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January 24, 2013

Ms. Elizabeth M. Murphy
Secretary
United States Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549

Re: Response to Comments
File No. SR-NASDAQ-2012-119

Dear Ms. Murphy:

Thank you for the opportunity to respond to the comment letter submitted on behalf of Quincy Data, LLC, a wireless market data vendor, regarding the recent proposed rule change to establish fees for an optional wireless connectivity for co-located clients (SR-NASDAQ 2012-119). We note as an initial matter that the Quincy letter was received almost two months after the comment deadline of November 19, 2012, and just days before the deadline for action by the SEC on this proposal.

We also note that as a wireless data vendor, Quincy has a direct financial interest in delaying or obstructing NASDAQ's proposal. Like many other wireless data vendors that are working to get wireless networks live, Quincy is not required to file its services or fees with the SEC. Unlike NASDAQ, it can customize pricing and adjust services as it sees fit, and is able to pick and choose the clients it wishes to service. A delay or denial of the Exchange's proposal would enable Quincy, which was not chosen as NASDAQ's wireless provider, to advance its own network and maximize its share of the market.

Perhaps because Quincy is aware of the limits of its argument with regard to wireless connectivity, it has included a broad attack on NASDAQ's processes and services. This attack is unsupportable, as well as irrelevant to the proposal before the Commission. Quincy charges that NASDAQ can "control, delay or limit" the vendors that can distribute NASDAQ data through (1) the market data license application process; (2) the co-location application and approval process; (3) the authorized telecom provider and application and approval process; and (4) by controlling the initial dissemination and re-dissemination of NASDAQ data from the trading engine and distribution of other market data within the NASDAQ data center.

As Quincy is no doubt aware, all of these processes have been subject to review and approval by the SEC, and are subject to continual oversight by the SEC. These processes are transparent, regulated, and designed to promote a free and open market and national market system. NASDAQ proposes no changes to any of these processes in this rule proposal. And the wireless connectivity program implicates none of these processes.

Quincy's more specific objections to the proposal are also without merit. Quincy complains that the proposal would allow NASDAQ a competitive advantage over other wireless providers of data because NASDAQ would control exclusive rights to place wireless dishes on its Carteret Data facility. This claim is wrong on several accounts. First, NASDAQ does not control all rights to the roof space at Carteret. Second, even if it were to operate as the only wireless provider on the Carteret roof, this would not give NASDAQ an unfair competitive advantage over other providers. In short, as we detail below, the proposal does not unduly constrain competition, nor impede a free and open market and national market system.

NASDAQ Does Not Have Exclusive Control of Carteret Roof Rights

Quincy assumes, without evidence or analysis, that NASDAQ has exclusive control of Carteret roof rights and the concomitant ability to exclude competitors from placing wireless equipment on the Carteret roof. In fact, NASDAQ does not have such exclusive control. Verizon, the lessor of the facility, retains rights to the rooftop that would enable it to approve a wireless carrier to place equipment on the Carteret rooftop and to compete for the provision of wireless data transmission. Such vendor would require separate approval from the Federal Communication Commission and state and local authorities, as well as NASDAQ approval for fiber optic connectivity to NASDAQ's telco connectivity room within the Carteret building. As a national securities exchange operating pursuant to fair access requirements, NASDAQ's application process is fully disclosed to the public and subject to SEC supervision and sanction. Contrary to Quincy's assertion, NASDAQ has no contractual, regulatory, or statutory monopoly over the Carteret roof rights.

No Unfair Competitive Advantage from Dish Placement on Carteret Roof

Quincy's assertion that "rooftop access as a critical ingredient for a wireless market data vendor to create a competitive network" is simply wrong. A competitive network provides the same or similar data, at the same or similar speed, at the same or similar cost, and NASDAQ's proposal does nothing to inhibit or constrain this. Wireless vendors and co-location clients with their own wireless networks can currently choose between any one of 17 vendors that provide fiber optic connections from NASDAQ's Carteret facility to nearby wireless towers. That number can, and likely will, grow, and nothing in the proposal inhibits additional wireless vendors accessing or providing NASDAQ data.

Quincy suggests without evidence or analysis, however, that competitor vendors who must route these fiber optic connections to a nearby tower, rather than to a rooftop dish, will be disadvantaged because latency will be compromised. This claim is factually unsubstantiated. The commenter has submitted no evidence, and NASDAQ is aware of none, that a measurable, meaningful latency differential exists between fiber optic cables of the very small lengths involved in wireless networks. In fact, the science of wireless technology, coupled with the practical realities that constrain it, turn this assertion on its head.

The largest portion of network latency can be found in the total distance of the network path. A wireless network path allows data to travel faster than a fiber optic network of the exact same distance. However, wireless networks require direct "line of sight" in order to transfer data from one dish to another, and relay towers along the route to transfer the signals. Taller towers allow for fewer obstructions, such as buildings and trees, and allow fewer towers, as they can be spaced further apart. Each additional tower adds latency, as the signal must be received and re-transmitted to the next tower.

Vendor networks operating from Carteret to Secaucus utilize routes that can differ in length by as much as 2 kilometers, due to the placement and height of towers. A difference of 2 kilometers between any two competing wireless routes equates to a 6 microsecond latency difference.[1]

NASDAQ's path for its wireless network requires a fiber optic connection (of approximately 400 feet) from the NASDAQ network within Carteret to a dish on the roof, which then relays the data to a nearby tower, which receives and retransmits the signal on to Secaucus via a series of towers. This initial relay between roof to nearby tower is due to the low height of the Carteret data center roof, which is less than half the height of most wireless towers, and is calculated to add .2 microseconds in latency. In contrast, a competing vendor's fiber optic trip from the telco\ room where data emanates from the execution system to a nearby wireless tower, which range in distance from 100 to 400 meters from the data center, adds .5 to 2 microseconds of latency. From the nearby tower, however, the first wireless signal may travel many kilometers before the next tower, thereby reducing additional latency caused by tower reception and re-transmission.

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[1] Latency is largely a function of the speed of light, which is 299,792,458 meters/second in vacuum. This would equate to a latency of 3.33 microseconds for every kilometer of path length. The index of refraction of most fiber optic cables is about 1.5, meaning that light travels about 1.5 times faster in a vacuum than it does in the cable. This works out to about 4.9 microseconds of latency for every kilometer. To simplify calculations, the 4.9 microseconds has been rounded up to 5 microseconds of latency for every kilometer. Using these calculations, a fiber optic path that is 30 km in distance will have a latency of approximately 150 microseconds (30 x 5). The same path via a wireless network would be approximately 40% less at around 90 microseconds. A difference then, of 2 kilometers equates to a 6 microsecond latency difference.

Moreover, because NASDAQ is a national securities exchange, it has additional requirements that add latency compared to the optical network that wireless vendors could utilize to connect to clients. NASDAQ's exchange network infrastructure needs to be more secure and diverse, which requires more optical switches within the data centers. These additional switches can add 2.4 to 8 microseconds in added latency (depending on the type and age of the network switch). In addition, NASDAQ provides equidistant client connectivity to receive the market data feeds in the data center, which adds latency of over 1 microsecond. Wireless vendors and clients do not have these requirements, so do not have this additional latency in their overall network.

In sum, microseconds of latency are added and subtracted along the wireless route due to a variety of practical routing issues. Competing vendors may thus offer differing latency, but those differences cannot be seen as a result of an unfair competitive advantage, nor do they produce one. Technological constraints that preclude exactly equivalent service offerings between competitors is a phenomenon not unlike issues already confronted -- and resolved -- by Exchanges, data providers, and the Commission related to colocation services.

Furthermore, there are multiple effective competitive alternatives to NASDAQ's wireless offering. As stated above, currently, 17 market data vendors have fiber optic cables connected to NASDAQ's telco room in Carteret, and NASDAQ believes at least ten wireless networks exist or are under construction within very close proximity to the Carteret facility.[2] Any or all of those vendors and networks is an effective competitor to the NASDAQ wireless offering. Assuming *arguendo* that a measurable latency loss is attributable to a fiber optic cable to a nearby rooftop or tower, that latency loss would not preclude effective competition; a market data vendor could induce purchasers away from NASDAQ with an ever-so-slightly slower but still valuable product at a lower price. This variety of price and speed attributes is an effective constraint on NASDAQ's pricing power.

Moreover, fiber optic networks are themselves effective competitors for wireless data. As stated above, 17 vendors currently offer connectivity to NASDAQ data at various, competing prices. Fiber optic networks are more resilient than wireless networks, which can be more susceptible to severe weather affects; this mature market for fiber optic networks will remain attractive to many clients who are more risk averse. While some NASDAQ firms will opt for faster, costlier wireless data, many others will conclude that the price and speed attributes of fiber optic data provide a reasonable competitive alternative to wireless data.

As stated in the original proposal, NASDAQ supports the Commission's and Congress's belief that market forces should to the greatest extent consistent with the Act guide the evolution of the markets. Here, where NASDAQ's decision to offer wireless

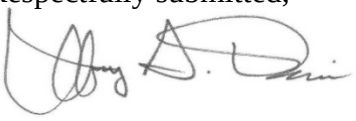
[2] This belief is based on a review conducted for NASDAQ of publicly-available registration and spectrum reservation databases at the Federal Communications Commission.

connectivity is voluntary, as is each user's decision to purchase wireless connectivity, market forces play an important role. The decision of the United States Court of Appeals for the District of Columbia Circuit in NetCoaliton v. SEC, No. 09-1042 (D.C. Cir. 2010) upheld the Commission's reliance upon competitive markets to set reasonable and equitably allocated fees for market data. "In fact, the legislative history indicates that the Congress intended that the market system 'evolve through the interplay of competitive forces as unnecessary regulatory restrictions are removed' and that the SEC wield its regulatory power 'in those situations where competition may not be sufficient,' such as in the creation of a 'consolidated transactional reporting system.' NetCoaltion, at 15 (quoting H.R. Rep. No. 94–229, at 92 (1975), *as reprinted in* 1975 U.S.C.C.A.N. 321, 323). The court agreed with the Commission's conclusion that "Congress intended that 'competitive forces should dictate the services and practices that constitute the U.S. national market system for trading equity securities.'"[3]

Finally, NASDAQ's proposal to offer wireless connectivity supports important policy objectives of the Act, including the broadest, fairest possible dissemination of market data. As described in the rule filing, practical issues – space constraints and interference between dishes that are placed too closely together – impose limits to the number of networks that can occupy the Carteret rooftop. It is simply technologically impossible for the rooftop to support equipment from every provider that NASDAQ anticipates would seek rooftop access. NASDAQ's proposal will make wireless connectivity available to each and every NASDAQ member at the same speed and the same price. Quincy leaves unstated its view of how NASDAQ would fairly and on a non-discriminatory basis allocate that scarce resource and ensure that all members have effective access to a wireless network. The alternative to NASDAQ's plan, ostensibly put forth by Quincy, would allow the best-financed, most-agile competitors to occupy the limited space on the Carteret rooftop.

Quincy's comment fails to articulate the proper standard of Commission review of Exchange rule proposals. While Quincy claims that NASDAQ's proposal is "anti-competitive" – which is not the case – Commission rules require a finding that the proposal "does not impose any burden on competition not necessary or appropriate in the furtherance of the purposes of the Act." For all of the reasons stated above, NASDAQ believes that its wireless connectivity proposal is consistent with the Act. We respectfully urge the Commission to approve it at the earliest possible date.

Respectfully submitted,



Jeffrey S. Davis
V.P. and Deputy General Counsel

[3] NetCoaliton v. SEC, No. 09-1042 (D.C. Cir. 2010) at p. 16.