

|                                       |  |   |                         |
|---------------------------------------|--|---|-------------------------|
| Form 1<br>Page 1<br>Execution<br>Page | <b>UNITED STATES SECURITIES AND EXCHANGE COMMISSION</b><br><b>WASHINGTON, D.C. 20549</b><br><b>APPLICATION FOR, AND AMENDMENTS TO APPLICATION FOR,</b><br><b>REGISTRATION AS A NATIONAL SECURITIES EXCHANGE OR EXEMPTION</b><br><b>FROM REGISTRATION PURSUANT TO SECTION 5 OF THE EXCHANGE ACT</b> | Date filed<br>(MM/DD/YY):<br><br>01/09/2020 | OFFICIAL<br>USE<br>ONLY |
|---------------------------------------|--|---|-------------------------|

Warning: Failure to keep this form current and to file accurate supplementary information on a timely basis, or the failure to keep accurate books and records or otherwise comply with the provisions of law applying to the conduct of the applicant would violate the federal securities laws and may result in disciplinary, administrative or criminal action

INTENTIONAL MISSTATEMENTS OR OMISSIONS OF FACTS MAY CONSTITUTE CRIMINAL VIOLATIONS

APPLICATION  AMENDMENT

1. State the name of the applicant: MIAX Emerald, LLC

2. Provide the applicant's primary street address (Do not use a P.O. Box): 7 Roszel Road, Suite 1A, Princeton, NJ 08540

3. Provide the applicant's mailing address (if different):

4. Provide the applicant's business telephone and facsimile number:  
Telephone: 609-897-7300; Facsimile: 609-987-2210

5. Provide the name, title and telephone number of a contact employee:  
Barbara J. Comly, EVP, General Counsel & Corporate Secretary  
609-897-7315

6. Provide the name and address of counsel for the applicant:  
Barbara J. Comly, EVP, General Counsel & Corporate Secretary  
MIAX Emerald, LLC  
7 Roszel Road, Suite 1A  
Princeton, NJ 08540

7. Provide the date applicant's fiscal year ends: December 31

8. Indicate legal status of applicant:  Corporation  Sole Proprietorship  Partnership  
 Limited Liability Company  Other (specify):

If other than a sole proprietor, indicate the date and place where applicant obtained its legal status (e.g. state where incorporated, place where partnership agreement was filed or where applicant entity was formed):

(a) Date (MM/DD/YY): 01/30/18 (b) State/Country of formation: Delaware

(c) Statute under which applicant was organized: Delaware Limited Liability Company Act, 6 Del. C. 18-1d et seq.

SEC Mail Processing  
JAN 10 2020  
Washington, DC  
Securities and Exchange Commission  
Trading and Markets  
JAN 10 2020  
RECEIVED

**EXECUTION:** The applicant consents that service of any civil action brought by, or notice of any proceeding before, the Securities and Exchange Commission in connection with the applicant's activities may be given by registered or certified mail or confirmed telegram to the applicant's contact employee at the main address, or mailing address if different, given in Items 2 and 3. The undersigned, being first duly sworn, deposes and says that he/she has executed this form on behalf of, and with the authority of, said applicant. The undersigned and applicant represent that the information and statements contained herein, including exhibits, schedules, or other documents attached hereto, and other information filed herewith, all of which are made a part hereof, are current, true, and complete.


MIAX EMERALD, LLC

Date: January 9, 2020

By: Barbara J. Comly  
Barbara J. Comly  
EVP, General Counsel & Corporate Secretary

Subscribed and sworn before me this 9<sup>th</sup> day of January, 2020

Jane Post  
Jane Post  
Notary Public of the State of New Jersey  
My Commission Expires October 27, 2024

  
20004807

**This page must always be completed in full with original, manual signature and notarization.**  
**Affix notary stamp or seal where applicable.**



Barbara J. Comly  
General Counsel

7 Roszel Road, Suite 1A  
Princeton, New Jersey 08540  
T 609 897 7300  
F 609 987 2210  
bcomly@miami-holdings.com

Securities and Exchange Commission  
Trading and Markets

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January 9, 2020

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JAN 10 2020

Washington, DC

**VIA FEDERAL EXPRESS**

Jeannette Marshall  
Division of Trading and Markets  
Office of Market Supervision  
Securities and Exchange Commission  
100 F. Street, N.E.  
Washington, D.C. 20549

**Re: MIAX Emerald, LLC (“Emerald”)  
Amendment No. 2020-1 to Form 1 Application**

Dear Ms. Marshall:

Enclosed for official filing pursuant to Rule 6a-2(a) are an original and two copies of Amendment No. 2020-1 to the Form 1 Application of Emerald, which includes the following changes:

Exhibit C – Updated Officers of Miami International Holdings, Inc., Miami International Futures Exchange, LLC, and MIAX Global, LLC

Please do not hesitate to contact me if you have any questions in connection with this matter.

Very truly yours,

Barbara J. Comly  
EVP, General Counsel & Corporate Secretary

Enclosures  
cc: Marlene Olsen

Exhibit C

## EXHIBIT C

### Exhibit Request:

For each subsidiary or affiliate of the applicant, and for any entity with whom the applicant has a contractual or other agreement relating to the operation of an electronic trading system to be used to effect transactions on the exchange (“System”), provide the following information:

1. Name and address of organization.
2. Form of organization (e.g., association, corporation, partnership, etc.).
3. Name of state and statute citation under which organized. Date of incorporation in present form.
4. Brief description of nature and extent of affiliation.
5. Brief description of business or functions. Description should include responsibilities with respect to operation of the System and/or execution, reporting, clearance, or settlement of transactions in connection with operation of the System.
6. A copy of the constitution.
7. A copy of the articles of incorporation or association including all amendments.
8. A copy of existing by-laws or corresponding rules or instruments.
9. The name and title of the present officers, governors, members of all standing committees, or persons performing similar functions.
10. An indication of whether such business or organization ceased to be associated with the applicant during the previous year, and a brief statement of the reasons for termination of the association.

### Response:

#### A. MIAMI INTERNATIONAL HOLDINGS, INC.

1. *Name:* Miami International Holdings, Inc.  
*Address:* 7 Roszel Road, Suite 1A, Princeton, New Jersey 08540
2. *Form of organization:* Corporation.
3. *Name of state, statute under which organized and date of incorporation:* Delaware, Delaware General Corporation Law (8 Del. C. § 101, et seq), on November 14, 2007.
4. *Brief description of nature and extent of affiliation:* MIAX Emerald, LLC is a wholly-owned subsidiary of Miami International Holdings, Inc. (“MIH”).

5. *Brief description of business or functions:* Miami International Holdings, Inc. is a holding company which holds 100% of the equity of Miami International Securities Exchange, LLC, MIAX PEARL, LLC, MIAX Emerald, LLC, Miami International Technologies, LLC, MIAX Global, LLC, Miami International Futures Exchange, LLC, MIAX Products, LLC, and M 44 Holdings, LLC and approximately 65% of the outstanding shares of The Bermuda Stock Exchange. Miami International Holdings, Inc. is the entity through which the ultimate owners of the applicant indirectly hold their ownership interest in the applicant and its affiliates.
6. *A copy of the constitution:* Not applicable.
7. *A copy of the articles of incorporation or association including all amendments:* **The Amended and Restated Certificate of Incorporation dated October 16, 2015 is attached.**
8. *A copy of existing by-laws or corresponding rules or instruments:* **The Amended and Restated By-Laws dated June 27, 2015 are attached.**
9. *The name and title of the present officers, governors, members of all standing committees, or persons performing similar functions:*

**Officers of Miami International Holdings, Inc.**

The following persons are the officers of Miami International Holdings, Inc.:

| <b>Name</b>             | <b>Title</b>   |
|-------------------------|--|
| Thomas P. Gallagher     | Chairman and Chief Executive Officer   |
| Douglas M. Schafer, Jr. | Chief Information Officer and Executive Vice President   |
| Barbara Comly           | Executive Vice President, General Counsel and Corporate Secretary                                  |
| Paul Warner             | Executive Vice President and Chief Financial Officer   |
| Edward Deitzel          | Executive Vice President and Chief Regulatory Officer  |
| Mark Wetjen             | Executive Vice President, Futures and Innovative Products and Executive Regulatory Liaison Officer |
| Randy Foster            | Senior Vice President – Business Systems Development   |
| Harish Jayabalan        | Senior Vice President – Chief Risk Officer & Chief Information Security Officer                    |
| Matthew Rotella         | Senior Vice President – Chief Technology Officer   |
| Joseph W. Ferraro III   | Senior Vice President – Deputy General Counsel   |
| Deborah Carroll         | Senior Vice President – Associate General Counsel  |
| Amy Neiley              | Senior Vice President – Trading Operations and Listings  |
| Rodney Hester           | Vice President – Systems Infrastructure  |
| Roli Bhotika            | Vice President – Head of Business Development  |
| Shawn Hughes            | Vice President – Project Management  |

| <b>Name</b>        | <b>Title</b>  |
|--------------------|---|
| James O'Neil       | Vice President and Director of Physical Security and Safety |
| Vinay Rao          | Vice President – Trading Systems Development                |
| Siddharth Sahoo    | Vice President – Trading Systems Development                |
| Christopher Solgan | Vice President – Senior Counsel                             |
| Tia Toms           | Vice President – Administration                             |
| Gregory Ziegler    | Vice President – Senior Counsel                             |
| Kelly Fitzgerald   | Assistant Vice President – Controller                       |
| Dimitriy Kotov     | Assistant Vice President – Associate Counsel                |

The officers of Miami International Holdings, Inc. serve until their successors are appointed in accordance with the By-Laws of Miami International Holdings, Inc. Officers of Miami International Holdings, Inc. serve at the direction of the Board of Directors.

**Directors of Miami International Holdings, Inc.**

The following persons are the directors of Miami International Holdings, Inc.:

| <b>Name</b>                    |
|--------------------------------|
| Thomas P. Gallagher (Chairman) |
| Talal Jassim Al-Bahar          |
| Abdulwahab Ahmad Al-Nakib      |
| Sayer B. Al-Sayer              |
| Michael P. Ameen               |
| Albert M. Barro, Jr.           |
| John Beckelman                 |
| Barry J. Belmont               |
| Ricardo Blach                  |
| Christopher Brady              |
| Khaled Magdy El-Marsafy        |
| William W. Hopkins             |
| Thomas J. Kelly, Jr.           |
| Paul Kotos                     |
| Jack G. Mondel                 |
| William J. O'Brien III         |
| Robert D. Prunetti             |
| Mark F. Raymond                |
| Douglas M. Schafer, Jr.        |
| Paul V. Stahlin                |
| J. Gray Teekell                |
| Christopher L. Whittington     |

|                      |
|----------------------|
| <b>Name</b>          |
| Jassem Hassan Zainal |

Directors of Miami International Holdings, Inc. serve one year terms.

**Audit Committee of Miami International Holdings, Inc.**

The following persons are members of the Audit Committee of Miami International Holdings, Inc.:

|                            |
|----------------------------|
| <b>Name</b>                |
| Paul V. Stahlin (Chairman) |
| Michael P. Ameen           |
| Khaled Magdy El-Marsafy    |

**Compensation Committee of Miami International Holdings, Inc.**

The following persons are members of the Compensation Committee of Miami International Holdings, Inc.:

|                                  |
|----------------------------------|
| <b>Name</b>                      |
| Talal Jassim Al-Bahar (Chairman) |
| Christopher D. Brady             |
| Thomas J. Kelly                  |
| Mark F. Raymond                  |
| J. Gray Teekell                  |

10. *An indication of whether such business or organization ceased to be associated with the applicant during the previous year, and a brief statement of the reasons for termination of the association:* Not applicable.

**B. MIAMI INTERNATIONAL SECURITIES EXCHANGE, LLC**

1. *Name:* Miami International Securities Exchange, LLC  
*Address:* 7 Roszel Road, Suite 1A, Princeton, New Jersey 08540
2. *Form of organization:* Limited Liability Company.
3. *Name of state, statute under which organized and date of incorporation:* Delaware, Delaware General Corporation Law (8 Del. C. § 101, et seq), on September 10, 2007.
4. *Brief description of nature and extent of affiliation:* Miami International Securities Exchange, LLC is wholly-owned by Miami International Holdings, Inc., which is the applicant's 100% owner.

5. *Brief description of business or functions:* Miami International Securities Exchange, LLC (“MIAX”) is registered as a National Securities Exchange under Section 6 of the Securities Exchange Act of 1934, as amended. MIAX operates a fully electronic options trading platform.
6. *A copy of the constitution:* Not applicable.
7. *A copy of the articles of incorporation or association including all amendments:* **The Amended and Restated Certificate of Formation dated June 17, 2011 is attached.**
8. *A copy of existing by-laws or corresponding rules or instruments:* **The Second Amended and Restated Limited Liability Company Agreement dated December 1, 2012, and Amended and Restated By-Laws dated May 20, 2016 are attached.**
9. *The name and title of the present officers, governors, members of all standing committees, or persons performing similar functions:*

**Officers of Miami International Securities Exchange, LLC**

The following persons are the officers of Miami International Securities Exchange, LLC:

| <b>Name</b>             | <b>Title</b>  |
|-------------------------|---|
| Thomas P. Gallagher     | Chairman and Chief Executive Officer  |
| Douglas M. Schafer, Jr. | Chief Information Officer and Executive Vice President                              |
| Barbara Comly           | Executive Vice President, General Counsel and Corporate Secretary                   |
| Paul Warner             | Executive Vice President and Chief Financial Officer                                |
| Edward Deitzel          | Executive Vice President, Chief Regulatory Officer and Chief Compliance Officer     |
| Shelly Brown            | Executive Vice President – Strategic Planning and Business Development              |
| John Smollen            | Executive Vice President – Head of Exchange Traded Products and Strategic Relations |
| Randy Foster            | Senior Vice President – Business Systems Development                                |
| Harish Jayabalan        | Senior Vice President – Chief Risk Officer & Chief Information Security Officer     |
| Matthew Rotella         | Senior Vice President – Chief Technology Officer                                    |
| Joseph W. Ferraro III   | Senior Vice President – Deputy General Counsel                                      |
| Deborah Carroll         | Senior Vice President, Associate General Counsel and Assistant Corporate Secretary  |
| Joseph S. Bracco        | Senior Vice President – Head of Sales   |
| Amy Neiley              | Senior Vice President – Trading Operations and Listings                             |
| Roli Bhotika            | Vice President – Head of Business Development                                       |
| Rodney Hester           | Vice President – Systems Infrastructure   |

| <b>Name</b>        | <b>Title</b>  |
|--------------------|---|
| Shawn Hughes       | Vice President – Project Management                         |
| Lawrence O’Leary   | Vice President – Market Surveillance                        |
| Laurence Gardner   | Vice President – Regulatory Operations                      |
| James O’Neil       | Vice President and Director of Physical Security and Safety |
| Vinay Rao          | Vice President – Trading Systems Development                |
| Siddharth Sahoo    | Vice President – Trading Systems Development                |
| Christopher Solgan | Vice President – Senior Counsel                             |
| Tia Toms           | Vice President – Administration                             |
| Gregory Ziegler    | Vice President – Senior Counsel                             |
| Kelly Fitzgerald   | Assistant Vice President – Controller                       |
| Dimitriy Kotov     | Assistant Vice President – Associate Counsel                |

The officers of Miami International Securities Exchange, LLC serve until their successors are appointed in accordance with the By-Laws of Miami International Securities Exchange, LLC. Officers of Miami International Securities Exchange, LLC will serve at the direction of the Board of Directors.

**Directors of Miami International Securities Exchange, LLC**

The following persons are the directors and Board observers of Miami International Securities Exchange, LLC:

| <b>Directors</b>      |
|-----------------------|
| Thomas P. Gallagher   |
| Talal Jassim Al-Bahar |
| Michael P. Ameen      |
| Lindsay L. Burbage    |
| Robert Castrignano    |
| Marianne Deane        |
| John DiBacco, Jr.     |
| Kurt M. Eckert        |
| Leslie Florio         |
| Lawrence E. Jaffe     |
| Paul Jiganti          |
| John A. Kinahan       |
| John E. McCormac      |
| Miguel Moratiel       |
| William J. O’Brien IV |
| Robert D. Prunetti    |
| Joseph Sellitto       |

|                     |
|---------------------|
| Cynthia Schwarzkopf |
| J. Gray Teekell     |
| <b>Observers</b>    |
| Lawrence Tanzman    |

**Committees of Miami International Securities Exchange, LLC**

The standing committees of the Board and the persons appointed to sit on the standing committees are as follows:

|                            |
|----------------------------|
| <b>Audit Committee</b>     |
| Robert D. Prunetti (Chair) |
| Michael P. Ameen           |
| John E. McCormac           |

|                               |
|-------------------------------|
| <b>Compensation Committee</b> |
| J. Gray Teekell (Chair)       |
| Robert D. Prunetti            |
| Cynthia Schwarzkopf           |

|                                       |
|---------------------------------------|
| <b>Regulatory Oversight Committee</b> |
| Lindsay L. Burbage (Chair)            |
| Leslie Florio                         |
| Lawrence E. Jaffe                     |

|                          |
|--------------------------|
| <b>Appeals Committee</b> |
| Lawrence Jaffe (Chair)   |
| Robert Castrignano       |
| Kurt M. Eckert           |

|                             |
|-----------------------------|
| <b>Technology Committee</b> |
| Leslie Florio (Chair)       |
| Robert Castrignano          |
| Marianne Deane              |
| Kurt M. Eckert              |
| John A. Kinahan             |
| John E. McCormac            |
| William J. O'Brien IV       |
| J. Gray Teekell             |

10. *An indication of whether such business or organization ceased to be associated with the applicant during the previous year, and a brief statement of the reasons for termination of the association:* Not applicable.

**C. MIAX PEARL, LLC**

1. *Name:* MIAX PEARL, LLC  
*Address:* 7 Roszel Road, Suite 1A, Princeton, New Jersey 08540
2. *Form of organization:* Limited Liability Company.
3. *Name of state, statute under which organized and date of incorporation:* Delaware, Delaware General Corporation Law (8 Del. C. § 101, et seq), on February 11, 2016.
4. *Brief description of nature and extent of affiliation:* MIAX PEARL, LLC ("MIAX PEARL") is wholly-owned by Miami International Holdings, Inc., which is the applicant's 100% owner.
5. *Brief description of business or functions:* MIAX PEARL is registered as a National Securities Exchange under Section 6 of the Securities Exchange Act of 1934, as amended. MIAX PEARL operates a fully electronic options trading platform.
6. *A copy of the constitution:* Not applicable.
7. *A copy of the articles of incorporation or association including all amendments:* **The Certificate of Formation dated February 11, 2016 is attached.**
8. *A copy of existing by-laws or corresponding rules or instruments:* **The Amended and Restated Limited Liability Company Agreement dated December 5, 2016 and By-Laws dated December 5, 2016 are attached.**
9. *The name and title of the present officers, governors, members of all standing committees, or persons performing similar functions:*

**Officers of MIAX PEARL, LLC**

The following persons are the officers of MIAX PEARL, LLC:

| <b>Name</b>             | <b>Title</b>  |
|-------------------------|---|
| Thomas P. Gallagher     | Chairman and Chief Executive Officer  |
| Douglas M. Schafer, Jr. | Chief Information Officer and Executive Vice President                          |
| Barbara Comly           | Executive Vice President, General Counsel and Corporate Secretary               |
| Paul Warner             | Executive Vice President and Chief Financial Officer                            |
| Edward Deitzel          | Executive Vice President, Chief Regulatory Officer and Chief Compliance Officer |
| Shelly Brown            | Executive Vice President – Strategic Planning and Business Development          |

| <b>Name</b>           | <b>Title</b>  |
|-----------------------|---|
| John Smollen          | Executive Vice President – Head of Exchange Traded Products and Strategic Relations |
| Randy Foster          | Senior Vice President – Business Systems Development                                |
| Harish Jayabalan      | Senior Vice President – Chief Risk Officer & Chief Information Security Officer     |
| Matthew Rotella       | Senior Vice President – Chief Technology Officer                                    |
| Joseph W. Ferraro III | Senior Vice President – Deputy General Counsel                                      |
| Deborah Carroll       | Senior Vice President, Associate General Counsel and Assistant Corporate Secretary  |
| Joseph S. Bracco      | Senior Vice President – Head of Sales   |
| Amy Neiley            | Senior Vice President – Trading Operations and Listings                             |
| Roli Bhotika          | Vice President – Head of Business Development                                       |
| Rodney Hester         | Vice President – Systems Infrastructure   |
| Shawn Hughes          | Vice President – Project Management   |
| Lawrence O’Leary      | Vice President – Market Surveillance  |
| Laurence Gardner      | Vice President – Regulatory Operations  |
| James O’Neil          | Vice President and Director of Physical Security and Safety                         |
| Vinay Rao             | Vice President – Trading Systems Development  |
| Siddharth Sahoo       | Vice President – Trading Systems Development  |
| Christopher Solgan    | Vice President – Senior Counsel   |
| Tia Toms              | Vice President – Administration   |
| Gregory Ziegler       | Vice President – Senior Counsel   |
| Kelly Fitzgerald      | Assistant Vice President – Controller   |
| Dimitriy Kotov        | Assistant Vice President – Associate Counsel  |

**Directors of MIAX PEARL, LLC**

The following persons are the directors of MIAX PEARL, LLC:

| <b>Name</b>         |
|---------------------|
| Thomas P. Gallagher |
| William T. Bergman  |
| Lindsay L. Burbage  |
| Kurt M. Eckert      |
| Leslie Florio       |
| Michael Harrington  |
| Richard Herr        |
| Lawrence E. Jaffe   |
| Sebastian Koeling   |

|                     |
|---------------------|
| Benjamin Londergan  |
| Mark I. Massad      |
| John E. McCormac    |
| Robert D. Prunetti  |
| Cynthia Schwarzkopf |

**Committees of MIAX PEARL, LLC**

The standing committees of the Board and the persons appointed to sit on the standing committees are as follows:

|                               |
|-------------------------------|
| <b>Compensation Committee</b> |
| Cynthia Schwarzkopf (Chair)   |
| William T. Bergman            |
| Robert D. Prunetti            |

|                            |
|----------------------------|
| <b>Audit Committee</b>     |
| Robert D. Prunetti (Chair) |
| John E. McCormac           |
| Cynthia Schwarzkopf        |

|                                       |
|---------------------------------------|
| <b>Regulatory Oversight Committee</b> |
| Lindsay L. Burbage (Chair)            |
| Leslie Florio                         |
| Lawrence E. Jaffe                     |

|                           |
|---------------------------|
| <b>Appeals Committee</b>  |
| Lawrence E. Jaffe (Chair) |
| Kurt M. Eckert            |
| Richard Herr              |

|                             |
|-----------------------------|
| <b>Technology Committee</b> |
| Leslie Florio (Chair)       |
| John E. McCormac            |
| Kurt Eckert                 |

10. *An indication of whether such business or organization ceased to be associated with the applicant during the previous year, and a brief statement of the reasons for termination of the association:* Not applicable.

**D. MIAMI INTERNATIONAL TECHNOLOGIES, LLC**

1. *Name:* Miami International Technologies, LLC  
*Address:* 7 Roszel Road, Suite 1A, Princeton, New Jersey 08540
2. *Form of organization:* Limited Liability Company.
3. *Name of state, statute under which organized and date of incorporation:* Delaware, Delaware General Corporation Law (8 Del. C. § 101, et seq), on May 12, 2010.
4. *Brief description of nature and extent of affiliation:* Miami International Technologies, LLC ("MIAX Technologies") is wholly-owned by Miami International Holdings, Inc., which is the applicant's 100% owner.
5. *Brief description of business or functions:* MIAX Technologies engages in the sale and licensing of trading and information technology to unrelated third parties.
6. *A copy of the constitution:* Not applicable.
7. *A copy of the articles of incorporation or association including all amendments:* **The Amended and Restated Certificate of Formation dated June 29, 2011 is attached.**
8. *A copy of existing by-laws or corresponding rules or instruments:* **The First Amended and Restated Limited Liability Company Agreement dated May 20, 2011 is attached.**
9. *The name and title of the present officers, governors, members of all standing committees, or persons performing similar functions:*

**Officers of Miami International Technologies, LLC**

The following persons are the officers of Miami International Technologies, LLC:

| <b>Name</b>             | <b>Title</b>  |
|-------------------------|---|
| Thomas P. Gallagher     | Chairman and Chief Executive Officer                              |
| Douglas M. Schafer, Jr. | President and Chief Information Officer                           |
| Barbara Comly           | Executive Vice President, General Counsel and Corporate Secretary |
| Paul Warner             | Executive Vice President and Chief Financial Officer              |
| Matthew Rotella         | Senior Vice President – Chief Technology Officer                  |
| Randy Foster            | Senior Vice President – Business Systems Development              |
| Deborah Carroll         | Senior Vice President – Associate General Counsel                 |
| Rodney Hester           | Vice President – Systems Infrastructure                           |
| Harish Jayabalan        | Vice President – Technical Support and Product Specialist         |
| Tia Toms                | Vice President – Administration                                   |
| James O'Neil            | Vice President and Director of Physical Security and Safety       |
| Kelly Fitzgerald        | Assistant Vice President – Controller                             |

**Directors of Miami International Technologies, LLC**

The following persons are the directors of Miami International Technologies, LLC:

| Name                |
|---------------------|
| Thomas P. Gallagher |

10. *An indication of whether such business or organization ceased to be associated with the applicant during the previous year, and a brief statement of the reasons for termination of the association:* Not applicable.

**E. MIAX GLOBAL, LLC**

1. *Name:* MIAX Global, LLC  
*Address:* 7 Roszel Road, Suite 1A, Princeton, New Jersey 08540
2. *Form of organization:* Limited Liability Company.
3. *Name of state, statute under which organized and date of incorporation:* Delaware, Delaware General Corporation Law (8 Del. C. § 101, et seq), on June 30, 2015.
4. *Brief description of nature and extent of affiliation:* MIAX Global, LLC ("MIAX Global") is wholly-owned by Miami International Holdings, Inc., which is the applicant's 100% owner.
5. *Brief description of business or functions:* MIAX Global focuses on the company's trading, technology and other projects primarily based outside of North America, initially focusing on Europe and Latin America.
6. *A copy of the constitution:* Not applicable.
7. *A copy of the articles of incorporation or association including all amendments:* **The Certificate of Formation dated June 30, 2015 is attached.**
8. *A copy of existing by-laws or corresponding rules or instruments:* **The Limited Liability Company Agreement dated June 30, 2015 is attached.**

9. *The name and title of the present officers, governors, members of all standing committees, or persons performing similar functions:*

**Officers of MIAX Global, LLC**

The following persons are the officers of MIAX Global, LLC:

| <b>Name</b>              | <b>Title</b>  |
|--------------------------|---|
| Thomas P. Gallagher      | Chairman and Chief Executive Officer                              |
| Barbara Comly            | Executive Vice President, General Counsel and Corporate Secretary |
| Douglas M. Schafer, Jr.  | Chief Information Officer and Executive Vice President            |
| Paul Warner              | Executive Vice President and Chief Financial Officer              |
| Gregory A. Wojciechowski | President   |

**Directors of MIAX Global, LLC**

The following persons are the directors of MIAX Global, LLC:

| <b>Name</b>         |
|---------------------|
| Thomas P. Gallagher |

10. *An indication of whether such business or organization ceased to be associated with the applicant during the previous year, and a brief statement of the reasons for termination of the association:* Not applicable.

**F. MIAMI INTERNATIONAL FUTURES EXCHANGE, LLC**

1. *Name:* Miami International Futures Exchange, LLC  
*Address:* 7 Roszel Road, Suite 1A, Princeton, New Jersey 08540
2. *Form of organization:* Limited Liability Company.
3. *Name of state, statute under which organized and date of incorporation:* Delaware, Delaware General Corporation Law (8 Del. C. § 101, et seq), on November 30, 2007.
4. *Brief description of nature and extent of affiliation:* Miami International Futures Exchange, LLC ("MIAX Futures") is wholly-owned by Miami International Holdings, Inc., which is the applicant's 100% owner.
5. *Brief description of business or functions:* MIAX Futures is not yet active. Miami International Holdings, Inc. may develop MIAX Futures as a futures exchange under the regulation of the CFTC. If MIAX Futures becomes operational, it will perform functions performed by a futures exchange.

6. *A copy of the constitution:* Not applicable.
7. *A copy of the articles of incorporation or association including all amendments:* **The Amended and Restated Certificate of Formation dated June 17, 2011 is attached.**
8. *A copy of existing by-laws or corresponding rules or instruments:* **The First Amended and Restated Limited Liability Company Agreement dated May 20, 2011 is attached.**
9. *The name and title of the present officers, governors, members of all standing committees, or persons performing similar functions:*

**Officers of Miami International Futures Exchange, LLC**

The following persons are the officers of Miami International Futures Exchange, LLC:

| <b>Name</b>             | <b>Title</b>  |
|-------------------------|---|
| Thomas P. Gallagher     | Chairman  |
| Mark Wetjen             | Chief Executive Officer   |
| Douglas M. Schafer, Jr. | Chief Information Officer and Executive Vice President            |
| Barbara Comly           | Executive Vice President, General Counsel and Corporate Secretary |

**Directors of Miami International Futures Exchange, LLC**

The following persons are the directors of Miami International Futures Exchange, LLC:

| <b>Name</b>         |
|---------------------|
| Thomas P. Gallagher |

10. *An indication of whether such business or organization ceased to be associated with the applicant during the previous year, and a brief statement of the reasons for termination of the association:* Not applicable.

**G. MIAX PRODUCTS, LLC**

1. *Name:* MIAX Products, LLC  
*Address:* 7 Roszel Road, Suite 1A, Princeton, New Jersey 08540
2. *Form of organization:* Limited Liability Company.
3. *Name of state, statute under which organized and date of incorporation:* Illinois, Illinois Limited Liability Company Act, 805 ILCS 180/, on January 25, 2019.
4. *Brief description of nature and extent of affiliation:* MIAX Products, LLC ("MIAX Products") is wholly-owned by Miami International Holdings, Inc., which is the applicant's 100% owner.

5. *Brief description of business or functions:* Development of financial products.
6. *A copy of the constitution:* Not applicable.
7. *A copy of the articles of incorporation or association including all amendments:* **The Articles of Organization dated January 25, 2019 are attached.**
8. *A copy of existing by-laws or corresponding rules or instruments:* **The Limited Liability Company Agreement dated January 25, 2019 is attached.**
9. *The name and title of the present officers, governors, members of all standing committees, or persons performing similar functions:*

**Officers of MIAX Products, LLC**

The following persons are the officers of MIAX Products, LLC:

| <b>Name</b>             | <b>Title</b>  |
|-------------------------|---|
| Thomas P. Gallagher     | Chairman and Chief Executive Officer                              |
| Barbara Comly           | Executive Vice President, General Counsel and Corporate Secretary |
| Douglas M. Schafer, Jr. | Chief Information Officer and Executive Vice President            |
| Paul Warner             | Executive Vice President and Chief Financial Officer              |

**Directors of MIAX Products, LLC**

The following persons are the directors of MIAX Products, LLC:

| <b>Name</b>         |
|---------------------|
| Thomas P. Gallagher |

10. *An indication of whether such business or organization ceased to be associated with the applicant during the previous year, and a brief statement of the reasons for termination of the association:* Not applicable.

**H. M 44 HOLDINGS, LLC**

1. *Name:* M 44 Holdings, LLC  
*Address:* 7 Roszel Road, Suite 1A, Princeton, New Jersey 08540
2. *Form of organization:* Limited Liability Company.
3. *Name of state, statute under which organized and date of incorporation:* Delaware, Delaware General Corporation Law (8 Del. C. § 101, et seq), on June 21, 2019.
4. *Brief description of nature and extent of affiliation:* M 44 Holdings, LLC ("M 44") is wholly-owned by Miami International Holdings, Inc., which is the applicant's 100% owner.

5. *Brief description of business or functions:* M 44 is a holding company for certain investments.
6. *A copy of the constitution:* Not applicable.
7. *A copy of the articles of incorporation or association including all amendments:* **The Certificate of Formation dated June 21, 2019 is attached.**
8. *A copy of existing by-laws or corresponding rules or instruments:* **The Limited Liability Company Agreement dated June 26, 2019 is attached.**
9. *The name and title of the present officers, governors, members of all standing committees, or persons performing similar functions:*

**Officers of M 44 Holdings, LLC**

The following persons are the officers of M 44 Holdings, LLC:

| <b>Name</b>            | <b>Title</b>  |
|------------------------|---|
| Thomas P. Gallagher    | Chairman & Chief Executive Officer                              |
| Barbara Comly          | Executive Vice President, General Counsel & Corporate Secretary |
| Douglas M. Shafer, Jr. | Executive Vice President & Chief Information Officer            |
| Paul Warner            | Executive Vice President & Chief Financial Officer              |

**Directors of M 44 Holdings, LLC**

The following persons are the directors of M 44 Holdings, LLC:

| <b>Name</b>         |
|---------------------|
| Thomas P. Gallagher |

10. *An indication of whether such business or organization ceased to be associated with the applicant during the previous year, and a brief statement of the reasons for termination of the association:* Not applicable.

**I. THE BERMUDA STOCK EXCHANGE**

1. *Name:* The Bermuda Stock Exchange  
*Address:* 30 Victoria Street, 3F, Hamilton, Bermuda
2. *Form of organization:* A body corporate incorporated pursuant to The Bermuda Stock Exchange Act 1992.
3. *Name of state, statute under which organized and date of incorporation:* Bermuda, The Bermuda Stock Exchange Company Act 1992, on March 10, 1993.

4. *Brief description of nature and extent of affiliation:* Miami International Holdings, Inc., which is the applicant's 100% owner, is the owner of 64.455% of the outstanding shares of The Bermuda Stock Exchange ("BSX").
5. *Brief description of business or functions:* Stock Exchange located in Hamilton, Bermuda.
6. *A copy of the constitution:* Not applicable.
7. *A copy of the articles of incorporation or association including all amendments:* **The Memorandum of Association dated March 10, 1993, is attached.**
8. *A copy of existing by-laws or corresponding rules or instruments:* **The Bye-Laws dated August 24, 2001, are attached.**
9. *The name and title of the present officers, governors, members of all standing committees, or persons performing similar functions:*

**Officers of The Bermuda Stock Exchange**

The following persons are the officers of The Bermuda Stock Exchange:

| <b>Name</b>              | <b>Title</b>                        |
|--------------------------|-------------------------------------|
| Gregory A. Wojciechowski | President & Chief Executive Officer |
| Gregory A. Wojciechowski | Secretary                           |
| James McKirdy            | Chief Compliance Officer            |

**Directors (Council) of The Bermuda Stock Exchange**

The following persons are the directors of The Bermuda Stock Exchange:

| <b>Directors</b>               |
|--------------------------------|
| David Brown (Chairman)         |
| Jeff Conyers (Deputy Chairman) |
| Thomas Gallagher               |
| Scott Lines                    |
| Michael Neff                   |
| Barclay Simmons                |
| Eric Sites                     |
| Keith Stock                    |
| Alan Swimmer                   |
| John Wight                     |
| Gregory A. Wojciechowski       |

|   |
|---|
| <b>Alternate Directors</b>                          |
| Alan Marshall (for Keith Stock and Barclay Simmons) |
| Malcolm Moseley (for Scott Lines)                   |

**Committees of The Bermuda Stock Exchange**

|                                       |
|---------------------------------------|
| <b>Business Development Committee</b> |
| Eric Sites                            |
| Jeff Conyers                          |
| Michael Neff                          |
| Keith Stock                           |
| Gregory A. Wojciechowski              |

|                               |
|-------------------------------|
| <b>Compensation Committee</b> |
| David Brown                   |
| Jeff Conyers                  |
| Michael Neff                  |

|                                       |
|---------------------------------------|
| <b>Executive Management Committee</b> |
| David Brown                           |
| Jeff Conyers                          |
| Scott Lines                           |
| Michael Neff                          |

|                          |
|--------------------------|
| <b>Listing Committee</b> |
| Dudley Cottingham        |
| Susan Monkman            |
| Sharon Beesley           |
| Miguel DaPonte           |
| Gregory A. Wojciechowski |

10. *An indication of whether such business or organization ceased to be associated with the applicant during the previous year, and a brief statement of the reasons for termination of the association:* Not applicable.

|   |
|---|
| <b>Alternate Directors</b>                          |
| Alan Marshall (for Keith Stock and Barclay Simmons) |
| Malcolm Moseley (for Scott Lines)                   |

**Committees of The Bermuda Stock Exchange**

|                                       |
|---------------------------------------|
| <b>Business Development Committee</b> |
| Eric Sites                            |
| Jeff Conyers                          |
| Michael Neff                          |
| Keith Stock                           |
| Gregory A. Wojciechowski              |

|                               |
|-------------------------------|
| <b>Compensation Committee</b> |
| David Brown                   |
| Jeff Conyers                  |
| Michael Neff                  |

|                                       |
|---------------------------------------|
| <b>Executive Management Committee</b> |
| David Brown                           |
| Jeff Conyers                          |
| Scott Lines                           |
| Michael Neff                          |

|                          |
|--------------------------|
| <b>Listing Committee</b> |
| Dudley Cottingham        |
| Susan Monkman            |
| Sharon Beesley           |
| Miguel DaPonte           |
| Gregory A. Wojciechowski |

10. *An indication of whether such business or organization ceased to be associated with the applicant during the previous year, and a brief statement of the reasons for termination of the association:* Not applicable.