

SECURITIES AND EXCHANGE COMMISSION
(Release No. 34-100986; File No. SR-BX-2024-033)

September 10, 2024

Self-Regulatory Organizations; Nasdaq BX, Inc.; Notice of Filing and Immediate Effectiveness of Proposed Rule Change to Amend its Fees for Connectivity and Co-location Services

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (“Act”),¹ and Rule 19b-4 thereunder,² notice is hereby given that on August 26, 2024, Nasdaq BX, Inc. (“BX” or “Exchange”) filed with the Securities and Exchange Commission (“Commission”) the proposed rule change as described in Items I, II, and III below, which Items have been prepared by the Exchange. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization’s Statement of the Terms of Substance of the Proposed Rule Change

The Exchange proposes to amend the Exchange’s fees for connectivity and co-location services, as described further below.

The text of the proposed rule change is available on the Exchange’s Website at <https://listingcenter.nasdaq.com/rulebook/bx/rules>, at the principal office of the Exchange, and at the Commission’s Public Reference Room.

II. Self-Regulatory Organization’s Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the Exchange included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

Item IV below. The Exchange has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

A. Self-Regulatory Organization’s Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The purpose of the proposed rule change is to amend the Exchange’s fees relating to connectivity and co-location services.³ Specifically, the Exchange proposes to raise its fees for connectivity and co-location services in General 8, fees assessed for remote multi-cast ITCH (“MITCH”) Wave Ports in Equity 7, Section 115, and certain fees related to its Testing Facilities in Equity 7, Section 130 by 5.5%, with certain exceptions.

General 8, Section 1 includes the Exchange’s fees that relate to connectivity, including fees for cabinets, external telco / inter-cabinet connectivity fees, fees for connectivity to the Exchange, fees for connectivity to third party services, fees for market data connectivity, fees for cabinet power install, and fees for additional charges and services. General 8, Section 2 includes the Exchange’s fees for direct connectivity services, including fees for direct circuit connection to the Exchange, fees for direct circuit connection to third party services, and fees for point of presence connectivity. With the exception of the Exchange’s GPS Antenna fees and the Cabinet Proximity Option Fee for cabinets with power density >10kW,⁴ the Exchange proposes to

³ The Exchange initially filed the proposed pricing change on March 1, 2024 (SR-BX-2024-008). On April 29, 2024, the Exchange withdrew that filing and submitted SR-BX-2024-014. The Exchange withdrew BX-2024-14 and replaced it with SR-BX-2024-20. The instant filing replaces SR-BX-2024-20, which was withdrawn on August 26, 2024.

⁴ The Exchange proposes to exclude the GPS Antenna fees from the proposed fee increase because, unlike the other fees in General 8, the Exchange recently increased its GPS Antenna fees. See Securities Exchange Act Release No. 34-99124 (December 8, 2023), 88 FR 86715 (December 14, 2023) (SR-BX-2023-033). The Exchange also proposes to exclude the Cabinet Proximity Option Fee for cabinets with power density >10kW from the proposed fee increase because the Exchange recently established such fee. See Securities Exchange Act Release No. 34-100195 (May 21, 2024), 89 FR 46180 (May 28, 2024) (SR-BX-2024-017).

increase its fees throughout General 8 by 5.5%. For Remote Hands Services, at General 8, Section 1, the Exchange proposes to increase its fee by 1%, from \$150 to \$151.50 per hour.⁵

In addition to increasing fees in General 8, the Exchange also proposes to increase certain fees in Equity 7. First, the Exchange proposes to increase the installation and recurring monthly fees assessed for remote MITCH Wave Ports⁶ in Equity 7, Section 115(g)(1) by 5.5%. In addition, the Exchange proposes to increase certain fees in Section 130(d), which relate to the Nasdaq Testing Facility. Equity 7, Section 130(d)(1)(C) provides that subscribers to the Nasdaq Testing Facility (“NTF”) located in Carteret, New Jersey shall pay a fee of \$1,000 per hand-off, per month for connection to the NTF. The hand-off fee includes either a 1Gb or 10Gb switch port and a cross connect to the NTF. In addition, Equity 7, Section 130(d)(1)(C) provides that subscribers shall also pay a one-time installation fee of \$1,000 per hand-off. The Exchange proposes to increase these aforementioned fees by 5.5% to require that subscribers to the NTF shall pay a fee of \$1,055 per hand-off, per month for connection to the NTF and a one-time installation fee of \$1,055 per hand-off.

The proposed increases in fees would enable the Exchange to maintain and improve its market technology and services. With the exception of fees that were established as part of a new service in 2017 (and have remained unchanged since their adoption), the Exchange has not increased any of the fees included in the proposal since 2015, and many of the fees date back to

⁵ The term “Remote Hands Services” refers to the use of Nasdaq engineers to perform on-site technical support tasks in its Data Center on behalf of its co-located customers, including the following: (1) power cycling of equipment; (2) patching and plugging in cabling and circuits; (3) observing, describing or reporting on display indicators; (4) configuration of hardware components instructed by the customer; (5) diagnosis and repairs as instructed by the customer; (6) swapping hardware components with customer-supplied spares or upgrades; (7) troubleshooting heat related issues as instructed by the Customer; and (8) returning defective equipment to the manufacturer or customer.

⁶ Remote MITCH Wave Ports are for clients co-located at other third-party data centers, through which NASDAQ TotalView ITCH market data is distributed after delivery to those data centers via wireless network.

between 2010 and 2014. However, since 2010, there has been notable inflation by various measures.

Between January 2010 and August 2024, the dollar had an average inflation rate of 2.65% per year, as measured by the Consumer Price Index,⁷ producing a cumulative price increase of 44.25%.⁸ Said otherwise, the value of a dollar of revenue collected today is worth only 69.444% of what it was worth in 2010.

Additionally, as measured by another gauge of inflation, the Producer Price Index (“PPI”),⁹ inflation has increased by roughly 43% during the same time period.¹⁰

Meanwhile, a more granular version of the PPI exists which measures inflation by category of industry.¹¹ The most apt of these industry categorizations measures inflation for the provision of data processing, hosting and related services as well as other information technology infrastructure provisioning services.¹² The Exchange believes that this measure of inflation is

⁷ The Consumer Price Index (“CPI”) is a measure of the average change over time in the prices paid by urban consumers for a market basket of consumer goods and services. The CPI represents all goods and services purchased for consumption by the reference population (U or W). BLS has classified all expenditure items into more than 200 categories, arranged into eight major groups (food and beverages, housing, apparel, transportation, medical care, recreation, education and communication, and other goods and services). Included within these major groups are various government-charged user fees, such as water and sewerage charges, auto registration fees, and vehicle tolls.. See <https://www.bls.gov/cpi/questions-and-answers.htm>.

⁸ See <https://www.officialdata.org/us/inflation/2010?amount=1> (Last updated August 21, 2024).

⁹ The PPI is a family of indexes that measures the average change over time in selling prices received by domestic producers of goods and services. PPIs measure price change from the perspective of the seller. This contrasts with other measures, such as the Consumer Price Index (CPI), that measure price change from the purchaser's perspective. See <https://www.bls.gov/ppi/overview.htm>.

¹⁰ See U.S. Bureau of Labor Statistics (“BLS”), Producer Price Index by Commodity: Final Demand [PPIFIS], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/PPIFIS> (last updated August 22, 2024).

¹¹ As noted by the BLS, the “Producer Price Index for an industry is a measure of changes in prices received for the industry's output sold outside the industry (that is, its net output).” See *id.*

¹² Among the industry-specific PPIs is for North American Industry Classification System (“NAICS”) Code 518210: “Data Processing, Hosting and Related Services: Hosting, Active Server Pages (ASP), and Other Information Technology (IT) Infrastructure Provisioning Services,” NAICS index codes categorize products and services that are common to particular industries. According to BLS, these codes “provide comparability with a wide assortment of industry-based data for other economic programs, including

particularly apt because many of the colocation and connectivity services that the Exchange offers to customers involve hosting and providing connections for its customers' telecommunications and information technology equipment collocated in its Data Center. Between January 2010 and July 2024, the inflation rate for hosting, ASP, and other IT infrastructure provisioning services was 17.4%.¹³

Finally, yet another gauge of inflation – average hourly earnings (“AHE”) growth for Computing Infrastructure – increased 77% for non-managers and 81% for all employees from 2010 to 2024.¹⁴ This gauge of inflation is apt to the extent that the Exchange proposes to increase its fees for remote hands services, which are services performed by engineers and other technical personnel to support customer connectivity and colocation in the Exchange’s Data Center.

Notwithstanding inflation, the Exchange historically has not increased its fees every year.¹⁵ The proposed fees represent a 5.5% increase (and for Remote Hands, a 1% increase) from the current fees, which is far below any of the above-described gauges of inflation since 2010. In addition to being far below cumulative inflation rates since 2010, the Exchange also

productivity, production, employment, wages, and earnings.” See <https://www.bls.gov/ppi/overview.htm>. BLS describes NAICS 51820 as follows: “The primary output of NAICS 518210 is the provision of electronic data processing services. In the broadest sense, computer services companies help their customers efficiently use technology. The processing services market consists of vendors who use their own computer systems—often utilizing proprietary software—to process customers’ transactions and data. Companies that offer processing services collect, organize, and store a customer’s transactions and other data for record-keeping purposes.”

¹³ See U.S. Bureau of Labor Statistics, Producer Price Index by Industry: Data Processing, Hosting and Related Services: Hosting, Active Server Pages (ASP), and Other Information Technology (IT) Infrastructure Provisioning Services [PCU5182105182105], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/PCU5182105182105> (last updated August 22, 2024).

¹⁴ See <https://www.bls.gov/web/empsit/ceseeb3a.htm> (Last updated July 5, 2024); <https://www.bls.gov/web/empsit/ceseeb8a.htm> (Last updated July 5, 2024).

¹⁵ Unregulated competitors providing connectivity and co-location services often have annual price increases written into their agreements with customers to account for inflation and rising costs.

believes that the proposed 5.5%/1% increase is reasonable because it is comparable to recent inflation rates even for one-year periods. For example, in 2022, the inflation rate, as measured by the CPI, was 8.00% and it was 9.47%, as measured by the PPI.¹⁶ The Exchange is sensitive to the sticker shock that would occur if the Exchange raised its fees by 17% or more than 40% and therefore proposes a more modest increase, similar to that of inflation in recent one-year periods.

The Exchange believes that it is reasonable to increase its fees to compensate for inflation because, over time, inflation has degraded the value of each dollar that the Exchange collects in fees, such that the real revenue collected today is considerably less than that same revenue collected in 2010. The Exchange notes that this inflationary effect is a general phenomenon that is independent of any change in the Exchange's costs in providing its goods and services. The Exchange believes that it is reasonable for it to offset, in part, this erosion in the value of the revenues it collects. The Exchange notes that other exchanges have filed for comparable or higher increases in certain connectivity-related fees, based in part on similar rationale.¹⁷

In addition, the Exchange continues to invest in maintaining, improving, and enhancing its connectivity and co-location products, services, and facilities – for the benefit and often at the behest of its customers. Such enhancements include refreshing hardware and expanding Nasdaq's existing co-location facility to offer customers additional space and power. These investments, and the value they provide to customers, far exceed the amount of the proposed price increases. It is reasonable and consistent with the Act for the Commission to allow the

¹⁶ See <https://www.officialdata.org/us/inflation/2022?endYear=2023&amount=1>; see also <https://fred.stlouisfed.org/series/PPIFIS#0>.

¹⁷ See, e.g., Securities Exchange Act Release No. 34-100004 (April 22, 2024), 89 FR 32465 (April 26, 2024) (SR-CboeBYX-2024-012).

Exchange to recoup these investments by charging fees, lest the Commission will disincentivize the Exchange to make similar investments in the future – a result that would be detrimental to the Exchange’s competitiveness as well as the interests of market participants and investors.

2. Statutory Basis

The Exchange believes that its proposal is consistent with Section 6(b) of the Act,¹⁸ in general, and furthers the objectives of Sections 6(b)(4) and 6(b)(5) of the Act,¹⁹ in particular, in that it provides for the equitable allocation of reasonable dues, fees and other charges among members and issuers and other persons using any facility, and is not designed to permit unfair discrimination between customers, issuers, brokers, or dealers.

This belief is based on several factors. First, the current fees do not properly reflect the value of the services and products, as fees for the services and products in question have been static in nominal terms, and therefore falling in real terms due to inflation. Second, exchange fees are constrained by the fact that market participants can choose among 16 different venues for equities trading and 17 different venues for options trading, and therefore no single venue can charge excessive fees for its products without losing customers and market share.

Real Exchange Fees Have Fallen

As explained above, with the exception of fees that were established as part of a new service in 2017 (and have remained unchanged since their adoption), the Exchange has not increased any of the fees included in the proposal since 2015, and many of the fees date back to between 2010 and 2014. This means that such fees have fallen in real terms due to inflation, which has been notable by various measures.

¹⁸ 15 U.S.C. 78f(b).

¹⁹ 15 U.S.C. 78f(b)(4) and (5).

Between January 2010 and August 2024, the dollar had an average inflation rate of 2.65% per year, as measured by the CPI, producing a cumulative price increase of 44.25%.²⁰ Said otherwise, the value of a dollar of revenue collected today is worth only 69.444% of what it was worth in 2010.

Additionally, as measured by another gauge of inflation, the PPI has increased by roughly 43% during the same time period.²¹

Meanwhile, a more granular version of the PPI exists which measures inflation by category of industry. The most apt of these industry categorizations measures inflation for the provision of data processing, hosting and related services as well as other information technology infrastructure provisioning services. The Exchange believes that this measure of inflation is particularly apt because many of the colocation and connectivity services that the Exchange offers to customers involve hosting and providing connections for its customers' telecommunications and information technology equipment collocated in its Data Center. Between January 2010 and July 2024, the inflation rate for hosting, ASP, and other IT infrastructure provisioning services was 17.4%.²²

Finally, yet another gauge of inflation – AHE growth for Computing Infrastructure – increased 77% for non-managers and 81% for all employees from 2010 to 2024.²³ This gauge of

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²² See U.S. Bureau of Labor Statistics, Producer Price Index by Industry: Data Processing, Hosting and Related Services: Hosting, Active Server Pages (ASP), and Other Information Technology (IT) Infrastructure Provisioning Services [PCU5182105182105], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/PCU5182105182105> (last updated August 22, 2024).

²³ See <https://www.bls.gov/web/empsit/ceseeb3a.htm> (Last updated July 5, 2024); <https://www.bls.gov/web/empsit/ceseeb8a.htm> (Last updated July 5, 2024).

inflation is apt to the extent that the Exchange proposes to increase its fees for remote hands services, which are services performed by engineers and other technical personnel to support customer connectivity and colocation in the Exchange's Data Center.

Notwithstanding inflation, the Exchange historically has not increased its fees every year.²⁴ As noted above, the Exchange has not increased the fees in this proposal for over 8 years (or in the case of services introduced in 2017, for over 6 years since the services were introduced). Accordingly, the Exchange believes that the proposed fees are reasonable as they represent a 5.5% increase (and for Remote Hands, a 1% increase) from the current fees, which is far below inflation since 2010, however measured. In addition to being far below the inflation rate since 2010, the Exchange also believes that the proposed 5.5%/1% increase is reasonable because it is comparable to recent inflation rates for one-year periods. For example, in 2022, the inflation rate, as measured by the CPI, was 8.00% and it was 9.47%, as measured by the PPI.²⁵ The Exchange is sensitive to the sticker shock that would occur if the Exchange raised its fees by 17% or more than 40% and therefore proposes a more modest increase, similar to that of inflation in recent one-year periods.

The Exchange believes that it is reasonable to increase its fees to compensate for inflation because, over time, inflation has degraded the value of each dollar that the Exchange collects in fees, such that the real revenue collected today is considerably less than that same revenue collected in 2010. The Exchange notes that this inflationary effect is a general phenomenon that is independent of any change in the Exchange's costs in providing its goods and services. The

²⁴ As noted above, unregulated competitors providing connectivity and co-location services often have annual price increases written into their agreements with customers to account for inflation and rising costs.

²⁵ See <https://www.officialdata.org/us/inflation/2022?endYear=2023&amount=1>; see also <https://fred.stlouisfed.org/series/PPIFIS#0>.

Exchange believes that it is reasonable for it to offset, in part, this erosion in the value of the revenues it collects.

In addition, the Exchange continues to invest in maintaining, improving, and enhancing its connectivity and co-location products, services, and facilities – for the benefit and often at the behest of its customers. Such enhancements include refreshing hardware and expanding Nasdaq’s existing co-location facility to offer customers additional space and power. Again, these investments, and the value they provide to customers, far exceed the amount of the proposed price increases. It is reasonable and consistent with the Act for the Commission to allow the Exchange to recoup these investments by charging fees, lest the Commission will disincentivize the Exchange to make similar investments in the future – a result that would be detrimental to the Exchange’s competitiveness as well as the interests of market participants and investors.

Customers Have a Choice in Trading Venue

Customers face many choices in where to trade both equities and options. Market participants will continue to choose trading venues and the method of connectivity based on their specific needs. No broker-dealer is required to become a Member of the Exchange. There is no regulatory requirement that any market participant connect to any one exchange, nor that any market participant connect at a particular connection speed or act in a particular capacity on the Exchange, or trade any particular product offered on an exchange. Moreover, membership is not a requirement to participate on the Exchange. Indeed, the Exchange is unaware of any one exchange whose membership includes every registered broker-dealer. The Exchange also believes substitutable products and services are available to market participants, including, among other things, other equities and options exchanges that a market participant may connect

to in lieu of the Exchange, indirect connectivity to the Exchange via a third-party reseller of connectivity, and/or trading of equities or options products within markets which do not require connectivity to the Exchange, such as the Over-the-Counter markets.

There are currently 16 registered equities exchanges that trade equities and 17 exchanges offering options trading services. No single equities exchange has more than 15% of the market share.²⁶ No single options exchange trades more than 14% of the options market by volume and only one of the 17 options exchanges has a market share over 10 percent.²⁷ This broad dispersion of market share demonstrates that market participants can and do exercise choice in trading venues. Further, low barriers to entry mean that new exchanges may rapidly enter the market and offer additional substitute platforms to further compete with the Exchange and the products it offers.

As such, the Exchange must set its fees, including its fees for connectivity and co-location services and products, competitively. If not, customers may move to other venues or reduce use of the Exchange's services. "If competitive forces are operative, the self-interest of the exchanges themselves will work powerfully to constrain unreasonable or unfair behavior."²⁸ Accordingly, "the existence of significant competition provides a substantial basis for finding that the terms of an exchange's fee proposal are equitable, fair, reasonable, and not unreasonably or unfairly discriminatory."²⁹ Disincentivizing market participants from purchasing Exchange connectivity would only serve to discourage participation on the Exchange, which ultimately

²⁶ See Cboe Global Markets, U.S. Equities Market Volume Summary, Month-to-Date (Last updated January 11, 2024), available at https://www.cboe.com/us/equities/market_statistics/.

²⁷ See Nasdaq, Options Market Statistics (Last updated January 11, 2024), available at <https://www.nasdaqtrader.com/Trader.aspx?id=OptionsVolumeSummary>.

²⁸ See Securities Exchange Act Release No. 59039 (December 2, 2008), 73 Fed. Reg. 74,770 (December 9, 2008) (SR-NYSEArca-2006-21).

²⁹ Id.

does not benefit the Exchange. Moreover, if the Exchange charges excessive fees, it may stand to lose not only connectivity revenues but also other revenues, including revenues associated with the execution of orders.

In summary, the proposal represents an equitable allocation of reasonable dues, fees and other charges because Exchange fees have fallen in real terms and customers have a choice in trading venue and will exercise that choice and trade at another venue if exchange fees are not set competitively.

No Unfair Discrimination

The Exchange believes that the proposed fee changes are not unfairly discriminatory because the fees are assessed uniformly across all market participants that voluntarily subscribe to or purchase connectivity and co-location services or products, which are available to all customers.

B. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will impose any burden on competition not necessary or appropriate in furtherance of the purposes of the Act.

Nothing in the proposal burdens inter-market competition (the competition among self-regulatory organizations) because approval of the proposal does not impose any burden on the ability of other exchanges to compete. The Exchange operates in a highly competitive market in which market participants can determine whether or not to connect to the Exchange based on the value received compared to the cost of doing so. Indeed, market participants have numerous alternative exchanges that they may participate on and direct their order flow, as well as off-exchange venues, where competitive products are available for trading.

Nothing in the proposal burdens intra-market competition (the competition among consumers) because the Exchange's connectivity and co-location services are available to any

customer under the same fee schedule as any other customer, and any market participant that wishes to purchase such services can do so on a non-discriminatory basis.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received from Members, Participants, or Others

No written comments were either solicited or received.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

The foregoing rule change has become effective pursuant to Section 19(b)(3)(A)(ii) of the Act.³⁰

At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is: (i) necessary or appropriate in the public interest; (ii) for the protection of investors; or (iii) otherwise in furtherance of the purposes of the Act. If the Commission takes such action, the Commission shall institute proceedings to determine whether the proposed rule should be approved or disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments:

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

³⁰ 15 U.S.C. 78s(b)(3)(A)(ii).

- Send an email to rule-comments@sec.gov. Please include file number SR-BX-2024-033 on the subject line.

Paper Comments:

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

All submissions should refer to file number SR-BX-2024-033. This file number should be included on the subject line if email 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 (<https://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change 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, 100 F Street NE, Washington, DC 20549, on official business days between the hours of 10 a.m. and 3 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. Do not include personal identifiable information in submissions; you should submit only information that you wish to make available publicly. We may redact in part or withhold entirely from publication submitted material that is obscene or subject to copyright

protection. All submissions should refer to file number SR-BX-2024-033 and should be submitted on or before [INSERT DATE 21 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*].

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.³¹

Vanessa A. Countryman,
Secretary.

³¹ 17 CFR 200.30-3(a)(12).