

HIGHLIGHT OF OCTOBER 1, 2020 FEE CHANGES

(Changes Highlighted Below)

3) Membership Fees

a) Application for MIAX Emerald Membership (One-Time Fee)

Type of Membership	Application Fee
Electronic Exchange Member	Fee waived for the Waiver Period\$2,500.00
Market Maker	Fee waived for the Waiver Period\$3,000.00

MIAX Emerald will assess a one-time Membership Application Fee on the earlier of (i) the date the applicant is certified in the membership system, or (ii) once an application for MIAX Emerald membership is finally denied.

b) Monthly Trading Permit Fee

MIAX Emerald will issue Trading Permits to Members that confer the ability to transact on MIAX Emerald. (For a complete description of MIAX Emerald Trading Permits, see MIAX Emerald Rule 200.) Members receiving Trading Permits during a particular calendar month will be assessed Trading Permit Fees according to the schedules below.

Type of Trading Permit	Monthly MIAX Emerald Trading Permit Fee
Electronic Exchange Member	Fee waived for the Waiver Period\$1,500.00

Monthly Trading Permit Fees will be assessed with respect to EEMs (other than Clearing Firms) in any month the EEM is certified in the membership system and the EEM is credentialed to use one or more FIX Ports in the production environment.

Monthly Trading Permit Fees will be assessed with respect to EEM Clearing Firms in any month the Clearing Firm is certified in the membership system to clear transactions on the Exchange.

Monthly Trading Permit Fees will be assessed with respect to Market Makers in any month the Market Maker is certified in the membership system, is credentialed to use one or more MEI Ports in the production environment and is assigned to quote in one or more classes.

Notwithstanding the foregoing, the calculation of the Trading Permit Fee for the first month in which the Trading Permit is issued will be pro-rated based on the number of trading days on which the Trading Permit was in effect divided by the total number of trading days in that month multiplied by the monthly rate.

Type of Trading	Monthly MIAX Emerald Trading	Market Maker Assignments (the lesser of the applicable measurements below)	
Permit	Permit Fee	Per Class	% of National Average Daily Volume
	Fee waived for the Waiver Period \$7,000.00	Up to 10 Classes	Up to 20% of Classes by volume
Market Maker (includes RMM,	F ee waived for the Waiver Period \$12,000.00	Up to 40 Classes	Up to 35% of Classes by volume
LMM, PLMM)	Fee waived for the Waiver Period \$17,000.00	Up to 100 Classes	Up to 50% of Classes by volume
	Fee waived for the Waiver Period \$22,000.00■	Over 100 Classes	Over 50% of Classes by volume up to all Classes listed on MIAX Emerald

For these Monthly MIAX Emerald Trading Permit tier levels, if the Market Maker's total monthly executed volume during the relevant month is less than 0.025% of the total monthly executed volume reported by OCC in the customer account type for MIAX Emerald-listed option classes for that month, then the fee will be \$15,500 instead of the fee otherwise applicable to such level.

For the calculation of the monthly Market Maker Trading Permit Fees, the number of classes is defined as the greatest number of classes the Market Maker was assigned to quote in on any given day within the calendar month and the class volume percentage is based on the total national average daily volume in classes listed on MIAX Emerald in the prior calendar quarter. Newly listed option classes are excluded from the calculation of the monthly Market Maker Trading Permit Fee until the calendar quarter following their listing, at which time the newly listed option classes will be included in both the per class count and the percentage of total national average daily volume. The Exchange will assess MIAX Emerald Market Makers the monthly Market Maker Trading Permit Fee based on the greatest number of classes listed on MIAX Emerald that the MIAX Emerald Market Maker was assigned to quote in on any given day within a calendar month and the applicable fee rate that is the lesser of either the per class basis or percentage of total national average daily volume measurement.

4) Testing and Certification Fees

a) Member Application Programming Interface ("API") Testing and Certification Fee

Type of Member	API Testing and Certification Fee
Electronic Exchange Member	Fee waived for the Waiver Period \$1,000.00
Market Maker	Fee waived for the Waiver Period \$2,500.00

API Testing and Certification Fees for EEMs (other than Clearing Firms) will be assessed (i) initially per API for FIX, FXD and CTD in the month the EEM has been credentialed to use one or more ports in the production environment for the tested API, and (ii) each time an EEM initiates a change to its system that requires testing and certification.

API Testing and Certification Fees for EEM Clearing Firms will be assessed (i) initially per API in the month the EEM Clearing Firm has been credentialed to use one or more CTD Ports in the production environment, and (ii) each time an EEM Clearing Firm initiates a change to its system that requires testing and certification.

API Testing and Certification Fees for Market Makers will be assessed (i) initially per API for CTD and MEI in the month the Market Maker has been credentialed to use one or more ports in the production environment for the tested API and the Market Maker has been assigned to quote in one or more classes, and (ii) each time a Market Maker initiates a change to its system that requires testing and certification.

API Testing and Certification Fees will not be assessed in situations where the Exchange initiates a mandatory change to the Exchange's system that requires testing and certification.

b) Non-Member API Testing and Certification Fee

Non-Member	API Testing and Certification Fee
Third Party Vendors and Service Bureaus and other non-Members	Fee waived for the Waiver Period \$1,200.00

API Testing and Certification Fees for Third Party Vendors, Service Bureaus and other non-Members will be assessed (i) initially per API for FIX, FXD, CTD and MEI in the month the non-Member has been credentialed to use one or more ports in the production environment for the tested API, and (ii) each time a Third Party Vendor, Service Bureau, or other non-Member initiates a change to its system that requires testing and certification.

API Testing and Certification Fees will not be assessed in situations where the Exchange initiates a mandatory change to the Exchange's system that requires testing and certification.

c) Member Network Connectivity Testing and Certification Fee

Type of Member	1 Gigabit Fee Per Connection	10 Gigabit ULL Fee Per Connection
Individual Firm	<mark>Fee waived for the</mark> Waiver Period \$1,000.00	<mark>Fee waived for the</mark> Waiver Period \$4,000.00

Member Network Connectivity Testing and Certification Fees will be assessed (i) initially per connection in the month the Individual Firm has been credentialed to use any API or market data feeds in the production environment utilizing the tested network connection, and (ii) each time an Individual Firm initiates a change to its system that requires network connectivity testing and certification.

Network Connectivity Testing and Certification Fees will not be assessed in situations where the Exchange initiates a mandatory change to the Exchange's system that requires testing and certification. Member Network Connectivity Testing and Certification Fees will not be assessed for testing and certification of connectivity to the Exchange's Disaster Recovery Facility.

Members utilizing a single, Shared cross-connect to connect to the trading platforms, market data systems, test systems, and disaster recovery facilities of the Exchange, MIAX PEARL, and MIAX will only be assessed one Network Connectivity Testing and Certification Fee per connection tested, regardless of the trading platforms, market data systems, test systems, and disaster recovery facilities accessed via such connection.

d) Non-Member Network Connectivity Testing and Certification Fee

Non-Member	1 Gigabit Fee Per Connection	10 Gigabit ULL Fee Per Connection
Service Bureau/Extranet Provider	Fee waived for the Waiver Period	F ee waived for the Waiver Period
and other non-Members	\$1,200.00	\$4,200.00

Non-Member Network Connectivity Testing and Certification fees will be assessed (i) initially per connection in the month the Service Bureau, Extranet Provider or other non-Member has been credentialed to use any API or market data feeds in the production environment using the tested network connection, and (ii) each time a Service Bureau, Extranet Provider or other non-Member initiates a change to its system that requires network connectivity testing and certification.

Network Connectivity Testing and Certification Fees will not be assessed in situations where the Exchange initiates a mandatory change to the Exchange's system that requires testing and certification. Non-Member Network Connectivity Testing and Certification Fees will not be assessed for testing and certification of connectivity with the Exchange's Disaster Recovery Facility.

Non-Members utilizing a single, Shared cross-connect to connect to the trading platforms, market data systems, test systems, and disaster recovery facilities of the Exchange, MIAX PEARL, and MIAX will only be assessed one Network Connectivity Testing and Certification Fee per connection tested, regardless of the trading platforms, market data systems, test systems, and disaster recovery facilities accessed via such connection.

5) System Connectivity Fees

a) Monthly Member Network Connectivity Fee

Member Network Connectivity Per Month	Primary/ Secondary Facility 1 Gigabit Per Connection	Disaster Recovery Facility 1 Gigabit Per Connection	Disaster Recovery Facility 10 Gigabit Per Connection	Primary/ Secondary Facility 10 Gigabit ULL Per Connection
Individual Firm	\$1,400.00	\$550.00	\$2,750.00	<mark>\$6,000.00</mark> \$10,000.00

Monthly Member Network Connectivity fees for connectivity with the Primary/Secondary Facility will be assessed in any month the Member is credentialed to use any of the APIs or Market Data feeds via the network connection in the production environment and will be pro-rated when a Member makes a change to the connectivity (by adding or deleting connections) with such pro-rated fees based on the number of trading days that the Member has been credentialed to utilize any of the APIs or Market Data feeds in the production environment through such connection, divided by the total number of trading days in such month multiplied by the applicable monthly rate. Monthly Member Network Connectivity fees for connectivity with the Disaster Recovery Facility will be assessed in each month during which the Member has established connectivity with the Disaster Recovery Facility.

Members utilizing the MENI to connect to the trading platforms, market data systems, test systems, and disaster recovery facilities of the Exchange, MIAX PEARL, and MIAX via a single, Shared connection will only be assessed one Monthly Member Network Connectivity Fee per connection, regardless of the trading platforms, market data systems, test systems, and disaster recovery facilities accessed via such connection.

Non-Member Network Connectivity Per Month	Primary/ Secondary Facility 1 Gigabit Per Connection	Disaster Recovery Facility 1 Gigabit Per Connection	Disaster Recovery Facility 10 Gigabit Per Connection	Primary/ Secondary Facility 10 Gigabit ULL Per Connection
Service Bureau/ Extranet Provider and other non- Members	\$1,400.00	\$550.00	\$2,750.00	<mark>\$6,000.00</mark> \$10,000.00

b) Monthly Non-Member Network Connectivity Fee

Monthly Non-Member Network Connectivity fees for connectivity with the Primary/Secondary Facility will be assessed in each month the Non-Member has been credentialed to use any of the APIs or Market Data feeds via the network connection in the production environment and will be pro-rated when a Non-Member makes a change to the connectivity (by adding or deleting connections) with such pro-rated fees based on the number of trading days that the Non-Member has been credentialed to utilize any of the APIs or Market Data feeds in the production environment through such connection, divided by the total number of trading days in such month multiplied by the applicable monthly rate. Monthly Non-Member Network Connectivity fees for connectivity with the Disaster Recovery Facility will be assessed in each month during which the Non-Member has established connectivity with the Disaster Recovery Facility.

Non-Members utilizing the MENI to connect to the trading platforms, market data systems, test systems, and disaster recovery facilities of the Exchange, MIAX PEARL, and MIAX via a single, Shared connection will only be assessed one Monthly Non-Member Network Connectivity Fee per connection, regardless of the trading platforms, market data systems, test systems, and disaster recovery facilities accessed via such connection.

d) Port Fees

i) FIX Port Fees

MIAX Emerald will assess monthly Financial Information Exchange ("FIX") Port Fees on Members in each month the Member is credentialed to use a FIX Port in the production environment and based upon the number of credentialed FIX Ports.

FIX Port Fees	MIAX Emerald Monthly Port Fees Includes Connectivity to the Primary, Secondary and Disaster Recovery Data Centers
1st FIX Port	Fee waived for the Waiver Period \$550.00
FIX Ports 2 through 5	Fee waived for the Waiver Period \$350.00
Additional FIX Ports over 5	Fee waived for the Waiver Period \$150.00

ii) MEI Port Fees

	Market Maker Assignments (the lesser of the applicable measurements below)	
Monthly MIAX Emerald MEI Fees	Per Class	% of National Average Daily Volume
Fee waived for the Waiver Period* \$5,000.00	Up to 5 Classes	Up to 10% of Classes by volume
Fee waived for the Waiver Period* \$10,000.00	Up to 10 Classes	Up to 20% of Classes by volume
Fee waived for the Waiver Period* \$14,000.00	Up to 40 Classes	Up to 35% of Classes by volume
Fee waived for the Waiver Period* \$17,500.00	Up to 100 Classes	Up to 50% of Classes by volume
Fee waived for the Waiver Period* \$20,500.00 ■	Over 100 Classes	Over 50% of Classes by volume up to all Classes listed on MIAX Emerald

Fees for Additional Limited Service MEI Ports are not subject to the Waiver Period.

For these Monthly MIAX Emerald MEI Port tier levels, if the Market Maker's total monthly executed volume during the relevant month is less than 0.025% of the total monthly executed volume reported by OCC in the customer account type for MIAX Emerald-listed option classes for that month, then the fee will be \$14,500.00 instead of the fee otherwise applicable to such level.

MIAX Emerald will assess monthly MIAX Emerald Express Interface ("MEI") Port Fees on Market Makers in each month the Member has been credentialed to use the MEI Port in the production environment and has been assigned to quote in at least one class. The amount of the monthly MEI Port Fee will be based upon the number of classes in which the Market Maker was assigned to quote on any given day within the calendar month, and upon the class volume percentages set forth in the above table. The class volume percentage is based on the total national average daily volume in classes listed on MIAX Emerald in the prior calendar quarter. Newly listed option classes are excluded from the calculation of the monthly MEI Port Fee until the calendar quarter following their listing, at which time the newly listed option classes will be included in both the per class count and the percentage of total national average daily volume. The Exchange will assess MIAX Emerald Market Makers the monthly MEI Port Fee based on the greatest number of classes listed on MIAX Emerald that the MIAX Emerald Market Maker was assigned to quote in on any given day within a calendar month and the applicable fee rate that is the lesser of either the per class basis or percentage of total national average daily volume measurement.

MEI Port users will be allocated two (2) Full Service MEI Ports and two (2) Limited Service MEI Ports per Matching Engine to which they connect. MEI Port Fees include MEI Ports at the Primary, Secondary and Disaster Recovery data centers. MIAX Emerald Market Makers may request additional Limited Service MEI Ports ("Additional Limited Service MEI Ports") for which MIAX Emerald will assess MIAX Emerald Market Makers \$50 \$100 per month per Additional Limited Service MEI Ports per Matching Engine. Market Makers are limited to six Additional Limited Service MEI Ports per Matching Engine, for a total of eight per Matching Engine.

A MIAX Emerald Market Maker may request and be allocated two (2) Purge Ports per Matching Engine to which it connects. For each month in which the MIAX Emerald Market Maker has been credentialed to use Purge Ports in the production environment and has been assigned to quote in at least one class, the Exchange will assess the MIAX Emerald Market Maker a flat fee of \$1,500 per month which will be waived for the Waiver Period, regardless of the number of Purge Ports allocated to the MIAX Emerald Market Maker.

iii) Clearing Trade Drop Port Fees

Description	Monthly Fee
Real-Time CTD Information	Fee waived for the Waiver Period \$450.00

Clearing Trade Drop ("CTD") provides Exchange Members with real-time clearing trade updates. The updates include the Member's clearing trade messages on a low latency, real-time basis. The trade messages are routed to a Member's connection containing certain information. The information includes, among other things, the following: (i) trade date and time; (ii) symbol information; (iii) trade price/size information; (iv) Member type (for example, and without limitation, Market Maker, Electronic Exchange Member, Broker-Dealer); (v) Exchange Member Participant Identifier ("MPID") for each side of the transaction, including Clearing Member MPID; and (vi) strategy specific information for complex transactions. CTD Port Fees will be assessed in any month the Member is credentialed to use the CTD Port in the production environment.

iv) FIX Drop Copy Port Fees

Description	MIAX Emerald Monthly Port Fees Includes connectivity to the Primary, Secondary and Disaster Recovery Data Centers
FIX Drop Copy Port	Fee waived for the Waiver Period \$500.00

The FIX Drop Copy ("FXD") Port is a messaging interface that will provide a copy of real-time trade execution, trade correction and trade cancellation information to FXD Port users who subscribe to the service. FXD Port users are those users who are designated by an EEM to receive the information and the information is restricted for use by the EEM. FXD Port Fees will be assessed in any month the Member is credentialed to use the FXD Port in the production environment.

6) Market Data Fees

a) MIAX Emerald Top of Market ("ToM") and Complex Top of Market ("cToM")

Distributor Type	ToM Monthly Fee	cToM Monthly Fee
Internal Distributor	<mark>Fee waived for the Waiver Period</mark> <mark>\$1,250.00</mark>	Fee waived for the Waiver Period
External Distributor	<mark>Fee waived for the Waiver Period</mark> \$1,750.00	Fee waived for the Waiver Period

MIAX Emerald will assess Market Data Fees (as applicable) to ToM and cToM on Internal and External Distributors in each month the Distributor is credentialed to use ToM or cToM in the production environment. A Distributor of MIAX Emerald data is any entity that receives a feed or file of data either directly from MIAX Emerald or indirectly through another entity and then distributes it either internally (within that entity) or externally (outside that entity). All Distributors are required to execute a MIAX Emerald Distributor Agreement. Market Data Fees for ToM and/or cToM, as applicable, will be reduced for new Distributors for the first month during which they subscribe to ToM and/or cToM, as applicable, based on the number of trading days that have been held during the month prior to the date on which they have been credentialed to use ToM and/or cToM, as applicable, in the production environment. Such new Distributors will be assessed a pro-rata percentage of the fees described above, which is the percentage of the number of trading days remaining in the affected calendar month as of the date on which they have been credentialed to use ToM and/or cToM in the production environment, divided by the total number of trading days in the affected calendar month.

b) Administrative Information Subscriber ("AIS")

Distributor Type	Monthly Fee
Internal Distributor	Fee waived for the Waiver Period \$1,250.00
External Distributor	Fee waived for the Waiver Period \$1,750.00

MIAX Emerald will assess Market Data Fees applicable to AIS on Internal and External Distributors in each month the Distributor is credentialed to use AIS in the production environment. A Distributor of MIAX Emerald data is any entity that receives a feed or file of data either directly from MIAX Emerald or indirectly through another entity and then distributes it either internally (within that entity) or externally (outside that entity). All Distributors are required to execute a MIAX Emerald Distributor Agreement. Market Data Fees for AIS will be reduced for new Distributors for the first month during which they have been credentialed to use AIS in the production environment, based on the number of trading days that have been held during the month prior to the date on which they have been credentialed to use AIS in the production environment. Such new Distributors will be assessed a prorata percentage of the fees described above, which is the percentage of the number of trading days remaining in the affected calendar month as of the date on which they have been credentialed to use AIS in the production environment, divided by the total number of trading days in the affected calendar month. AIS includes administrative information for simple and complex orders.

c) MIAX Order Feed ("MOR")

Distributor Type	Monthly Fee
Internal Distributor	Fee waived for the Waiver Period \$3,000.00
External Distributor	Fee waived for the Waiver Period \$3,500.00

MIAX Emerald will assess Market Data Fees applicable to MOR on Internal and External Distributors in each month the Distributor is credentialed to use MOR in the production environment. A Distributor of MIAX Emerald data is any entity that receives a feed or file of data either directly from MIAX Emerald or indirectly through another entity and then distributes it either internally (within that entity) or externally (outside that entity). All Distributors are required to execute a MIAX Emerald Distributor Agreement. Market Data Fees for MOR will be reduced for new Distributors for the first month during which they have been credentialed to use MOR in the production environment, based on the number of trading days that have been held during the month prior to the date on which they have been credentialed to use MOR in the production environment. Such new Distributors will be assessed a pro-rata percentage of the fees described above, which is the percentage of the number of trading days remaining in the affected calendar month as of the date on which they have been credentialed to use MOR in the production environment, divided by the total number of trading days in the affected calendar month. MOR subscribers will receive information for simple and complex orders.