is approved by affirmative vote of not less than two-thirds of all of the then voting members of CTA. Any such amendment shall be executed on behalf of each Participant that appointed a

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<sup>20</sup> Bloomberg Letter at 8.

voting member of CTA who approves such amendment and shall be filed with the SEC.”

Further, Section IX(b)(iii) of the CQ Plan provides that “additions, deletions, or modifications to any changes under this CQ Plan shall be effected by an amendment . . . that is approved by affirmative vote of two-thirds of all the members of the Operating Committee.”

The Participants have executed this Amendment and represent not less than two-thirds of all of the parties to the Plan. That satisfies the Plans' Participant-approval requirements

**H. Description of Operation of Facility Contemplated by the Proposed Amendments**

Not applicable.

**I. Terms and Conditions of Access**

Not applicable.

**J. Method of Determination and Imposition, and Amount of, Fees and Charges**

**1. In General**

The Participants took a number of factors into account in deciding to propose the amendments contained herein. First, the administrator works closely with vendors and customers to assess and analyze the different methods by which vendors make data available to their customers. The Participants have determined that certain vendors are providing non-display functionality via their market data products but nevertheless are reporting that their customers are only subject to the lower display device charges based on a skewed reading of the Non-Display Use and access fees.

Significantly, the Participants discussed their findings with the Advisory Committee. The Advisory Committee includes a representative of a broker-dealer with a substantial retail investor customer base, a broker-dealer with a substantial institutional investor customer base, an alternative trading system, a data vendor, and an investor. It also includes other industry

representatives having deep market data experience. The Advisory Committee members attended and participated in meetings of the Participants in which the proposed amendment was discussed in length. During these meetings, no Advisory Committee member voiced an opposition to the proposed amendment, and some were quite vocal in their support of the need to level the competitive imbalance that currently exists as a result of the misinterpretation by certain vendors of the Non-Display and access fees.

2. The Proposed Amendment Will Have No Impact on Most Individual Investors.

Non-Professional Users (i.e., individual investors) will not be impacted by the proposed amendment. As described above, Non-Professional Users are not subject to Non-Display Use, access, or device fees, regardless of the type of data product they receive. Rather, as provided for on the Fee Schedules, the only charge applicable to Non-Professional Users is the \$1.00 monthly charge and this charge is applicable to any use of the data by a Non-Professional User. Therefore, this proposed amendment will have no effect on the fees paid by Non-Professional Users.

3. Vendor Fees

Fees imposed by data vendors (which the Commission does not regulate), rather than the fees imposed under the national market system plans account for a significant majority of the global market data fees incurred by the financial industry. Market data vendors may significantly mark-up national market system fees or incorporate that data into the vendors' own market data products. The fees the market data vendors charge are not regulated and there is limited transparency into how their rates are applied. In any event the vendors' fees do not result in any additional revenues for the Participants; the vendors alone profit from them.

4. The Proposed Amendment Resolves the Inequitable Application of Non-Display Use and Access Fees as a Result of the Misinterpretation.

The Participants believe that the proposed amendment is fair and reasonable and provides for an equitable allocation of dues, fees, and other charges among vendors, data recipients and other persons. This proposed amendment is not motivated by a plan to increase fees or revenues, but rather to ensure that the 2014 Fee Amendments are applied correctly and consistently by all vendors. In a perfect world, this proposed amendment would not result in any changes to revenue because data recipients are already subject to the 2014 Fee Amendments and they should be reporting usage correctly. However, as the Bloomberg Letter exposes, there is at least one vendor (Bloomberg) that has not been accurately reporting its Bloomberg SAPI product.

For the reasons discussed below, the Participants cannot conduct a precise analysis of what changes to revenue would accrue if this amendment were to go into effect. Indeed, to date, the administrator cannot project whether this proposed amendment would result in any revenue changes because it is not known whether, and how many, vendors are not accurately reporting usage. The Participants are therefore unable to forecast what revenue increase, if any, may result from the proposed amendment, because only those vendors utilizing a misinterpretation of the 2014 Fee Amendments have the information necessary to enable the Participants to calculate the effects of closing the perceived loophole.

Nevertheless, the Participants have done a general analysis, as described below, based upon the comments received on the prior proposal. Specifically, as demonstrated by the Bloomberg comment, we know that at least one vendor is not reporting correctly and it has refused to provide information to the administrator. However, Bloomberg acknowledges in its letter that if it correctly applied the 2014 Fee Amendments, “hundreds” of its customers would be affected.

Because Bloomberg has refused to provide any information, the Participants have no way of knowing whether 200 customers or 999 customers would be impacted, or somewhere in between. In addition, some of these customers may only need to receive the data in a display format and therefore not be impacted at all. Regardless of the actual number of Bloomberg customers, there would not be a one-to-one correlation between the number of customers receiving CTA/CQ data over the Bloomberg SAPI and the number of additional access fees and Non-Display Use fees that would be charged if Bloomberg correctly reported its customers' usage. Specifically, Bloomberg is likely currently reporting those "hundreds" of data recipients as Professional Device Users, which means the customer that Bloomberg is referring to is in fact a person as opposed to a firm. A customer firm of Bloomberg may subscribe multiple times to the Bloomberg SAPI feed for its individual users. In that case, because access fees and Non-Display Use fees are charged once at a firm level, that Bloomberg customer firm would likely be subject to a single access fee and Non-Display Use fee for multiple Bloomberg SAPI connections. Moreover, a Bloomberg firm customer that subscribes to the Bloomberg SAPI may already be paying an access fee and Non-Display Use fees, in which case, correctly reporting the Bloomberg SAPI as a data feed would not result in any additional fees to such customer. Additionally, the Participants believe that many data users that are currently taking high-priced vendor products such as Bloomberg's SAPI, providing what is for those users unnecessary functionality, may switch to other products so as to avoid having to pay any additional charges they may face once the non-display functionality is accurately reported. Any such switch will reduce any potential revenue increase resulting from the clarification. In sum, although the Participants are aware of certain vendors inaccurately reporting data usage, they do not believe that there has been a widespread misinterpretation of the 2014 Fee Amendments. Accordingly,

the Participants generally do not believe that this proposed amendment would result in a material increase in revenue.

More importantly, however, the Participants are concerned about the possible consequences of failing to close this perceived loophole. In particular, the level of access provided by the misreported products is roughly equivalent to that provided by the products offered by vendors reporting accurately. Yet, those vendor's customers are not paying what other vendor's customers pay for the similar services. In order to maintain the competitive balance, it is likely that, absent the clarification, the market vendors that are now accurately reporting may feel compelled to take advantage of this perceived loophole to reduce their competitors' untoward advantage, and, if they do so, this may reduce the market data revenue pool available to the Participants. The failure to close this perceived loophole therefore could result in substantial disruptions to the market data funding mechanism.

**K. Method and Frequency of Processor Evaluation**

Not applicable.

**L. Dispute Resolution**

Not applicable.

**II. Rule 601(a)**

**A. Equity Securities for which Transaction Reports Shall be Required by the Plan**

Not applicable.

**B. Reporting Requirements**

Not applicable.

**C. Manner of Collecting, Processing, Sequencing, Making Available and Disseminating Last Sale Information**

Not applicable.

D. Manner of Consolidation

Not applicable.

E. Standards and Methods Ensuring Promptness, Accuracy and Completeness of Transaction Reports

Not applicable

F. Rules and Procedures Addressed to Fraudulent or Manipulative Dissemination

Not applicable.

G. Terms of Access to Transaction Reports

Not applicable.

H. Identification of Marketplace of Execution

Not applicable.

III. Solicitation of Comments

The Commission seeks comment on the Amendments. In particular, the Commission seeks comment on, among other things: (1) whether the impact of the 2014 CTA/CQ Fee Amendments on market data users has been consistent with the representations of the Participants; (2) the number of market data users that would be impacted by these Amendments; (3) the impact these Amendments would have on, for example, the fees paid by market data users; and (4) whether the Amendments would have a disproportionately greater impact on certain segments of users (e.g., small and midsize trading firms). Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed Amendments are consistent with the Act. Comments may be submitted by any of the following methods:

Electronic comments:

- Use the Commission's Internet comment form (<http://www.sec.gov/rules/sro.shtml>); or

- Send an e-mail to [rule-comments@sec.gov](mailto:rule-comments@sec.gov). Please include File Number SR-CTA/CQ-2017-04 on the subject line.

Paper comments:

- Send paper comments in triplicate to Brent J. Fields, Secretary, Securities and Exchange Commission, 100 F Street, NE, Washington, DC 20549-1090.

All submissions should refer to File Number SR-CTA/CQ-2017-04. This file number should be included on the subject line if e-mail is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet website (<http://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the Amendments that are filed with the Commission, and all written communications relating to the Amendments between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Room on official business days between the hours of 10:00 am and 3:00 pm. Copies of the Amendments also will be available for inspection and copying at the principal office of the CTA.

All comments received will be posted without change. Persons submitting comments are cautioned that we do not redact or edit personal identifying information from comment submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR-CTA/CQ-2017-04 and should be submitted on or before [insert date 21 days from publication in the Federal Register].

By the Commission.

Brent J. Fields  
Secretary

UNITED STATES OF AMERICA  
before the  
SECURITIES AND EXCHANGE COMMISSION

In The Matter of:

The Application of BLOOMBERG L.P.

For Review of Amendments of the Consolidated  
Tape Association Limiting Access to its Services

Admin. Proc. File No. 3-18316

**DECLARATION OF TONY McMANUS**

I, Tony McManus, declare as follows:

1. I submit this declaration in support of Bloomberg L.P.'s Motion to Stay CTA's Fee Amendment. Since November 2012, I have served as the global business head for real time feeds, platform technology, and service delivery for Bloomberg L.P. ("Bloomberg").

2. Before joining Bloomberg, I worked for NYSE Euronext for five years, including as its managing director for the NYSE Technology Centre of Excellence and as the global business head for enterprise software. Earlier in my career, I developed trading programs for a large international financial institution. I received a Masters in Science in Information Systems in 1997 from the University of Portsmouth in the U.K.

3. Among the products and services I am responsible for in my current role are Bloomberg's Server Applications Program Interface ("SAPI") service and its Market Data Feed, known as B-PIPE. My responsibilities include overseeing product development, customer support, and business management for these products and services. I make this declaration based on my personal knowledge, discussions with colleagues, and Bloomberg's corporate records.

## **A. Bloomberg's Market-Data Services**

4. Bloomberg, like competing market data vendors, offers real-time market data in two basic ways: display services and data feeds.

a. **Display services:** Bloomberg supplies data to devices that display the data to human users on a screen through an application. The Bloomberg Terminal is a software tool that displays real-time data, news, and analytics to authorized Bloomberg subscribers on approved devices.<sup>1</sup> In connection with their Terminal subscription, Bloomberg subscribers may purchase the Server Applications Program Interface (“SAPI”) at issue in this proceeding. SAPI supplies real-time market data, and/or data derived from real-time market data (“derived data”), for display on the same devices on which subscribers view the Bloomberg Terminal. SAPI delivers market data to a customer’s central server for distribution to the display devices of authorized Bloomberg Terminal users, as verified by Bloomberg’s centrally controlled entitlement system. SAPI subscribers view market data (and data derived from market data) on their devices through third-party applications or their firm’s own proprietary applications. Bloomberg tightly controls access to the market data and derived data that SAPI provides. To view the data, a subscriber must be logged into the Bloomberg Terminal, which requires the subscriber to provide a unique alphanumeric identifier and biometric authentication. Bloomberg’s systems then verify that the subscriber is entitled to view the requested market

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<sup>1</sup> Although the Bloomberg Terminal is still available in its original hardware form, the software version is far more widely used.

data. Data is then delivered only to the device on which the subscriber is logged into the Bloomberg Terminal.

**b. Data feeds:** Bloomberg supplies data-feed customers, by contrast, with a stream of data they may access however they want, including in ways that require no human intervention, such as automated, algorithmic, or “black box” trading. Bloomberg’s B-PIPE data feed delivers higher volumes of data than SAPI allows, without the usage restrictions that SAPI imposes. B-PIPE customers may use data for black box trading and other activities that are never displayed on a screen. Unlike Bloomberg’s display products, the B-PIPE data feed is not tied to subscriptions for individual users, but may be used by anyone across an entire firm regardless of whether they have a Bloomberg Terminal subscription or log into a particular device. As a result, with B-PIPE the firm, rather than Bloomberg, controls which individuals may access what data.

5. In the amendment to the CTA and CQ national market system plans that is at issue in these proceedings, *see* SEC Release No. 34-82071 (“Amendment” or “Release”), the NYSE-led Consolidated Tape Association (“CTA”) claims that SAPI (1) uses market data for non-display purposes and (2) delivers data to subscribers in an uncontrolled format tantamount to a data feed. Both of these claims are wrong, as demonstrated by the basic differences between SAPI and B-PIPE outlined above. SAPI market data and derived data may be accessed only (1) on a display device, (2) on which the user is simultaneously logged into the Bloomberg Terminal, (3) through a graphical application, (4) by a properly authenticated and entitled human user. B-PIPE, by contrast, is a data feed that may be used (1) on any kind of device, (2) by any

person irrespective of whether they are Bloomberg Terminal subscribers, and (3) for any number of automated, algorithmic, high-frequency, or black box trading applications that never graphically display the data.

**B. SAPI Is a Display Service**

6. SAPI delivers real-time market data to display devices via a firm's central server, instead of directly to the display device, as happens with the Bloomberg Terminal. The display devices receiving the data are verified by Bloomberg's centrally controlled entitlement system. This choice of delivery method is minimally (if at all) apparent to the end user. With both SAPI and the Bloomberg Terminal, the same market data reaches the screens of the same authenticated users, who may use it only through display applications.

7. SAPI's server-based system for delivering information to display devices nevertheless offers several advantages over a direct-to-desktop approach. None of these advantages, however, supports CTA's assertion that SAPI allows customers to use data for purposes other than display. *See* Release 11.

8. First, the server-based arrangement enhances efficiency by allowing customers' SAPI applications to receive data through one download to a central server, instead of redundant downloads to individual devices. This reduces data consumption by allowing individual users to access the same data on the firm's server. This advantage is effectively invisible to end users.

9. Second, by downloading data to a single server and then distributing it to users' authorized devices, rather than delivering the data to the devices directly, SAPI ensures that different applications receive consistent, uniform data.

10. Third, users of SAPI can view the data through applications that reside on a server but are displayed on the users' devices alongside the Bloomberg Terminal. These display

applications, which may be acquired from approved third-party vendors or developed in-house on a proprietary basis, allow Bloomberg Terminal users to view, analyze, and act on the market data delivered through SAPI. All applications compatible with SAPI must have graphical user interfaces that visibly display the market data (or derived data). Bloomberg works with customers and with third-party vendors to ensure that applications displaying SAPI data comply with Bloomberg controls.

**11.** Fourth, delivering the data to a central server that services the display applications streamlines technological maintenance and control for SAPI customers. This configuration allows firms to upgrade or modify software through a central server rather than on each individual device.

**12.** CTA states that “a customer would not need the Bloomberg SAPI” if it “only needs the display features.” Release 11. This is incorrect. One of the main benefits of SAPI is the ability to deliver data to third-party and proprietary applications that display the data on the same device as the Bloomberg Terminal, but are not offered directly by Bloomberg. Order-management systems from vendors such as Eze Castle are popular display applications that use SAPI to display data to Bloomberg Terminal users. CTA’s conclusion that SAPI customers must be using data for non-display purposes is at odds with customers’ actual, authorized use of SAPI.

**13.** Relatedly, the Amendment states that unlike the Bloomberg Terminal, which CTA itself describes as “a display product,” the “functionality made available by the Bloomberg SAPI is not at its core a display product.” Release 10. This misunderstands how SAPI works. SAPI enables servers to deliver the same market data for display on the same device that displays the Bloomberg Terminal. SAPI does not replace the Bloomberg Terminal; to the contrary, a Bloomberg Terminal subscription is required to use SAPI. From the customer’s perspective, the

Bloomberg Terminal and SAPI are intertwined, with SAPI supplying data that subscribers can use and view only on the same device where they use and view the Bloomberg Terminal.

**14.** CTA’s Amendment also states that “Bloomberg SAPI permits” non-display use where the data is not “visibly available to a data recipient on a device” when “Bloomberg SAPI allows customers to run server-based applications on market data.” Release 10. This is incorrect. Bloomberg neither “permits” nor “allows” non-display uses for SAPI and, in fact, affirmatively prohibits those uses. Moreover, from a technical perspective and as described above, SAPI delivers data exclusively for use in display applications visible on devices running the Bloomberg Terminal, which CTA recognizes is “a display product.” *Id.* at 10. Whether an application is “server-based” or “desktop-based” has no bearing on whether it is a display use. Those terms simply describe whether the application is installed on a server or on the individual user’s desktop device. All approved SAPI applications are server-based but are nevertheless displayed, through a graphical user interface, on an authorized and entitled user’s desktop or other display device (e.g., tablet or smartphone).

**15.** CTA is also wrong when it concludes that “[c]ustomers that choose to subscribe to both the Bloomberg Terminal and the Bloomberg SAPI presumably are doing so because they are using the data for purposes other than just display of the data.” Release 11. Customers who purchase SAPI are receiving a service that uses the data solely for the purpose of displaying it on the devices of individual users, just as with the Bloomberg Terminal.

### **C. SAPI Data Is Controlled**

**16.** CTA’s amendment indicates that SAPI does not deliver market data “in a controlled format,” but rather “in a format that enable[s] their customers to integrate the data into their own systems and software for Non-Display Use.” Release 7. This statement, however,

ignores the fact that Bloomberg controls access to and use of SAPI data through multiple contractual and technological restrictions that require all data a user consumes to be either displayed on the same device as the Bloomberg Terminal or used to create derived data that is displayed on the same device as the Bloomberg Terminal.

**17.** Significant limitations in Bloomberg's customer contract restrict SAPI data to only approved display usage.<sup>2</sup>

- a.** SAPI customers must subscribe to the Bloomberg Terminal and agree to a contract governing the type and amount of Bloomberg market data they can use.
- b.** Bloomberg's contract with SAPI customers prohibits the use of SAPI data for algorithmic trading, black box trading, or other automated non-display processes.
- c.** Bloomberg's SAPI contract also limits data consumption to levels typically employed for display use rather than non-display or black-box trading applications.
- d.** The contract requires Bloomberg's approval of any third-party server applications supplied with SAPI data.
- e.** The contract restricts use of the SAPI product to authorized users and prohibits these users from sharing market data, or data derived from market data, with unauthorized users. It also requires customers to provide documentation to Bloomberg evidencing that they have incorporated

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<sup>2</sup> For confidentiality reasons, this and other contracts mentioned in this declaration are not attached to the declaration. Should it aid the Commission's consideration of this motion, Bloomberg is willing to submit the contracts in connection with a request for confidential treatment or other appropriate protection.

Bloomberg's technical restrictions into their system architecture to ensure that only authorized, entitled users may view SAPI data.

f. The contract gives Bloomberg the right to audit a customer's use of SAPI data whenever Bloomberg believes the customer to be in breach of the contract or if CTA requests an audit.

g. The contract requires SAPI customers to certify every six months that only authorized users have received data through SAPI. It also requires customers to make annual certifications that their use of SAPI complies with all contractual requirements, including the prohibition against black-box use.

**18.** SAPI customers must also sign a subscriber agreement with NYSE and potentially other sources of market data. In the case of CTA, its administrator NYSE has a contractual right to audit the use of SAPI data.

**19.** Consistent with these contractual limitations, Bloomberg personnel work closely with customers to ensure their use of SAPI data on display devices remains compliant with the customers' obligations. During the implementation process, for example, Bloomberg personnel share with customers a SAPI Guidelines document that sets forth the nature and limitations of SAPI use. The Guidelines make clear that the "fundamental rule governing [a customer's] use of SAPI data is that the data can be accessed only by a [Bloomberg Terminal user] that has been permissioned to access that data and who is logged on[to] the Terminal on the same device that he or she is accessing that data." It explains that "SAPI data (whether raw or derived) may not be used as inputs into any non-user-based, non-display application, including but not limited to any automated algorithmic trading application." A copy of the SAPI Guidelines document is attached as Exhibit A.

**20.** When a customer subscribes to SAPI, Bloomberg personnel work closely with the customer, its information technology staff, its software developers, and its end users to ensure they understand and properly implement SAPI in light of these controls. This typically involves spending a significant amount of time with the customer on-site to test and deploy the SAPI product.

**21.** Bloomberg personnel also work closely with third-party developers who design applications for use on display devices with Bloomberg SAPI data. We utilize a vetting form, development kit, and product review in order to determine whether an application is appropriate for use with SAPI. Bloomberg publishes a list of approved third-party applications and individually vets any unlisted third-party applications that a customer wishes to use. Bloomberg counsels SAPI customers on how to use applications and remain compliant with their technical limitations and contractual obligations.

**22.** The contractual limitations on SAPI use set forth above are consistent with technological limitations designed to prevent the unauthorized or non-display usage of market data supplied by SAPI.

**a.** To log into the Bloomberg Terminal, SAPI users must provide biometric identification. This technology prevents subscribers from logging into the Bloomberg Terminal on more than one device at a time and ensures that only authorized users are physically present to view the data delivered by SAPI to a device.

**b.** SAPI users must also supply a unique subscription ID to log into the Bloomberg Terminal, which further ensures that only authorized users are viewing data supplied by SAPI.

c. Bloomberg verifies a user's biometric and alphanumeric identification through a centrally controlled entitlement system. The system will permit a user to view SAPI-supplied data only after it verifies the user's identity, ensures that the user is logged into only one device, and confirms that the user is authorized by Bloomberg to view the requested data.

d. SAPI users' data consumption is limited to volumes appropriate for use on a limited number of applications displayed on a device. SAPI technology monitors the amount of data consumption by SAPI customers. Usage above contractual limits triggers reports to a product oversight team. Bloomberg works with customers to bring consumption within authorized limits and, if those efforts fail within an allotted time, will suspend service.

**23.** The controls applicable to SAPI generally do not apply to Bloomberg's data feed product, B-PIPE. B-PIPE customers can make the data they receive available to any of their employees, whether or not those employees are Bloomberg Terminal subscribers. As a result, B-PIPE customers may authorize any number or type of their employees to use data delivered through B-PIPE. B-PIPE also offers much higher quantities of data than SAPI does, and, unlike SAPI, the data does not have to be displayed on a device logged into the Bloomberg Terminal—or even displayed at all. It can be used for algorithmic trading or other automated processes not requiring human users.

**24.** These controls also protect against misuse of Bloomberg's own proprietary market data. A great deal of Bloomberg proprietary data is provided through SAPI—all of which Bloomberg has a vested financial interest in protecting from unauthorized use.

**25.** CTA states that non-display use should be defined according to whether customers are “able to integrate the data into the recipient’s own systems and software.” Release 7-8. It also states that the “ability to integrate consolidated quotation and last sale information in a data recipient’s ‘server-based applications’ clearly demonstrates the incongruence between SIFMA’s description and the Bloomberg SAPI data product’s overall functionality.” *Id.* at 11. From a technical perspective, CTA’s description is inconsistent with the way market data is delivered and used in the industry. Any market data could in theory be integrated in some way with a customer’s software or system. That is one reason why Bloomberg utilizes extensive technical, contractual, and training provisions to ensure usage remains consistent with the customer’s authorization.

**26.** CTA’s use of the terms “integrate” and “manipulate” to define non-display and access fees is also highly ambiguous from a technical perspective. For example, CTA—correctly—excludes Excel use from its definition of non-display use. Release 8. But it provides no explanation why Excel should be deemed display use, while other applications are deemed non-display use, based on “integrating” and “manipulating” data into a customer’s software. From a technical perspective, there is little if any difference between the “integration” and “manipulation” of data for display through Excel compared to other display applications CTA proposes to treat as non-display use.

I declare under penalty of perjury under the laws of the United States that the  
foregoing is true and correct.

Dated: 2/5/2018

T. McManus

Tony McManus

# McManus Exhibit A

**Server API (SAPI) Guidelines**  
**Bloomberg Product Oversight**  
**Overview**

Bloomberg Server API (“SAPI”) is a part of the BLOOMBERG PROFESSIONAL® service (the “Terminal”). It allows Bloomberg Anywhere® users (“BBA Users”) to download the same high quality, timely data they rely on within the Terminal environment for use in server-based, display applications.

Use of SAPI data is subject to certain license restrictions as specified in the Bloomberg Agreement and the Server API Customer Agreement (the “Agreements”). This document is designed to summarize these usage restrictions.

(This document serves as a guide only. Your company’s Agreements with Bloomberg govern your use of the Terminal and SAPI.)

**Data Dissemination**

The fundamental rule governing your company’s use of SAPI data is that the data can be accessed only by a BBA User that has been permissioned to access that data and who is logged on the Terminal on the same device that he or she is accessing that data. This rule applies to both raw data and derived data generated by the BBA User. Each application that the BBA User uses to access SAPI data must be running Bloomberg’s permissioning system (authentication and entitlement checks) to confirm that the above requirements are met.

As an exception to this rule, however, Bloomberg allows the BBA User who initially accessed the data or generated derived data to disseminate a ‘Limited Amount’ of the data (or derived data) in the ordinary course of business, such as providing research reports to your company’s clients. This use of a ‘Limited Amount’ of raw and derived data may not be sold, created as part of a regularly scheduled, automated process, nor streamed or broadcasted. Note that BBA Users must comply with all restrictions on use required by providers of exchange data and other third party contributors. Additional consents from these providers may be required for the use and dissemination of data and information.

Some common ‘Limited Amount’ examples are:

- Three graphs containing Bloomberg data used in a quarterly .pdf research report created by an asset manager and distributed to its advisory clients.
- A chart containing Bloomberg data used by a broker-dealer in a research report to its clients.

**Automated Data Validation**

Use of SAPI data for *data validation* or *data verification* to improve other data is not permitted.

**Non-Display Applications**

SAPI data (whether raw or derived) may not be used as inputs into any non-user-based, non-display application, including but not limited to any automated algorithmic trading application.

**Data Storage**

SAPI data (whether raw or derived) may be stored only on authorized servers for re-access only by authorized BBA Users of the data.

**Reports**

In order to authorize BBA Users, applications and servers to access SAPI data (whether raw or derived), your company is required to report (biannually in January and July on SAPE <GO>) all such BBA Users, applications and servers.

**Conclusion**

SAPI is a sophisticated tool that supports a wide range of uses. Use of SAPI in an impermissible manner represents a breach of your Agreements with Bloomberg. The Bloomberg Product Oversight team is available to answer questions about use cases and product choice. For additional information, or for any questions, please contact your Bloomberg account manager.

Revised: November 2015

UNITED STATES OF AMERICA  
before the  
**SECURITIES AND EXCHANGE COMMISSION**

In The Matter of:

The Application of BLOOMBERG L.P.

For Review of Amendments of the Consolidated  
Tape Association Limiting Access to its Services

Admin. Proc. File No. 3-18316

**DECLARATION OF KEITH BUNNELL**

I, Keith Bunnell, declare as follows:

1. I submit this declaration in support of Bloomberg L.P.'s Motion to Stay CTA's Fee Amendment. I have worked in sales at Bloomberg L.P. ("Bloomberg") since graduating from college in 2000. Since 2013, I have led Bloomberg's enterprise solution sales for North and South America. I work closely with Bloomberg's sales representatives, existing customers, and potential customers.

2. I have been involved with sales of Bloomberg's Server Applications Program Interface ("SAPI") since 2004. My team and I market Bloomberg market-data services to new customers, serve existing customers, learn about competitors' market-data offerings, and work closely with Bloomberg's product team to enhance our products and services. I make this declaration based on my personal knowledge, discussions with colleagues, and Bloomberg's corporate records.

**A. Real-Time Market-Data Services Offered by Bloomberg and Its Competitors**

3. Bloomberg, like competing vendors of market data, offers customers two basic ways to receive real-time market data: display services and data feeds.

4. Bloomberg markets a display service known as the Bloomberg Terminal, a software tool that displays real-time data, news, and analytics on the devices of authorized subscribers. Bloomberg previously supplied Terminal customers with actual desktop hardware, but now generally supplies software that can run instead on subscribers' own devices, such as desktops, laptops, or smartphones.

5. The Bloomberg Terminal can receive and display multiple types of data from many different sources, including top-of-book data from securities information processors such as the Consolidated Tape Association ("CTA"), depth-of-book data from exchanges such as NYSE and NASDAQ, and Bloomberg's own proprietary data and news. Customers choose which types of market data they would like to purchase and receive using the Terminal.

6. Bloomberg Terminal customers may also purchase Bloomberg's SAPI service in connection with their Terminal subscriptions. SAPI delivers a customer's chosen data to the customer's central server for distribution to the display devices of authorized Bloomberg Terminal users, as verified by Bloomberg's centrally controlled entitlement system. Market data delivered through SAPI, and/or data derived from such market data ("derived data"), is displayed on the device screen through third-party applications or a subscriber's proprietary applications. The user who views the data must be a Bloomberg Terminal subscriber, must be logged into the Bloomberg Terminal on only one device, and must view the data on that same device.

7. Bloomberg SAPI competes with the display products and services of other data vendors, including those offered by FactSet Research Systems, Inc. and Thomson Reuters' Eikon.

8. Bloomberg and the sales team I supervise market SAPI as what it is—a display service. Attached as Exhibit B is a description of SAPI that Bloomberg uses to market SAPI.

That document repeatedly makes clear that SAPI allows Bloomberg subscribers to “consum[e] real-time data in display applications.”

9. Separate from the display offerings available through the Bloomberg Terminal, Bloomberg also markets a data feed known as the Bloomberg Market Data Feed, or B-PIPE. The B-PIPE Market Data Feed delivers real-time data and analytics to a wide range of third-party, proprietary, and non-display applications. Attached as Exhibit C is a brochure that is used to market B-PIPE. In contrast to SAPI as described in Exhibit B, the description of B-PIPE in Exhibit C explains that B-PIPE can be used to feed “black box,” algorithmic, or automated trading programs that rely solely on computerized programs to execute trades without any requirement that humans view the data. Unlike Bloomberg’s SAPI service, our customers may use the B-PIPE data feed separately from a Bloomberg Terminal, give access to data from B-PIPE to employees who are not Bloomberg Terminal subscribers, and distribute data from B-PIPE to any number of non-display devices.

10. B-PIPE competes with Thomson Reuters Elektron and the IDS data feeds. IDS is owned by Intercontinental Exchange, Inc., the parent company of NYSE.

11. I understand, based on my own experience and knowledge of the market, that Bloomberg’s SAPI service is more popular than competing Thomson Reuters and FactSet services, while Thomson Reuters’ data feed is more popular than competing Bloomberg and IDS data feeds.

**B. Customers and Uses Served by Bloomberg SAPI**

12. In its amendment to the CTA and CQ national market system plans, SEC Release No. 34-82071, dated November 14, 2017 (“Amendment” or “Release”), CTA describes SAPI as “tantamount to a data feed” because it supposedly delivers data in a format “that is not controlled either in the entitlements or how the data is displayed.” Release 14. This is mistaken.

Bloomberg markets SAPI only for use by individuals who subscribe to the Bloomberg Terminal, log in as a biometrically authenticated user, and view market data on applications displayed on the same device as the Bloomberg Terminal service. Exhibit B makes this clear. Bloomberg’s contracts and technological controls are designed to prevent SAPI customers from using market data either outside the device running the Bloomberg Terminal or for non-display functions, such as algorithmic or automated trading. In contrast to SAPI, B-PIPE can be used for non-display functions such as automated, algorithmic, or black box trading.

13. Bloomberg does not market and will not sell SAPI to customers who want to use market data for automated, algorithmic, or black box trading, or independently of the Bloomberg Terminal. When we encounter potential customers who seek to use market data in these ways, we direct them to B-PIPE as the appropriate Bloomberg offering to meet their needs. B-PIPE can help customers execute trades and take other automated actions that are not displayed to a human user on a device screen.

14. Attempting to use SAPI for these purposes would violate the terms of SAPI customers’ contractual agreement with Bloomberg. In a clause entitled “No ‘Black Box’ Applications,” the agreement expressly prohibits the use of market data supplied by SAPI “as

inputs into any non-user-based, non-display application, including but not limited to any automated algorithmic trading application.” § 1(h).<sup>1</sup>

**15.** Bloomberg works with our customers through sales counseling, training, installation, third-party certification, and data-usage monitoring to ensure SAPI is used only for approved display purposes in compliance with the SAPI customer agreement.

**16.** Contrary to CTA’s suggestion, Bloomberg is not mischaracterizing SAPI to avoid non-display and access fees. Release 7-11. In fact, Bloomberg has strong financial incentives to route customers who want to engage in non-display uses such as algorithmic trading to B-PIPE rather than SAPI, and to control the data that Bloomberg delivers through SAPI. First, B-PIPE costs substantially more than SAPI, and therefore there is no incentive for Bloomberg and its salespersons to steer customers with non-display needs to the less-expensive SAPI. Second, Bloomberg provides via SAPI its own proprietary data, in addition to CTA and other exchange data. Bloomberg has a compelling financial interest in ensuring that our own data is used and distributed only to the customers who have subscribed to and paid for that data. Unauthorized use of SAPI would deprive Bloomberg of revenues the customers should be paying to Bloomberg.

**17.** Given these parameters, SAPI offers Bloomberg Terminal customers a number of important competitive and technological advantages, including:

- a.** Ensuring a single, consistent supply of market data to multiple approved applications used by a Bloomberg subscriber on a single device.

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<sup>1</sup> For confidentiality reasons, this contract is not attached to this declaration. Should it aid the Commission’s consideration of this motion, Bloomberg is willing to submit the contract in connection with a request for confidential treatment or other appropriate protection.

- b. Allowing Bloomberg subscribers to select from a wide variety of third-party applications, such as order-management systems, approved by Bloomberg for use and display on the device of a Terminal user.
- c. Allowing Bloomberg subscribers to develop their own proprietary applications for use and display on the device of a Terminal user.
- d. Streamlining technical support and maintenance by allowing customers to install, service, and upgrade a single version of their applications on a server, rather than deploying the applications on every device.
- e. Streamlining the delivery and consumption of data by delivering data only once to the central server, rather than independently and redundantly to each device.

**18.** Bloomberg's SAPI customer base reflects these advantages. SAPI customers include many small and mid-sized funds and broker-dealers. These SAPI customers serve a variety of market sectors, including institutional and individual investors. The customers are often attracted by SAPI's ability to improve the quality and consistency of their data, expand the menu of third-party and proprietary applications displayed on their devices, and streamline their administrative overhead and information-technology demands.<sup>2</sup>

**19.** CTA speculates that "Bloomberg charges its subscribers substantial amounts for the Bloomberg SAPI over and above the amounts Bloomberg charges for use of one of its terminals alone" because SAPI customers "are using the data for purposes other than just display of the data." Release 11. As noted above, however, strong contractual and technological

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<sup>2</sup> CTA states that its fee increase would affect hundreds of Bloomberg "customers." But it mistakenly believes "Bloomberg is referring to ... a person as opposed to a firm." Release 22-23. Bloomberg has hundreds of SAPI customer firms, each of which may authorize one or more end users to use SAPI.

controls limit SAPI data and/or derived data to use for display purposes only. The amounts that Bloomberg charges customers for SAPI reflect valuable technological benefits that SAPI delivers to customers, as well as Bloomberg's increased costs in producing and deploying SAPI, including enhanced customer support, implementation costs, and development support. Those benefits all facilitate the viewing and use of real-time data (and derived data) on a screen by human beings. SAPI can improve the ability of professionals to react and participate in the market, but does not eliminate the need for humans to view and react to the displayed market data.

**20.** Regardless of whether a display device receives data directly from Bloomberg or indirectly via a server controlled by Bloomberg's technology, the data serves the same basic function of enabling human use of market data through applications displayed on the same device that displays the Terminal. Contrary to CTA's suggestion, SAPI does not alter the basic use case for working on a device operated by a Bloomberg Terminal user.

### **C. Competitors' SAPI services**

**21.** CTA asserts that subjecting SAPI to device fees, rather than non-display and access fees, causes a "competitive imbalance" among data vendors. Release 9-11. I am not aware of any competitive imbalance among similar services caused by disparate market-data fees.

**22.** CTA's assertion appears to be incorrect, based on statements by other vendors that compete with SAPI. Those statements suggest that other server API services are treated the same way CTA historically has treated Bloomberg SAPI: as display use subject only to device fees.

**23.** Attached as Exhibit D is a marketing brochure used by Thomson Reuters for its Eikon Server API (or “SAPI”) service. That document describes the Eikon Server API’s functionality and fees, as relevant to CTA’s Amendment, in a manner that closely resembles Bloomberg SAPI. Eikon Server API “is available only to Eikon [*i.e.*, terminal] customers,” “power[s] server based applications,” allows customers to “use Eikon alongside their … order management systems on the same desktop,” and “[d]elivers the same data to desktop OMS/EMS applications running alongside Eikon.” Ex. C. Eikon Server API, moreover, incurs “no additional exchange fees,” “eliminat[es] dual exchange fees,” and ensures “Thomson Reuters remains Vendor of Record.” *Id.* (Data-feed customers, but not display customers, generally sign a vendor agreement with the exchanges that makes the customer the vendor of record.) Given this description, I understand Exhibit D to indicate Eikon Server API is subject to device fees, not the non-display and access fees that CTA and others impose on data feeds. This is consistent with Thomson Reuters’ April and November letters to the Commission, which do not assert that Thomson Reuters’ Eikon Server API customers are subject to non-display and access fees.

**24.** CTA states that the “proposed amendment is consistent with how access fees are currently charged and would remove any ambiguity for subscribers,” and alleges that Bloomberg has misinterpreted non-display use and access fees in a way that creates a “need to level the competitive imbalance that currently exists as a result.” Release 21. This view is inconsistent with my and my team’s experience in the marketplace. Vendors and customers have understood non-display and access fees to cover data that is obtained through a data feed and not displayed on a device, either as raw or derived data. Customers and vendors have not, in my experience, understood the non-display and access fees to apply to the display of data on devices that run the Bloomberg Terminal or Thomson Reuters Eikon.

#### **D. Impact of Proposed Fee Change**

**25.** Rather than “eliminating” the competitive imbalance that CTA ascribes to SAPI’s classification as a display service, Release 9, this Amendment will cause enormous competitive harm to Bloomberg—harm that may well redound to the benefit of NYSE’s sister company, IDS, and Thomson Reuters, a member of CTA’s advisory committee.

**26.** Before the proposed Amendment, our customers receiving display services such as SAPI paid between \$19 and \$45 per Terminal user per month for quotation and last-sale information for Network A securities, and \$23 per Terminal user per month for quotation and last-sale information for Network B securities.

**27.** Deeming SAPI to entail non-display use under CTA’s Amendment would require each SAPI customer firm to pay at least an additional \$6,000 per month in non-display use fees and access fees for Network A securities, and an additional \$3,000 per month for Network B securities.<sup>3</sup> CTA’s fee increase would raise the monthly fees of a typical SAPI customer, which authorizes approximately two end users, by more than 6000%, from \$136 to \$9,136.

**28.** Such a change in the cost structure for market data would dramatically alter the competitive landscape. Customers who previously had access to a relatively low-price source of market data would be forced to consider buying data feeds at far higher prices, or to consider altering their business models to avoid using real-time data altogether. In other words, SAPI, which competes for terminal customers principally at small and mid-sized firms, would be charged the high fees applied to data feeds—a different market sector with far higher price points. The fees artificially diminish the competitive advantage Bloomberg has built for display-device data. And third-party developers who designed programs specifically for the SAPI

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<sup>3</sup> This applies to both bid/ask and last-sale data, which are bundled on Bloomberg’s offerings.

technology and marketed applications to SAPI users would be left with far fewer customers able to use their products.

**29.** Because CTA claims the unilateral power to impose these higher fees on Bloomberg's SAPI customers, there is nothing Bloomberg could do to avoid significant SAPI customer attrition. The cost to the customer would rise dramatically without any change to the costs Bloomberg incurs or to the services it offers its customers.<sup>4</sup>

**30.** The SAPI customers we serve operate in competitive environments. Many customers could not absorb a fee increase of 2,000% (for a ten-user firm, *see SIFMA comment letter, No. 34-82071*) to 6,000% or more (for a two-user firm, *see supra ¶27*) for a critical business expense like real-time market data. Many customers would be forced to limit SAPI use, drop SAPI completely, or upgrade to a more expensive service such as the B-PIPE data feed or the competing data feeds offered by Thomson Reuters or IDS. This would necessarily harm the leading display-based data business Bloomberg has built.

**31.** SAPI customers who upgraded to B-PIPE or a similar data feed would face significant costs on top of their subscription costs and the non-display and access fees. For a data feed, the customer rather than the data vendor serves as the vendor of record that interacts and contracts directly with the SIP. This entails a significant amount of administrative paperwork and reporting that would add to the customer's burden without adding any corresponding value to the services they provide their own clients. Some customers would have to hire or contract out this purely administrative workload. Treating SAPI as a display use, by contrast, does not impose the same administrative burden because the data vendor—here, Bloomberg—maintains the vendor relationship with the exchange.

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<sup>4</sup> CTA notes that non-professional users would experience no fee increase. Release 3. But there are no non-professional Bloomberg SAPI users.

**32.** If CTA were to apply non-display and access fees to SAPI but not to other services or products, then competitors such as Thomson Reuters, FactSet, and IDS would enjoy a huge competitive advantage, purely as a result of CTA's ability to set fees in the absence of competitive forces. To date, CTA's statements regarding this fee increase have discussed its applicability to only a single competitor and a single service: Bloomberg SAPI.

**33.** Even if the fee increase were later invalidated or rescinded, the harm to Bloomberg and its customers will not be remedied. Adopting a new market-data service requires market research, technology installation, data mapping, paperwork, coding, contracting, up-front fees, and training—all of which would impose a severe burden on the small and mid-sized businesses that use SAPI. Because of these search costs, infrastructure investments, and contractual commitments, customers could not freely return to Bloomberg's SAPI service even if non-display and access fees later went away. Whether replacing SAPI with a new data service in the wake of this fee increase, or replacing another service to return to SAPI in the wake of a fee invalidation, the transition would be costly and burdensome. Restoring Bloomberg's current SAPI customer base and market position may not be feasible.

**34.** The Amendment would cause further competitive harm by requiring Bloomberg to share confidential customer information with CTA, whose members compete directly with Bloomberg for those same customers. CTA is administered by NYSE, whose parent company ICE offers competing market-data services through its IDS subsidiary. Currently, NYSE receives information for billing purposes regarding all Bloomberg Terminal customers, including but not limited to those who subscribe to SAPI. Since promulgating this fee amendment, I understand that NYSE has asked Bloomberg to provide information regarding the specific Bloomberg Terminal customers who subscribe to SAPI. This information is competitively very

sensitive, and could not be recovered and restored to its confidential status if and when the fee increase were eventually invalidated.

**35.** Finally, the fee increase would also punish the innovation undertaken by Bloomberg, other data vendors, and many software application developers—all of whom have improved the financial markets by introducing useful and efficient financial tools. Bloomberg works on a daily basis with customers and third-party developers to design more efficient and more valuable ways to use and display market data to investors' advantage. That process has led to advances by many third-party and proprietary applications made possible by SAPI's server-based design. It is also reflected in the development of SAPI itself, which was part of a broader technological trend toward installing applications on servers rather than desktops. If the exchanges, acting jointly and without competition, are able to capture the value added by such technological advances, the incentives that led to these innovations and efficiencies will diminish accordingly.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Dated: 2/6/18

Keith Bunnell

Keith Bunnell

# **Bunnell Exhibit B**

## SAPI ENABLES BLOOMBERG SUBSCRIBERS TO CONSUME BLOOMBERG DATA IN DISPLAY APPLICATIONS

### OPPORTUNITY DEMANDS ACTION

Financial professionals who want to make smarter decisions faster rely on the Bloomberg Professional® service for real-time data, news and analytics. And while this platform offers a wide range of capabilities, users inevitably need to do more.

Specifically, professionals are working with proprietary and third-party display applications for trade and order management, risk, compliance, portfolio management and analytics. But these tools are often fed with different data sources, raising the risk of discrepancies that can derail critical opportunities. Different feeds may also have specialized requirements for reporting, distribution, usage monitoring and metering.

### SAPI MAKES DATA ACTIONABLE

The Bloomberg Server API (SAPI) offers a more straightforward approach. With SAPI, firms can feed proprietary and Bloomberg-approved display applications with the same real-time market data, historical data, premium reference data and calculation tools available with the Bloomberg Terminal.

Available exclusively to Bloomberg subscribers, SAPI helps reduce inconsistencies that can complicate workflow when professionals use multiple display applications fed by disparate data sources. SAPI effectively gives all Bloomberg subscribers in the firm a unified view of global markets whether they are managing orders, measuring risk or analyzing portfolios.

And that view remains one of the most trusted in the industry, fueled by high-quality data across asset classes with superior depth and breadth. So firms can not only improve operational efficiency but also potentially reduce costs by eliminating redundant feeds.

### FEED DISPLAY APPLICATIONS WITH CONSISTENT DATA

#### Extensive cross-asset coverage

- Exchange and market data from global sources
- Most contributor data in the industry
- Bloomberg premium data
- Bloomberg calculated analytics
- Time and sales
- Market depth
- Referential data – options, future chains, index constituents
- Historical and intra-day time series data
- Real-time streaming data (exchange data and OTC markets)

#### Open symbology

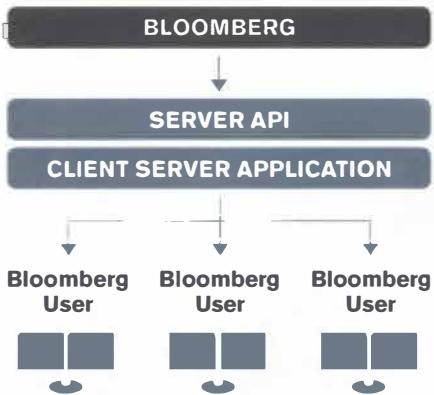
- Provides connectivity across solutions from Bloomberg and others

#### Secure, reliable technology

- Robust entitlements control
- Data usage monitoring and management
- Encrypted connection with mutually authenticated SSL sessions
- Can be deployed over the Internet
- Offers fail over, load balancing and scalability

# Bloomberg

## BUILD AN EFFICIENT ENTERPRISE



SAPI allows Bloomberg subscribers to consume high-quality content from the Bloomberg Terminal within proprietary and third-party display applications. It runs on existing hardware and is also available as a managed service called SAPI Plus. Connection to Bloomberg is encrypted using a mutually authenticated SSL session.

## SAPI PLUS

For firms that are seeking to maximize efficiency while reducing the IT department's workload, SAPI Plus combines the capabilities of SAPI with the Bloomberg Platform. Offered as a managed service, the Bloomberg Platform can replace some or all of the infrastructure that firms use today for enterprise data distribution. SAPI Plus lets firms offload all the management of infrastructure and SAPI to Bloomberg. We handle all the underlying hardware assets, including upgrades. SAPI Plus also gives firms access to proven Bloomberg solutions for entitlements management and activity monitoring.

## ENTERPRISE ADVANTAGES

SAPI delivers value to workgroups of Bloomberg users.

**Front and middle office users** who are Bloomberg subscribers will be able to take the high-quality data they see every day and consume it within the display applications they rely on for daily workflow. Coverage remains exceptional and the Bloomberg network ensures low-latency delivery.

**C-suite decision makers** will appreciate how feeding multiple display applications with the same data source may create opportunities to consolidate other feeds.

**Software Developers and IT Engineers** will like that SAPI is available in multiple programming languages (C, C++, .NET (C#, VB.NET), .COM, Java) which makes it easy to integrate with downstream display applications. Users also benefit from the proven resiliency of the Bloomberg network.

**Vendor managers** can vastly simplify the management of permissions, entitlements and usage reporting.

## ENTERPRISE IS EVERYTHING

Financial firms face new realities: Do more with less. Show your work. Follow stricter rules. These goals don't fit within traditional boundaries. They involve people, processes and technology from the front, middle and back office. That's why firms need a partner with enterprise-level expertise and three decades of deep industry experience.

**Bloomberg Enterprise Solutions is ready to help.**

## ABOUT BLOOMBERG

Bloomberg connects influential decision makers to a dynamic network of information, people and ideas. Our strength—quickly and accurately delivering data, news and analytics through innovative technology—is at the core of everything we do. With over 15,000 employees in 192 locations, we deliver business and financial information, news and insight around the world.

## TAKE THE NEXT STEP

Learn more about how we can help you consume real-time data in display applications. Visit [bloomberg.com/enterprise](http://bloomberg.com/enterprise) or reach us at [bbg\\_enterprise@bloomberg.net](mailto:bbg_enterprise@bloomberg.net).

**BEIJING**  
+86 10 6649 7500

**FRANKFURT**  
+49 69 9204 1210

**LONDON**  
+44 20 7330 7500

**NEW YORK**  
+1 212 318 2000

**SÃO PAULO**  
+55 11 2395 9000

**SYDNEY**  
+61 2 9777 8600

**DUBAI**  
+971 4 364 1000

**HONG KONG**  
+852 2977 6000

**MUMBAI**  
+91 22 6120 3600

**SAN FRANCISCO**  
+1 415 912 2960

**SINGAPORE**  
+65 6212 1000

**TOKYO**  
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# **Bunnell Exhibit C**

## B-PIPE DELIVERS HIGH-QUALITY, REAL-TIME MARKET DATA TO FUEL THE ENTERPRISE

### SUCCESS DEPENDS ON THE QUALITY OF YOUR DATA

From the biggest banks to the most elite hedge funds, financial institutions need timely, accurate data to capture opportunity in fast-moving markets. The challenge is keeping pace with exchange-generated, OTC and derived data from thousands of sources, each with its own proprietary format, data model, symbology and reporting requirements.

To bring all of that market data into business-critical applications, firms historically have had to build a multitude of feed handlers, buy racks of hardware, manage the connections and process the data into a usable form. With millions of ticks, it's a daunting proposition for any firm trying to simplify workflow.

### B-PIPE PROVIDES THE DATA YOU NEED

Bloomberg B-PIPE provides the most comprehensive real-time data access the market can offer, delivered using the same highly-resilient global private network as the Bloomberg Professional® service. With over 200 real-time exchanges and over 2,500 unique contributed sources over one open API, your enterprise is one entitlement click away from getting the data it needs.

Bloomberg's consolidated real-time market data feed covers the same asset classes as the Bloomberg Professional service and can be distributed to users and applications across the firms. Decision makers and support teams alike no longer need to explain data inconsistencies found by the front office. With enterprise applications fueled by B-PIPE, front office users will finally get a consistent, accurate view of the global markets.

### POWER YOUR FIRM WITH REAL-TIME DATA

#### Extensive Cross-asset Coverage

- Exchange and market data from global sources
- The most contributed data in the industry
- Premium data available to Bloomberg Professional service users
- Bloomberg calculated analytics
- Time and sales
- Market depth
- Referential data: options, future chains, index constituents

#### Open Symbology

- Provides intermingled products to Bloomberg and other users

#### Extensible Normalized Data Model

- Standardized or native field formats:
  - Security status indicators
  - Trade events
  - Standardized trade types such as MMT and ESMA

#### Resilient Ticker Plant & Distribution Infrastructure

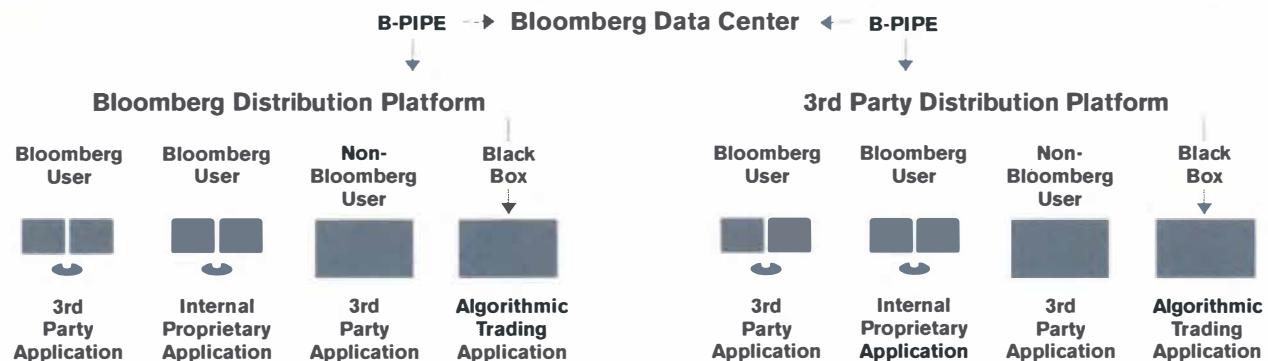
- Low latency
- High reliability

#### Intuitive and Comprehensive Documentation

- Data dictionaries
- Exchange profiles

# Bloomberg

## REAL-TIME DATA SIMPLIFIED



B-PIPE's high-quality content can be delivered via the Bloomberg Data Distribution Platform as a fully managed service or via the third party platform of your choosing. Potential consumers may include Bloomberg Users, non-Bloomberg users and black box applications.

### B-PIPE CAN NOURISH ANY APPLICATION IN YOUR ENTERPRISE

From front office to back, Bloomberg Professional user or otherwise, B-PIPE can deliver real-time market data to all of your user applications. Whether it's a simple P&L task in a spreadsheet or a complex analytics engine run on servers, your user community is covered.

Even in the absence of users, B-PIPE provides its high-quality data to non-display (black box) applications. B-PIPE's high-quality content can also be delivered via the Bloomberg Data Distribution Platform as a fully managed service or via the third-party platform of your choosing. If you can build it, we can feed it.

### B-PIPE IS MANAGED, MONITORED, AND EQUIPPED

Using the same world class resilient private network as the Bloomberg Professional Service, we monitor B-PIPE 24/7/365. As a fully-managed service, we provide the hardware you need to efficiently utilize the connectivity you have back to Bloomberg. B-PIPE eliminates the burden of buying equipment, managing your connections and performing software upgrades so you can stay focused on mission-critical, alpha-generating activities.

### ENTERPRISE ADVANTAGES

B-PIPE delivers value to everyone across the firm.

**Front, middle and back office users** gain access to world-class data with broad and deep coverage. Connectivity to local ticker plants worldwide ensures low-latency delivery. And everyone sees the same real-time data from the exact same source, so you don't lose time dealing with discrepancies.

**C-suite decision makers** will appreciate how a consolidated real-time data feed eliminates the need for redundant platforms, creating potential cost savings.

**IT engineers** will appreciate consistent performance, proven resiliency, and OPEN API and tools that allow easy integration and onboarding with downstream applications.

**Vendor managers** can vastly simplify the management of permissions, entitlements and usage reporting.

### EXPERIENCE AND TRUST

Financial firms face new realities: Do more with less. Show your work. Follow stricter rules. These goals don't fit within traditional boundaries. They involve people, processes and technology from the front, middle and back office. That's why firms need a partner with enterprise-level expertise and three decades of deep industry experience.

**Bloomberg Enterprise Solutions** is ready to help.

### TAKE THE NEXT STEP

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**BEIJING**  
+86 10 6649 7500

**FRANKFURT**  
+49 69 9204 1210

**LONDON**  
+44 20 7330 7500

**NEW YORK**  
+1 212 318 2000

**SÃO PAULO**  
+55 11 3048 4500

**SYDNEY**  
+61 2 9777 8600

**DUBAI**  
+971 4 364 1000

**HONG KONG**  
+852 2977 6000

**MUMBAI**  
+91 22 6120 3600

**SAN FRANCISCO**  
+1 415 912 2960

**SINGAPORE**  
+65 6212 1000

**TOKYO**  
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# **Bunnell Exhibit D**

# EIKON SERVER API

POWERING THE ENTERPRISE AND CONNECTING TO GLOBAL MARKETS

Eikon Server API enables customers to access Thomson Reuters News and Financial Data through Eikon and third party applications, on the same desktop, with a single data license.

Thomson Reuters Eikon provides easy access to trusted news, data, and analytics, all filtered by relevance to your exact needs, and displayed in a highly visual way that is easy to grasp and act on.

From the same intuitive desktop or mobile device, you can instantly connect to new and emerging markets, deep and varied pools of liquidity, professional networks and expert support—anywhere, anytime.

With Eikon Server API, professionals that use Eikon alongside their execution and order management systems on the same desktop have access to the same real-time market data, historical data, premium reference data through both platforms.

Our consolidated global data delivers full tick, depth-of-market data; helping customers to source better quality information. Coverage includes over 40 million securities and derivatives across every geography and asset class from thousands of exchange traded and OTC markets and offers derived analytics, proprietary news, evaluated pricing, reference data, tick history and third-party content.

Eikon Server API is available only to Eikon customers and is designed to help streamline buy-side workflow. By providing data delivery, desktop and transactions capabilities all in one package, Thomson Reuters helps companies reduce costs by eliminating dual exchange fees and provides a complete customer solution combining the Eikon desktop and a data delivery mechanism for powering server based applications.

## KEY FEATURES

- Delivers the same data to desktop OMS/EMS applications running alongside Eikon (no additional exchange fees)
- Provides access to Thomson Reuters global real time exchange, OTC, contributed data and news content on both platforms with access to a combination of level 1 real time exchange data, OTC & contributed data content, real time analytics (US) and selected reference and analytics fields
- Real time content available to OMS/EMS desktop application matches Eikon entitlements
- Thomson Reuters remains Vendor of Record
- Available over the Internet to any site globally
- Fully hosted solution with no requirement to deploy infrastructure on client sites

Eikon Server API allows Eikon subscribers to consume high-quality content from Thomson Reuters within OMS/EMS applications. It runs on existing hardware and is encrypted using a mutually authenticated SSL session.

## THOMSON REUTERS DATA AVAILABLE

### News & Commentary

Direct access to the breaking news and commentary that matters to you. Leveraging the world's largest financial news organization, we uncover market-moving news and deliver it faster than anyone else.

### Economic Data

We provide the largest and most comprehensive collection of global macroeconomic time series content in the industry, with a clear emphasis on factors that affect market performance.

### Market Data & Pricing

Deepen your insight into the global markets with access to the widest available range of cross-asset data; the breadth and depth of our reference, real-time and historical data is second to none.

### Company Data

Get the comprehensive, deep and timely information you need to develop in-depth, bottom-up analyses. Whether for developed, emerging or frontier markets, we are the leading provider of detailed company data.

### Reference Data

Confidently tap into the most comprehensive reference data available to investment management community including end-of-day prices from 180+ exchanges, spot rates on 175 currencies and corporate actions on over 50,000 companies.

### Specialized Data

Access valuable additional financial and analytical data, including quantitative modeling, venture capital and private equity data, M&A activity and environmental and social responsibility rankings.

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UNITED STATES OF AMERICA  
before the  
**SECURITIES AND EXCHANGE COMMISSION**

In The Matter of:

The Application of BLOOMBERG L.P.

For Review of Amendments of the Consolidated  
Tape Association Limiting Access to its Services

Admin. Proc. File No. 3-18316

**DECLARATION OF GARY KOTOVETS**

I, Gary Kotovets, declare as follows:

1. I submit this declaration in support of Bloomberg L.P.'s Motion to Stay CTA's Fee Amendment. I have worked at Bloomberg L.P. ("Bloomberg") since 2000. Since 2006, I have served as global head of data management and acquisition. In that role, my responsibilities include supervising Bloomberg's relationship with North American stock exchanges with respect to fees for market data, including real-time market data. I make this declaration based on my personal knowledge, discussions with colleagues, and Bloomberg's corporate records.

2. Bloomberg serves as a market data vendor for both top-of-book market data and depth-of-book data. Top-of-book, or "core," data consist of last-sale and quotation data that market participants must provide, free of charge, to a registered securities information processor ("SIP"), which consolidates and sells the data on an exclusive basis. The Consolidated Tape Association ("CTA") is the sole processor and registered SIP for consolidated last-sale and quotation data for two categories of securities: Network A, which consists of market information for securities listed on the New York Stock Exchange ("NYSE"), and Network B, which consists of market information for securities listed on CBOE, NYSE Arca, NYSE American, and other regional exchanges. NYSE administers Network A and Network B for CTA.

3. CTA historically has charged a device fee for devices that display real-time market data (e.g., computers, tablets, and smartphones), and an access fee for data feeds. In 2014, CTA began also charging separate non-display fees for data that is used for automated processes without display to users. CTA publishes its data fees in national market system plans, known as the CTA Plan and CQ Plan, filed for review with the Securities and Exchange Commission.

4. In November 2017, CTA published an amendment to the CTA and CQ plans, SEC Release No. 34-82071 (“Amendment” or “Release”). The Amendment purports to “clarify” the definitions of non-display use, access fee, and data feed. Release 1. It states that Bloomberg is allowing SAPI subscribers “to use … market data for Non-Display purposes, yet … not reporting that delivery of data as a data feed.” *Id.* at 8. Accordingly, the Amendment accuses Bloomberg of “mischaracterizing” SAPI as a display tool and “tak[ing] advantage of [a] perceived loophole” in the existing definitions governing non-display and access fees. *Id.* at 10, 24. SAPI’s classification as a display product rather than a data feed, however, is consistent with the longstanding agreement between Bloomberg and NYSE (acting on behalf of CTA), and with NYSE and CTA’s consistent interpretation and treatment of SAPI under that agreement.

**A. 2004 Introduction and Classification of SAPI**

5. In 2004, when Bloomberg launched SAPI, it entered into an amended agreement with CTA, acting through NYSE, governing Bloomberg’s use of Network A data. In the agreement, a document titled “Exhibit A to the Bloomberg-NYSE Agreement for the Receipt and

Use of Market Data,” CTA recognized that SAPI is a display product subject to the device fee, not a data feed subject to the access fee, under the CTA plan.<sup>1</sup>

**6.** In contrast to its treatment of SAPI, the agreement stated that the Market Data Feed known as B-PIPE was the only Bloomberg data product that “provide[s] a data feed or other type of service where control over the use of Market Data and the reporting of uses and display devices cannot be directly maintained by the Customer.”

**7.** The agreement went on to describe SAPI as a real-time display service for subscribers whose devices and logins entitle them to receive the relevant CTA market data. The agreement recognized that SAPI subscribers were required to sign agreements with both NYSE and with Bloomberg limiting the subscribers’ use of the data. And the agreement stated that SAPI subscribers were permitted to download market data onto authorized servers, run server-based applications on that market data, and make that data available to authorized internal users.

**8.** The agreement also described limits on the use of market data by SAPI subscribers. It stated that “[a]ll data entitlements are centrally controlled” through a server “compatible with Bloomberg’s central entitlement system, meaning the server enforces end-user entitlements … [and] ensures that only properly entitled users have access to real-time data.”

**9.** By letter dated October 22, 2004, NYSE’s Director of Market Data transmitted to Bloomberg the amended Exhibit A. Consistent with that agreement, NYSE’s letter distinguished between “display devices and data feeds” and recognized that “Bloomberg’s new Server API functionality” is part of the “Bloomberg display service.” A copy of NYSE’s letter is attached as Exhibit E.

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<sup>1</sup> For confidentiality reasons, this and other contracts mentioned in this declaration are not attached to the declaration. Should it aid the Commission’s consideration of this motion, Bloomberg is willing to submit the contracts in connection with a request for confidential treatment or other appropriate protection.

**B. 2005 and 2010 Amended Agreements**

**10.** In 2005, Bloomberg and CTA amended Exhibit A again, this time to allow Bloomberg to use Network B data with SAPI. The 2005 amendment for Network B data was substantively identical to the 2004 amendment for Network A data described above, and again embodied CTA's agreement that SAPI was a display service.

**11.** By letter dated April 18, 2005, the Market Data Services Account Manager of the American Stock Exchange (which at that time administered Network B on behalf of CTA, and which NYSE bought in 2008) sent Bloomberg the amended version of Exhibit A for Network B data. The letter acknowledged that “[t]here are no additional fees for use of data” with SAPI because SAPI “is integrated into [Bloomberg’s] current interrogation display services.” A copy of the letter is attached as Exhibit F.

**12.** On or around November 14, 2007, Bloomberg and NYSE, acting on behalf of CTA, entered into a new underlying “Agreement for Receipt and Use of Consolidated Network A Data and NYSE Market Data.” The agreement incorporated Exhibit A to continue to govern the receipt and use of market data, leaving intact the agreement that no additional fees apply to SAPI because it is integrated into Bloomberg’s display services.

**13.** In 2010, Bloomberg and NYSE, acting on behalf of CTA, amended Exhibit A to govern both Network A and Network B data in a single document. In this new version of Exhibit A, Bloomberg and NYSE again agreed that SAPI should be treated the same way it had been treated under the 2004 and 2005 amendments: as a display service subject to the device fee. The parties recognized in the 2010 agreement that SAPI is not “a data feed or other type of service where control over the use of Market Data and the reporting of uses and display devices cannot be directly maintained by [Bloomberg].” The agreement reiterated that the “only Bloomberg service that is included in [the data-feed] category is Bloomberg’s B-PIPE Service.”

The 2010 version of Exhibit A also restated the 2004 and 2005 versions' description of SAPI as subject to the device fee, SAPI's typical uses, and its entitlements and controls.

**C. CTA's 2013 and 2014 Plan Amendments**

**14.** In 2013, CTA adopted new access fees for Network A and Network B data feeds as follows:

<b>Access Fees (monthly)</b>			
<b>Network</b>	<b>Output Feed</b>	<b>Direct Fees</b>	<b>Indirect Fees<sup>2</sup></b>
Network A	Last Sale	\$1,250	\$750
	Bid-Ask	\$1,750	\$1,250
Network B	Last Sale	\$750	\$400
	Bid-Ask	\$1,250	\$600

**15.** The new access fees represented increases of between 25 and 78 percent over the previous access fees for Network A, and between 100 and 212 percent over the previous access fees for Network B. The 2013 amendment applied access fees only to data feeds.

**16.** In 2014, CTA again amended the CTA fee schedule to establish fees for "non-display" uses of market data. The 2014 amendment defined non-display use as "accessing, processing or consuming real-time Network A or Network B" data, "whether delivered via direct and/or redistributor data feeds, for a purpose other than in support of a data recipient's display or further internal or external redistribution." 79 FR 60,536, 60,538 (Oct. 7, 2014). The non-display definition excluded the use of market data "to create and use derived data." *Id.* As discussed below, by imposing increased fees the amendment expressly addressed the technological change and revenue impact associated with the rise of algorithmic, automated, and "black box" trading using data delivered to computers by data feeds and not displayed for human

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<sup>2</sup> Under the 2013 amendment, firms that purchase a data feed from a data vendor such as Bloomberg are subject to an indirect access fee; direct access fees apply to firms that receive data feeds directly from CTA.

use. *Id.* SAPI, by contrast, delivers data for display on a device that also displays the Bloomberg Terminal for human use.

**17.** The 2014 amendment established three different categories of non-display use, corresponding to whether a data recipient makes non-display use of market data on its own behalf (Category 1), on behalf of its clients (Category 2), or for the purpose of internally matching buy and sell orders within an organization (Category 3). Data recipients whose use falls into multiple categories must pay multiple non-display fees. The 2014 amendment adopted the following non-display fees:

Non-Display Fees (monthly)				
Network	Output Feed	Category 1	Category 2	Category 3
Network A	Last Sale	\$2,000	\$2,000	\$2,000
Network A	Bid/Ask	\$2,000	\$2,000	\$2,000
Network B	Last Sale	\$1,000	\$1,000	\$1,000
Network B	Bid/Ask	\$1,000	\$1,000	\$1,000

**18.** SAPI delivers data “in support of a data recipient’s display” and is not a data feed. Accordingly, following the 2014 amendment, Bloomberg (and CTA) continued to treat SAPI as a display product, subject to device fees. All recipients of Network A securities, including SAPI customers, paid between \$19 and \$45 per Terminal user per month for bid/ask and last-sale information, and all recipients of Network B securities, including SAPI customers, paid \$23 per Terminal user per month for bid/ask and last-sale information.

**19.** Since CTA promulgated these 2013 and 2014 amendments, I am unaware of any attempt by CTA to audit Bloomberg’s records regarding the use of CTA market data by SAPI customers. Nor did CTA cease treating Bloomberg SAPI customers as subject only to the device fee for display use. It was not until late 2016 and early 2017 that CTA changed its position to assert that SAPI was a non-display data feed rather than a display product.

20. In a comment letter regarding the Amendment currently at issue, dated December 14, 2017, CTA states that “[a]ny discussions prior to 2014 are immaterial.” Despite this unsupported assertion, the longstanding distinction between display devices and data feeds is reflected in the contractual and business relationship between CTA and Bloomberg both before and after the 2014 amendment. For over a decade, CTA recognized that SAPI is not a “data feed or other type of service where control over the use of Market Data and the reporting of uses and display devices cannot be directly maintained by [Bloomberg].” CTA now claims the opposite, even though there has been no weakening of “control” or change in “use” of SAPI, which remains a display service.

**D. CTA’s 2017 Efforts to Amend the Non-Display and Access Fees**

21. In mid-September 2016, a CTA representative called a Bloomberg employee who reports to me to discuss whether SAPI can be used for non-display purposes. I understand that, during this call, CTA asked for a current description of SAPI.

22. Later that week, on September 22, 2016, CTA contacted Bloomberg via email. In that email, CTA asked Bloomberg to review the description of SAPI in the 2004 version of Exhibit A to the Bloomberg-NYSE market-data agreement discussed above in paragraph 5. CTA asked Bloomberg to confirm whether that description was accurate and asserted that, “[b]ased on the description, SAPI can be used for non-display.” CTA did not suggest that it was considering amending the definition of the terms data feed, non-display use, or access fee. A copy of the email is attached as Exhibit G.

23. On October 5, 2016, Bloomberg emailed CTA an updated description of SAPI, which reflected tightened controls that Bloomberg had implemented since the product’s introduction. The updated description read:

Server API. Server API subscribers are permitted to download Market Data from Bloomberg onto authorized servers and run server-based applications on the Market Data. From the authorized server, customers may make real-time data available internally only to users whose device or user ID has been entitled by Bloomberg to receive such real-time data. Server API technology ensures that server-based applications can be used only to enable outputs of such applications *in a display to users* whose device or user ID has been entitled by Bloomberg. For the avoidance of doubt, Server API service shall continue to be considered as an Interrogation Display Service.

A copy of this email is attached as Exhibit H (emphasis added).

**24.** On October 14, 2016, CTA responded by email without indicating any disagreement with that description. The message, attached as Exhibit I, thanked Bloomberg and stated, “we will review.”

**25.** I understand that Bloomberg next heard from CTA on November 30, 2016, when its representative emailed that CTA planned to revise its pricing schedule for both Network A and Network B market data. Attached to CTA’s message was a draft of the revised pricing schedule, highlighting the planned changes. A copy of this email is attached as Exhibit J.

**26.** The following day, December 1, 2016, Bloomberg received by email a notice from NYSE stating that CTA had filed a “no-fee change amendment to the Pricing Schedules and the Non-Display Policy,” which “clarifie[d]” that the “CTA Device Fee is for display data use only (data that is visibly available to the data recipient)” and that “any other data use on a device shall be considered a Datafeed and subject to the Access Fee and any other applicable fees such as Non-Display Fee.” A copy of the email is attached as Exhibit K.

**27.** On December 6, 2016, I understand that CTA called Bloomberg regarding CTA’s pricing amendment and stated that CTA believed the amendment would increase prices for some SAPI clients. CTA also requested that Bloomberg provide NYSE with a list of SAPI clients. Bloomberg declined to do so, explaining that because SAPI is a display product, Bloomberg already reported its users to NYSE as part of the broader class of Bloomberg Terminal accounts.

**28.** NYSE filed a proposed amendment with the Securities and Exchange Commission, dated March 23, 2017. *See* SEC Release No. 34-80300. The release did not mention Bloomberg or SAPI, but was consistent with the revised pricing schedule CTA had earlier shared with Bloomberg.

**29.** Bloomberg subsequently received a letter dated March 27, 2017, from Margaret Sullivan at NYSE. The letter stated that CTA had filed an “immediately effective amendment” with the SEC purporting to “clarif[y] certain fees relating to Display and Non-Display Use and when access fees are applicable.” The letter then stated:

Based on your description of Bloomberg’s Serv[er] API functionality (“SAPI”), it does not qualify as a Professional/Internal Device under the Schedule. You describe SAPI as allowing firms to “run server-based applications” and “make real-time data available internally” to users’ devices. Both of these uses imply that SAPI does not make data visibly available to the data recipient; rather, SAPI is an extranet service that provides access to a data feed. Therefore, pursuant to the Schedule, as clarified consistent with the CTA Fee Clarification filed with the SEC, we consider use of SAPI to be Non-Display Use and subject data recipients to the applicable access fees.

A copy of the letter is attached as Exhibit L.

**30.** In response to Ms. Sullivan’s letter, I understand that Bloomberg sent an email on April 3, 2017, noting the lack of any follow-up to the October 2016 discussion about SAPI. The email reiterated that “SAPI is a terminal product by which usage is restricted to display only with specific technical and contractual controls,” and noted that NYSE had never followed up on the description to that effect, which Bloomberg had supplied to NYSE in October 2016. A copy of the email is attached as Exhibit M.

**31.** CTA responded by email two days later, on April 5. CTA’s email repeated CTA’s new position that, “[b]ased on Bloomberg’s description of SAPI’s functionality,” SAPI involves non-display uses and is a data feed, subject to access fees, because it includes uses not “designed solely to make CTA’s data visibly available to the data recipient on a device.” CTA

then directed Bloomberg to enter a data-feed request for each SAPI customer, report each SAPI customer as a data-feed customer once NYSE approves the corresponding data-feed request, and provide NYSE with a list of SAPI clients. A copy of the April 5, 2017 email is attached as Exhibit N.

32. On April 27, 2017, CTA withdrew its proposed amendment.

33. Despite this series of emails and letters, CTA claimed in its December 14, 2017 comment letter that its “Participants have no pre-conceived expectation about the change in fees collected, if any, that may result from the Amendment” and that, “[i]f the Bloomberg SAPI product enables only display uses, then the Bloomberg SAPI product would not be subject to the non-display use and access fees.” These statements are inconsistent with the communications described above, which reveal that reaching SAPI has been part of CTA’s plan from at least September 2016.

34. In January 2018, Bloomberg received requests from CTA that Bloomberg provide NYSE with a list of SAPI clients. Bloomberg has not provided a list of its SAPI customers to NYSE.

I declare under penalty of perjury that the foregoing is true and correct.

Dated: 2/5/18

Gary Kotovets

Gary Kotovets

# **Kotovets Exhibit E**

Gregory Reiter  
Director  
Market Data

New York Stock Exchange, Inc.  
1 Wall Street  
New York, NY 10005

tel : 212-656-5554  
fax : 212-656-5922  
g\_reiter@nyse.com



October 22, 2004

Ms. Elizabeth Cochrane  
Bloomberg L.P.  
499 Park Avenue  
15th Floor  
New York, NY 10022

Dear Elizabeth,

In accordance with the provisions of Paragraph 6 of the agreement between and the New York Stock Exchange, Inc., dated (the "Agreement"), this is to advise that the enclosed Exhibit A dated May 13, 2004, which was prepared by your organization, is acceptable as a replacement to the Exhibit A presently attached to the Agreement.

Specifically, the document cites Bloomberg's new Server API functionality in the Bloomberg display service. Please be reminded that the Exhibit A will need to be amended in the future if any non-trivial changes are made in the underlying sources, uses, services, entitlement procedure, etc.

There is no change in Bloomberg's monthly fees, but please be reminded that Bloomberg is required to report all display devices and data feeds entitled with Network A data.

Please let me know if you have any questions.

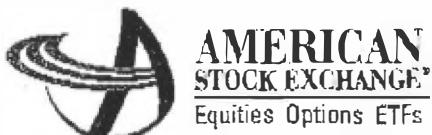
Regards,

A handwritten signature in black ink, appearing to read "Gregory Reiter".

Enclosure

cc: G. Gaylord - Milbank (with enclosure)

# **Kotovets Exhibit F**



American Stock Exchange  
86 Trinity Place  
New York, NY 10006-1872  
T 212 306 1000

April 18, 2005

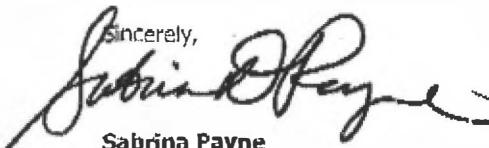
Ms. Elizabeth Cochrane  
Bloomberg LP  
499 Park Avenue, 15<sup>th</sup> fl.  
New York, NY 10022

Dear Ms. Cochrane:

Attached is your approved Exhibit A updated by your organization for the receipt of data via SIAC.

We understand that Bloomberg intends to distribute data via your Server API product in addition to current professional service. There are no additional fees for use of data in this manner and your reporting will not change since your API service is integrated into your current interrogation display services.

If you have any questions at all regarding this matter, please do not hesitate to contact me. Thank you for your continued support of the Amex and best of luck on this new endeavor.

Sincerely,  
  
Sabrina Payne  
Account Manager  
Market Data Services  
T: 212.306.1937  
F: 212.306.5938  
E: [sabrina.payne@amex.com](mailto:sabrina.payne@amex.com)

# **Kotovets Exhibit G**

=====Begin Message=====

Message#: 0

Message Sent: 09/22/2016 14:19:19

From: Eileen.Kelly@nyse.com|Eileen Kelly| |

TO: GGOLDRESS@Bloomberg.net|GADI GOLDRESS|BLOOMBERG/ 120 PARK|9001|30129324

Attachment: metadata\_57E420A80000F65E00CA1471.txt

FileID: 57E4276B00008EC107E3DEB1.txt

Attachment: alt\_body.html

FileID: 57E4275500008EC107E3DBE5.html

Attachment: image001.png

FileID: 57E4275500008EC107E3DBF4.png

Attachment: image002.png

FileID: 57E4275500008EC107E3DC01.png

Subject: Server API

Hi Gadi,

I'm following up on the conversation we had earlier this week. Please review the description of your Server Product offering as described in your Exhibit A. Please confirm that this is an accurate description of the service. Based on the description, SAPI can be used for non-display.

[cid:image001.png@01D214DC.22905290]

Thanks and Regards,

Eileen Kelly

Strategic Analysis & Market Data

New York Stock Exchange

An IntercontinentalExchange Company (NYSE: ICE)

11 Wall Street, 15th Floor, New York, NY 10005

Tel: + 212.656.5812 | Fax: 212.937.2391

eileen.kelly@nyse.com <mailto:ekelly@nyx.com>

[cid:image001.png@01CF84A6.9792EDA0]

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=====End Message=====

# **Kotovets Exhibit H**

=====Begin Message=====

Message#: 0

Message Sent: 10/05/2016 16:23:49

From: GGOLDRESS@Bloomberg.net|GADI GOLDRESS|BLOOMBERG/ 120 PARK|9001|30129324

TO: Eileen.Kelly@nyse.com|EILEEN.KELLY| ||

Attachment: image001.png

FileID: 57E4275500008EC107E3DBF4.png

Attachment: image002.png

FileID: 57E4275500008EC107E3DC01.png

Subject: Re:Server API

Here is the new definition to use as discussed:Server API. Server API subscribers are permitted to download Market Data from Bloomberg onto authorized servers and run server-based applications on the Market Data. From the authorized server, customers may make real-time data available internally only to users whose device or user ID has been entitled by Bloomberg to receive such real-time data. Server API technology ensures that server-based applications can be used only to enable outputs of such applications in a display to users whose device or user ID has been entitled by Bloomberg. For the avoidance of doubt, Server API service shall continue to be considered as an Interrogation Display Service.

From: Eileen.Kelly@nyse.com At: 09/22/16 14:19:19

To: Gadi Goldress (BLOOMBERG/ 120 PARK)

Subject: Re:Server API

v\$:\* behavior:url(#default#VML);  
o\$:\* behavior:url(#default#VML);  
w\$:\* behavior:url(#default#VML);  
.shape behavior:url(#default#VML);  
.bbScapedStyle4064907308202237

p.MsoNormal, li.MsoNormal, div.MsoNormal  
margin: 0in; margin-bottom: .0001pt; font-size: 11.0pt; font-family: "Calibri", "sans-serif";  
.bbScapedStyle4064907308202237  
a:link, span.MsoHyperlink  
color: blue; text-decoration: underline;  
.bbScapedStyle4064907308202237  
a:visited, span.MsoHyperlinkFollowed  
color: purple; text-decoration: underline;  
.bbScapedStyle4064907308202237  
p.MsoAcetate, li.MsoAcetate, div.MsoAcetate  
margin: 0in; margin-bottom: .0001pt; font-size: 8.0pt; font-family: "Tahoma", "sans-serif";

.bbScopedStyle4064907308202237  
span.EmailStyle17  
    font-family: "Calibri", "sans-serif"; color: windowtext;  
.bbScopedStyle4064907308202237  
span.BalloonTextChar  
    font-family: "Tahoma", "sans-serif";  
.bbScopedStyle4064907308202237  
.MsoChpDefault  
    font-family: "Calibri", "sans-serif";  
.bbScopedStyle4064907308202237  
@page WordSection1  
    margin: 1.0in 1.0in 1.0in 1.0in;  
.bbScopedStyle4064907308202237  
div.WordSection1

Hi Gadi,

I'm following up on the conversation we had earlier this week. Please review the description of your Server Product offering as described in your Exhibit A. Please confirm that this is an accurate description of the service. Based on the description, SAPI can be used for non-display.

Thanks and Regards,

Eileen Kelly  
Strategic Analysis & Market Data  
New York Stock Exchange  
An IntercontinentalExchange Company (NYSE: ICE)

11 Wall Street, 15th Floor, New York, NY 10005  
Tel: + 212.656.5812 | Fax: 212.937.2391  
eileen.kelly@nyse.com

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=====End Message=====

# **Kotovets Exhibit I**

====Begin Message=====

Message#: 0

Message Sent: 10/14/2016 13:59:19

From: Eileen.Kelly@nyse.com|Eileen Kelly| | |

TO: GGOLDRESS@Bloomberg.net|GADI GOLDRESS|BLOOMBERG/ 120 PARK|9001|30129324

Attachment: metadata\_58011CF700008786012FBC6C.txt

FileID: 580123D60000ACBD07FB7159.txt

Attachment: alt\_body.html

FileID: 580123B50000ACBD07FB6C2C.html

Attachment: image001.png

FileID: 580123BD0000ACBD07FB6D5F.png

Attachment: image002.png

FileID: 580123BD0000ACBD07FB6D6D.png

Subject: RE: Re:Server API

Thank you Gadi, we will review.

Thanks and Regards,

Eileen Kelly

Strategic Analysis & Market Data

New York Stock Exchange

An IntercontinentalExchange Company (NYSE: ICE)

11 Wall Street, 15th Floor, New York, NY 10005

Tel: + 212.656.5812 | Fax: 212.937.2391

eileen.kelly@nyse.com <mailto:ekelly@nyx.com>

[cid:image001.png@01CF84A6.9792EDA0]

From: Gadi Goldress (BLOOMBERG/ 120 PARK) [mailto:ggoldress@bloomberg.net]

Sent: Wednesday, October 05, 2016 4:24 PM

To: Eileen Kelly

Subject: Re:Server API

WARNING – External email; exercise caution

Here is the new definition to use as discussed:

Server API. Server API subscribers are permitted to download Market Data from Bloomberg onto authorized servers and run server-based applications on the Market Data. From the authorized server, customers may make real-time data available internally only to users whose device or user ID has been entitled by Bloomberg to receive such real-time data. Server API technology ensures that server-based applications can be used only to enable outputs of such applications in a display to users whose device or user ID has been entitled by Bloomberg. For the avoidance of doubt, Server API service shall continue to be considered as an Interrogation Display Service.

From: Eileen.Kelly@nyse.com<mailto:Eileen.Kelly@nyse.com> At: 09/22/16 14:19:19  
To: Gadi Goldress (BLOOMBERG/ 120 PARK)<mailto:ggoldress@bloomberg.net>  
Subject: Re:Server API  
Hi Gadi,

I'm following up on the conversation we had earlier this week. Please review the description of your Server Product offering as described in your Exhibit A. Please confirm that this is an accurate description of the service. Based on the description, SAPI can be used for non-display.

[cid:image002.png@01D22623.0A6A1180]

Thanks and Regards,

Eileen Kelly  
Strategic Analysis & Market Data  
New York Stock Exchange  
An IntercontinentalExchange Company (NYSE: ICE)  
11 Wall Street, 15th Floor, New York, NY 10005  
Tel: + 212.656.5812 | Fax: 212.937.2391  
eileen.kelly@nyse.com <mailto:ekelly@nyx.com>  
[cid:image001.png@01CF84A6.9792EDA0]

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=====End Message=====

# **Kotovets Exhibit J**

====Begin Message=====

Message#: 0

Message Sent: 11/30/2016 16:56:26

From: Eileen.Kelly@nyse.com|Eileen Kelly| | |

TO: GGOLDRESS@Bloomberg.net|GADI GOLDRESS|BLOOMBERG/ 120 PARK|9001|30129324

Attachment: metadata\_583F4B0A00003431015D0E16.txt

FileID: 583F52170000F75107FB190F.txt

Attachment: alt\_body.html

FileID: 583F52100000F75107FB17CD.html

Attachment: image001.png

FileID: 583F52160000F75107FB18F1.png

Attachment: CTA Network A Pricing.pdf

FileID: 583F4CC80000FBDE07FC0EBA.pdf

Subject: CTA pricing clarification

Hi Gadi,

Thanks for your time today. As promised, I'm attaching a copy of the revised pricing schedule for Network A. The same changes apply to Network B's pricing schedule.

This version has the points highlighted that are changing. These changes have been filed with the SEC.

The pricing documents are posted on the [www.CTAPLAN.com](http://www.CTAPLAN.com) website.

Let me know if you have any questions.

Thanks and Regards,

Eileen Kelly

Strategic Analysis & Market Data

New York Stock Exchange

An IntercontinentalExchange Company (NYSE: ICE)

11 Wall Street, 15th Floor, New York, NY 10005

Tel: + 212.656.5812 | Fax: 212.937.2391

[eileen.kelly@nyse.com](mailto:eileen.kelly@nyse.com) <<mailto:ekelly@nyx.com>>

[cid:image001.png@01CF84A6.9792EDA0]

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====End Message====

# CTA

Consolidated Tape Association

## NETWORK A

ALL FEES ARE MONTHLY

FEE EFFECTIVE JANUARY 2015

### Access Fees<sup>1</sup>

Direct Access Fees - LS	\$1,250.00
Direct Access Fees - BA	\$1,750.00
Indirect Access Fees - LS	\$750.00
Indirect Access Fees - BA	\$1,250.00

### Redistribution Fees<sup>2, 3</sup>

Per Account	\$1,000.00
-------------	------------

### Professional Devices (per unit)<sup>2, 4</sup>

1 – 2	\$45.00
3 – 999	\$27.00
1,000 – 9,999	\$23.00
10,000+	\$19.00

### Non-Professional Users (per unit)<sup>2, 5</sup>

Per User	\$1.00
----------	--------

### Per Quote Packet<sup>2, 6</sup>

Per Quote	\$0.0075
-----------	----------

### Broker Dealer Enterprise Cap<sup>7, 8</sup>

Unlimited dissemination of real-time data by a U.S. registered broker-dealer	\$686,400.00
--	--------------

### Ticker Display on TV<sup>8, 9</sup>

Per 1,000 households reached	\$2.00
Television Ticker Maximum	\$125,000.00

### Non-Display Use Fees<sup>10</sup>

	Category 1	Category 2	Category 3
Last Sale	\$2,000.00	\$2,000.00	\$2,000.00
Bid-Ask	\$2,000.00	\$2,000.00	\$2,000.00

### Multiple Feed Charge<sup>11</sup>

Bid-Asked	\$200.00
Last Sale	\$200.00

### Late/Clearly Erroneous Reporting Charges<sup>12</sup>

Late Fee	\$2,500.00
----------	------------

## Notes to Schedule of Charges

1 The access fee applies if:

- (i) the data recipient uses the data for non-display; or
- (ii) the data recipient receives the data in such a manner that the data can be manipulated and disseminated to one or more devices, display or otherwise, regardless of encryption or instructions from the redistribution vendor regarding who has authorized access to the data.

When access fees are applicable, the redistribution vendor must report a datafeed for that data recipient.

Access to data feeds through an extranet access provider subjects the data feed recipient to direct access charges.

- 2 Charges include last sale price information and quotation information.
- 3 The Redistribution Charges apply to any entity that makes last sale information or quotation information available to any other entity or to any person other than its employees, irrespective of the means of transmission or access.
- 4 The Network A Professional Subscriber charge is assessed on each Interrogation Device ("Device") and/or GUI application that displays data and contains four tiers of Device charges. For purposes of clarification, display data use subject to the Network A Subscriber charge shall mean only data that is visibly available to the data recipient; any other data use on a Device shall be considered Non-Display Use. A Professional Subscriber's charge is determined by the number of Devices and/or GUI applications that are capable of receiving Network A data. CTA reserves the right to make the sole determination as to whether a Device and/or GUI application is subject to: (i) Professional Device charges, or (ii) Non-Display Use charges. In determining which of the four tiers applies to a Professional Subscriber, the Professional Subscriber may only include within its tier the Devices that its own employees use ("Internal Distribution"). That is, in determining the appropriate tier, a Professional Subscriber may not include within its tier Devices used by (a) persons to whom it distributes data that are not employees of the Professional Subscriber (e.g., independent contractors) or (b) employees of firms to which it distributes data (collectively, "External Distribution"). Rather, if the Professional Subscriber redistributes data to other Professional Subscribers, each such other Professional Subscriber shall determine the tier applicable to it.

For example, if Firm ABC provides data to its own employees and also to the employees of three other firms, Firm ABC shall pay according to the pricing tier that reflects the number of Devices that its own employees use. (That is, Firm ABC's tier is determined solely according to its Internal Distribution.) Regarding Firm ABC's External Distribution, each of the three firms to which it redistributes data shall pay according to the pricing tier that reflects the number of Devices that its employees use.

Independent contractors associated with a firm are not considered to be employees of that firm. This means that the firm may not include independent contractors in the count of that firm's Devices for purposes of determining the applicable pricing tier. Rather, each

independent contractor must determine the tier applicable to it, a tier that would be separate and apart from the tier applicable to the firm with which it is associated.

- 5 Charges apply to Vendor providing service to Nonprofessional Subscribers.
- 6 Per-quote-packet charge is an alternative to monthly display charges and applies equally to Professional and Nonprofessional Subscribers. A quote packet includes any data element or all data elements in respect of a single issue. Last, open, high, low, volume, net change, bid, offer, size, and best bid and offer with size are examples of data elements. "IBM" is an example of a single issue. An index value is deemed to be a single-issue data element. For each of Network A and Network B, Vendor may maximize at \$1.00 that network's per-quote-packet charges payable for any month in respect of any customer that qualifies as a Nonprofessional Subscriber, regardless of how many quote-packets the customer may receive during that month.

As the Participant's form of "Agreement for Receipt and Use of Market Data" permits, the Participants require each data redistributor that wishes to redistribute data on a per-quote basis to periodically audit its quote-metering system. If a redistributor fails to provide NYSE with its audit results on or prior to December 31 of a year in which an audit is required, a late fee of \$3,000 applies for each month the audit is past due.

- 7 An entity that is registered as a broker/dealer under the Securities Exchange Act of 1934 is not required to pay more than the enterprise maximum for any month for the aggregate amount of (a) Network A Device charges for Devices used for its Internal Distribution plus (b) Network A Device and per-quote-packet charges payable in respect of services that it provides to Nonprofessional Subscribers that are brokerage account customers of the broker/dealer. A broker/dealer may not include in the enterprise maximum charges for (y) Devices used through External Distribution and (z) Devices used by independent contractors associated with the broker/dealer. Rather, the Professional Subscriber charges applicable to External Distribution and to independent contractors are payable in addition to the enterprise maximum.

During 2014, the Network A monthly enterprise maximum was \$686,400. For each subsequent calendar year, the Network A Participants may, by the affirmative vote of not less than two-thirds of all of the then voting members of CTA, determine to increase the Network A monthly enterprise maximum; provided, however, that no such annual increase shall exceed four percent of the then current enterprise maximum amount.

- 8 The Participants will post the amount of Network A's applicable monthly Broker-Dealer Enterprise Maximum and Television Ticker Maximum on the website that CTA maintains for the CTA Plan and its amendments.
- 9 Television broadcast can be through cable, satellite, or traditional means. A \$2000 monthly minimum fee applies to Network A television broadcasts.

No entity is required to pay more than the "Television Ticker Maximum" for any calendar month. For months falling in calendar year 2014, the monthly Network A Television Ticker Maximum was \$125,000. For each subsequent calendar year, the Network A Participants may increase the monthly Network A Television Ticker Maximum by the percentage increase in the annual composite share volume for the preceding calendar year, subject to a maximum annual increase of five percent. However, for any calendar year, the Network A

Participants may determine to waive the Network A “Annual Increase” for the Network A Television Ticker Maximum.

Prorating is permitted for those who broadcast the data for less than the entire business day, based upon the number of minutes the real-time ticker is displayed, divided by the number of minutes the primary market is open for trading (currently 390 minutes). A Vendor may simulcast over multiple channels and is not charged more than once for recipients that have access to multiple simulcasted channels. Billing amounts are based on the “households-reached” totals that are published periodically in the Nielsen Report. If a Nielsen Report does not provide the requisite information as to a Vendor, the Vendor must provide households-reached information, subject to audit. Households-reached totals published at the end of September are the basis for billing for the following January through June. Households-reached totals published at the end of March are the basis for billing for the following July through December.

<sup>10</sup> Non-Display Use refers to accessing, processing or consuming data, regardless of the method of transmission of the data, for a purpose other than in support of the datafeed recipient’s display or further internal or external redistribution; any use of the data that is not designed to make the data visibly available to the data recipient on a device is a Non-Display Use. It does not apply to the creation and use of derived data. CTA reserves the right to make the sole determination as to whether a datafeed recipient’s use constitutes Non-Display Use and the category of such Non-Display Use.

The Participants recognize three categories of Non-Display Use. Category 1 applies when a datafeed recipient’s Non-Display Use is on its own behalf. Category 2 applies when a datafeed recipient’s Non-Display Use is on behalf of its clients. Category 3 applies when a datafeed recipient’s Non-Display Use is for the purpose of internally matching buy and sell orders within an organization. Matching buy and sell orders includes matching customer orders on the data recipient’s own behalf and/or on behalf of its clients. Category 3 includes, but is not limited to, use in trading platform(s), such as exchanges, alternative trading systems (“ATS”), broker crossing networks, broker crossing systems not filed as ATS’s, dark pools, multilateral trading facilities, and systematic internalization systems.

For both Network A and Network B, the Non-Display Use charges apply separately for each of the three categories of Non-Display Use. One, two or three categories of Non-Display Use may apply to one organization.

An organization that uses data for Category 3 Non-Display Use must count each platform that uses data on a non-display basis. For example, an organization that uses Network A quotation information for the purposes of operating an ATS and also for operating a broker crossing system not registered as an ATS would be required to pay two Network A quotation information Non-Display Use fees.

<sup>11</sup> For both last sale and bid-ask data feeds, this charge applies to each data feed that a data recipient receives in excess of the data recipient’s receipt of one primary data feed and one backup data feed.

<sup>12</sup> These charges will be assessed for each month in which there is a failure to provide a network’s required data-usage report to the Network A administrator, commencing with reporting failures lasting more than three months from the date on which the report is first

due. By way of example, if a Network A data-usage report is due on May 31, the charge would commence to apply as of September 1 and would appear on the market data invoice for September. The Network A administrator would assess the charge as of September 1, and would continue to assess the charge each month until the Network A administrator receives the complete and accurate data-usage report.

A report is not considered to have been provided to the Network A administrator if the report is clearly incomplete or inaccurate. This would include, but is not limited to, a report that fails to report all data products and a report for which the reporting party did not make a good faith effort to assure the accuracy of data usage and entitlements.

# **Kotovets Exhibit K**

=====Begin Message=====

Message#: 0

Message Sent: 12/01/2016 15:55:10

From: Thomas.Marro@theice.com|Thomas Marro| |

TO: USEXCHANGE@Bloomberg.net|EBM AMERICAS|BLOOMBERG/ 731 LEX| |

BCC: GGOLDRESS@Bloomberg.net|GADI GOLDRESS|BLOOMBERG/ 120 PARK|9001|30129324

Attachment: metadata\_58408E2E000010F50065681A.txt

FileID: 584094770000F75107FBA70E.txt

Attachment: alt\_body.html

FileID: 5840946E0000F75107FBA5C4.html

Attachment: image001.png

FileID: 584094720000F75107FBA66A.png

Subject: CTA fee clarification on the use of CTA Data

----- [cid:image001.png@01D24BEB.47A9BDF0]

RE: CTA fee clarification on the use of CTA Data ~ BLOOMBERG FINANCE L P: 3914200000

Dear GADI GOLDRESS,

The Participants of the Consolidated Tape Association have filed a no-fee change amendment to the Pricing Schedules and the Non-Display Policy. The amendment clarifies that the CTA Device Fee is for display data use only (data that is visibly available to the data recipient); any other data use on a device shall be considered a Datafeed and subject to the Access Fee and any other applicable fees such as Non-Display Fee.

Redistributors that provide CTA Market Data to customers as a Datafeed must submit a data feed request to NYSE as the Administrator of the Consolidated Tape, and require those customers of such CTA Market Data to complete an Exhibit A for the data feed request.

Any Redistributors currently reporting a device where the data is leaving the device to be used for Non-Display or other purposes are required to report that as a data feed. The data recipient will be required to complete an Exhibit A and will be invoiced applicable Access and Non-Display Use fees.

Additional information can be found below:

CTA Network A Pricing

Schedule<<https://www.ctaplan.com/publicdocs/ctaplan/notifications/trader-update/CTA%20Network%20A%20Pricing%20-%20Jan%201%202015.pdf>>

CTA Network B Pricing

Schedule<<https://www.nyse.com/publicdocs/ctaplan/notifications/trader-update/CTA%20Network%20B%20Pricing%20-%20Jan%201%202015.pdf>>

Policy – CTA Non

Display<<https://www.ctaplan.com/publicdocs/ctaplan/notifications/trader-update/Policy%20-%20CTA%20Non%20Display.pdf>>

If you have any questions, please contact your NYSE account manager [eileen.kelly@nyse.com](mailto:eileen.kelly@nyse.com) .

Regards,  
NYSE Market Data

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=====End Message=====

# **Kotovets Exhibit L**



**Margaret Sullivan**  
Director  
  
New York Stock Exchange  
11 Wall Street  
NYC, NY 10005  
212-656-5553  
Margaret.Sullivan@NYSE.com

March 27, 2017

Mr. Gadi Goldress  
Bloomberg LP  
120 Park Ave.  
New York, NY 10165

Dear Gadi:

Please be advised that the Consolidated Tape Association ("CTA") filed with the Securities and Exchange Commission an immediately effective amendment to both the CTA Plan and Consolidated Quotation ("CQ") Plan that clarifies certain fees relating to Display and Non-Display Use and when access fees are applicable (the "CTA Fee Clarification") (see Securities Exchange Act Release No. 80300 (March 23, 2017) (File No. SR-CTA/CQ-2017-02)). The amended Fee schedule is available here: [CTA Network A Pricing/Rate Schedule](#); [CTA Network B Pricing/Rate Schedule](#)

As described in greater detail in the CTA Fee Clarification, footnote 2 of the CTA Schedule of Market Data Charges (the "Schedule") provides that "display data use subject to the Network A and Network B Subscriber charges shall mean only data that is visibly available to the data recipient; any other data use on a Device shall be considered Non-Display Use." In addition, footnote 8 of the Schedule specifies that "any use of the Data that is not designed to make the Data visibly available to the Data recipient on a device is a Non-Display Use." Finally, footnote 10 of the Schedule now provides that the "access fee applies if (i) the data recipient uses the data for non-display; or (ii) the data recipient receives the data in such a manner that the data can be manipulated and disseminated to one or more devices, display or otherwise, regardless of encryption or instructions from the redistribution vendor regarding who has authorized access to the data." The CTA Fee Clarifications, as filed, are applicable to all data recipients and supersede any prior understandings of the operation of the Schedule.

Based on your description of Bloomberg's Service API functionality ("SAPI"), it does not qualify as a Professional/Internal Device under the Schedule. You describe SAPI as allowing firms to "run server-based applications" and "make real-time data available internally" to users' devices. Both of these uses imply that SAPI does not make data visibly available to the data recipient; rather, SAPI is an extranet service that provides access to a data feed. Therefore, pursuant to the Schedule, as clarified consistent with the CTA Fee Clarification filed with the SEC, we consider use of SAPI to be Non-Display Use and subject data recipients to the applicable access fees. Any prior communications regarding SAPI are superseded by the fee clarification.

Sincerely,

A handwritten signature in black ink, appearing to read "Margaret M. Sullivan".

# **Kotovets Exhibit M**

=====Begin Message=====

Message#: 0

Message Sent: 04/03/2017 18:08:18

From: GGOLDRESS@Bloomberg.net|GADI GOLDRESS|BLOOMBERG/ 120 PARK|9001|30129324

CC: Margaret.Sullivan@nyse.com|MARGARET.SULLIVAN| |

TO: Eileen.Kelly@nyse.com|EILEEN.KELLY| |

Attachment: Letter to Bloomberg re API service March 27 2017.pdf

FileID: 58D9848900003E3F07FB4B9E.pdf

Attachment: image001.png

FileID: 58D9849F00003E3F07FB4F92.png

Subject: Re:Letter to Bloomberg re: API

Hi Eileen and Peggy,

Hope all is well.

We have reviewed the attached and we're surprised to have been sent this letter re: SAPI without any further follow-up to our previous discussion. When we last spoke about SAPI in October, I had explained how it worked and subsequently provided an amended description, of which you agreed to review. As explained, SAPI is a terminal product by which usage is restricted to display only with specific technical and contractual controls. We had not heard any follow up or discussion requests following that provided description, aside from the below email.

Has NYSE informed the street and our mutual clients of a policy change per below?

How does NYSE intend technically to bill a terminal product such fees as outlined?

Thanks

Gadi

----- Original Message -----

From: Eileen Kelly <Eileen.Kelly@nyse.com>

At: 27-Mar-2017 16:54:13

vY:/\* behavior:url(#default#VML);  
oY:/\* behavior:url(#default#VML);  
wY:/\* behavior:url(#default#VML);  
.shape behavior:url(#default#VML);

March 27, 2017

Mr. Gadi Goldress  
Bloomberg LP  
120 Park Ave.  
New York, NY 10165

Dear Gadi:

Please be advised that the Consolidated Tape Association (“CTA”) filed with the Securities and Exchange Commission an immediately effective amendment to both the

CTA Plan and Consolidated Quotation (“CQ”) Plan that clarifies certain fees relating to Display and Non-Display Use and when access fees are applicable (the “CTA Fee Clarification”) (see Securities Exchange Act Release No. 80300 (March 23, 2017) (File No.

SR-CTA/CQ-2017-02)). The amended Fee schedules are available here:

CTA

Network A Pricing/Rate Schedule;

CTA Network B Pricing/Rate Schedule

As described in greater detail in the CTA Fee Clarification, footnote 2 of the CTA Schedule of Market Data Charges (the “Schedule”) provides that “display data use subject to the Network A and Network B Subscriber charges shall mean only data that is visibly available to the data recipient; any other data use on a Device shall be considered Non-Display Use.” In addition, footnote 8 of the Schedule specifies that “any use of the Data that is not designed to make the

Data visibly available to the Data recipient on a device is a Non-Display Use.” Finally, footnote 10 of the Schedule now provides that the “access fee applies if (i) the data recipient uses the data for non-display; or (ii) the data recipient receives the

data in such a manner that the data can be manipulated and disseminated to one or more devices, display or otherwise, regardless of encryption or instructions from the redistribution vendor regarding who has authorized access to the data.” The CTA Fee Clarifications,

as filed, are applicable to all data recipients and supersede any prior understandings of the operation of the Schedule.

Based on your description of Bloomberg’s Service API functionality (“SAPI”), it does not qualify as a Professional/Internal Device under the Schedule. You describe SAPI as allowing firms to “run server-based applications” and “make real-time data available internally” to users’ devices. Both of these uses imply that SAPI does not make data visibly available to the data recipient; rather, SAPI is an extranet service that provides access to a data feed. Therefore,

pursuant to the Schedule, as clarified consistent with the CTA Fee Clarification filed with the SEC, we consider use of SAPI to be Non-Display Use and subject data recipients to the applicable access fees. Any prior communications regarding SAPI are superseded by the fee clarification.

Sincerely,

Margaret Sullivan (signed copy attached)

Thanks and Regards,

Eileen Kelly  
New York Stock Exchange  
An IntercontinentalExchange Company (NYSE: ICE)

11 Wall Street, 15th Floor, New York, NY 10005  
Tel: + 212.656.5812

[eileen.kelly@nyse.com](mailto:eileen.kelly@nyse.com)

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=====End Message=====

# Kotovets Exhibit N

====Begin Message=====

Message#: 0

Message Sent: 04/05/2017 11:49:55

From: Eileen.Kelly@nyse.com|Eileen Kelly| | |

TO: GGOLDRESS@Bloomberg.net|GADI GOLDRASS|BLOOMBERG/ 120 PARK|9001|30129324

CC: Margaret.Sullivan@nyse.com|MARGARET.SULLIVAN| | |

Attachment: metadata\_58E512230001AEDE3F4458D1.txt

FileID: 58E519CB00004D7B07E41776.txt

Attachment: alt\_body.html

FileID: 58E519AB00004D7B07E41515.html

Attachment: image001.png

FileID: 58E519B900004D7B07E41639.png

Subject: Letter to Bloomberg re: API

Dear Gadi,

Thank you for your email. To help clarify a few points, on November 30, 2016, I called you to discuss and provide you with notice that the CTA had agreed to file a policy clarification regarding Non-display fees, Access fees and Device fees. I explained to you what the filing would include and specifically mentioned that this would impact SAPI. You indicated at that point that you did not want to discuss the matter further at that time but instead would review the filing once it was published in the Federal Register. In addition to that conversation, the CTA Administrator team informed all our vendors and customers of the clarification when we filed our new pricing schedules with the SEC on December 1, 2016. (See Notice<<https://www.ctaplan.com/announcements#110000057154>>) Given our November 30th conversation I was waiting until the SEC approved the filing before following up with you individually as to SAPI.

The CTAPLAN.com website was updated on March 28, 2017, and a client notice was distributed, immediately after the SEC approved the filing, advising all recipients of the SEC approval. (See Notice)<<https://www.ctaplan.com/announcements#110000062630>>

SAPI can no longer be approved as a device. Based on Bloomberg's description of SAPI's functionality, it does not qualify as a Professional/Internal Device under the CTA Fee Schedule. Bloomberg describes SAPI as allowing subscribers to download market data from Bloomberg and run server-based applications on the market data and then make the data available to other users who have been entitled by Bloomberg. These are non-display uses; they are not uses designed solely to make CTA's data visibly available to the data recipient on a device, and therefore do not qualify for device fees. SAPI is a service that provides access to a data feed. We therefore consider use of SAPI to be a Non-Display Use which subjects SAPI's data recipients to the applicable access fees in line with the CTA Fee Schedule, as clarified and approved by the SEC.

To answer your question about how we intend to bill this product: any customer that is receiving a product that is not for visual display only should be reported as a datafeed. The vendor, Bloomberg in this case, should enter a datafeed request for each customer and report each customer as a datafeed once NYSE approves the datafeed request.

As per our various conversations and email I have asked for a list of the SAPI users pursuant to the terms of Section 11 of the vendor agreement. The list of SAPI users will provide information as to the firms that should be reported as receiving datafeeds.

I hope you find this helpful.

Thanks and Regards,

Eileen Kelly  
New York Stock Exchange

An IntercontinentalExchange Company (NYSE: ICE)  
11 Wall Street, 15th Floor, New York, NY 10005  
Tel: + 212.656.5812  
eileen.kelly@nyse.com <mailto:eileen.kelly@nyx.com>  
[cid:image001.png@01CF84A6.9792EDA0]

From: Gadi Goldress (BLOOMBERG/ 120 PARK) <ggoldress@bloomberg.net<mailto:ggoldress@bloomberg.net>>  
Date: Monday, Apr 03, 2017, 6:10 PM  
To: Eileen Kelly <Eileen.Kelly@nyse.com<mailto:Eileen.Kelly@nyse.com>>  
Cc: Margaret Sullivan <Margaret.Sullivan@nyse.com<mailto:Margaret.Sullivan@nyse.com>>  
Subject: Re:Letter to Bloomberg re: API

WARNING – External email; exercise caution  
Hi Eileen and Peggy,

Hope all is well.

We have reviewed the attached and we're surprised to have been sent this letter re: SAPI without any further follow-up to our previous discussion. When we last spoke about SAPI in October, I had explained how it worked and subsequently provided an amended description, of which you agreed to review. As explained, SAPI is a terminal product by which usage is restricted to display only with specific technical and contractual controls. We had not heard any follow up or discussion requests following that provided description, aside from the below email.

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How does NYSE intend technically to bill a terminal product such fees as outlined?

Thanks  
Gadi

----- Original Message -----

From: Eileen Kelly <Eileen.Kelly@nyse.com<mailto:Eileen.Kelly@nyse.com>>  
At: 27-Mar-2017 16:54:13

March 27, 2017

Mr. Gadi Goldress

Bloomberg LP

120 Park Ave.

New York, NY 10165

Dear Gadi:

Please be advised that the Consolidated Tape Association ("CTA") filed with the Securities and Exchange Commission an immediately effective amendment to both the CTA Plan and Consolidated Quotation ("CQ") Plan that clarifies certain fees relating to Display and Non-Display Use and when access fees are applicable (the "CTA Fee Clarification") (see Securities Exchange Act Release No. 80300 (March 23, 2017) (File No. SR-CTA/CQ-2017-02)). The amended Fee schedules are available here:

**CTA Network A Pricing/Rate**

Schedule<<https://secure.ice/?https://ctaplan.com/publicdocs/ctaplan/notifications/trader-update/CTA%20Network%20A%20Pricing%20-%20Jan%202015.pdf>>; CTA Network B Pricing/Rate

Schedule<<https://secure.ice/?https://ctaplan.com/publicdocs/ctaplan/notifications/pricing/trader-update/6016.pdf>>

As described in greater detail in the CTA Fee Clarification, footnote 2 of the CTA Schedule of Market Data Charges (the "Schedule") provides that "display data use subject to the Network A and Network B Subscriber charges shall mean only data that is visibly available to the data recipient; any other data use on a Device shall be considered Non-Display Use." In addition, footnote 8 of the Schedule specifies that "any use of the Data that is not designed to make the Data visibly available to the Data recipient on a device is a Non-Display Use." Finally, footnote 10 of the Schedule now provides that the "access fee applies if (i) the data recipient uses the data for non-display; or (ii) the data recipient receives the data in such a manner that the data can be manipulated and disseminated to one or more devices, display or otherwise, regardless of encryption or instructions from the redistribution vendor regarding who has authorized access to the data." The CTA Fee Clarifications, as filed, are applicable to all data recipients and supersede any prior understandings of the operation of the Schedule.

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Sincerely,

Margaret Sullivan (signed copy attached)

Thanks and Regards,

Eileen Kelly  
New York Stock Exchange  
An IntercontinentalExchange Company (NYSE: ICE)  
11 Wall Street, 15th Floor, New York, NY 10005  
Tel: + 212.656.5812  
eileen.kelly@nyse.com <mailto:ekelly@nyx.com>

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=====End Message=====