Alternative Trading Systems with Form ATS on File with the SEC as of November 30, 2017

Name(s) Under Which Business Is **Full Name of Alternative Trading** City and State of System (as provided in item 1.A. Conducted (as provided in item 1.B. of Alternative Trading of Form ATS) System (as provided in Form ATS) item 1.F. of Form ATS) New York, NY Aqua Securities L.P. Clarity BidRate Alternative Trading Arbor Research and Trading LLC Barrington, IL System ATS-1 Morgan Stanley & Co. Incorporated New York, NY ATS-4 Morgan Stanley & Co. Incorporated New York, NY ATS-6 Morgan Stanley & Co. Incorporated New York, NY Automated Equity Finance Markets, AQS, EquiLend Clearing Services (ECS) New York, NY Inc. New York, NY AX Trading, LLC **Barclavs ATS** LX New York, NY Barclays DirectEx New York, NY BGC Financial L.P. New York, NY BIDS Trading, L.P. **BIDS Trading** New York, NY BondVision US New York, NY New York, NY **Brokertec Brokertec Americas LLC** CIOI is owned and operated by Citigroup CIOI New York, NY Global Markets, Inc. (CGMI) CitiBLOC is owned and operated by CitiBLOC New York, NY Citigroup Global Markets, Inc. (CGMI) Citi Cross is owned and operated by **CITICROSS** New York, NY Citigroup Global Markets Inc. (CGMI) CODA Markets, Inc. CODA & CODA ATS Glenview, IL Credit Suisse Securities (USA) LLC CrossFinder New York, NY **Creditex Securities Corporation** ICE Credit Trade New York, NY DBOT ATS, LLC Wilmington, DE **DBVX** New York, NY Dealerweb Dealerweb, Inc. Jersey City, NJ Deutsche Bank Securities. Inc. SuperX New York, NY eBX LLC LeveL ATS Boston, MA Elixium NA Elixium NA, DBA of TFS Derivatives, LLC New York, NY EquiLend LLC New York, NY FixCenter, LLC Long Island City, NY FNC AG Stock, LLC Grand Forks, ND **GFI Securities LLC** CreditMatch (LATG) New York, NY **GFI Securities LLC** New York, NY Global OTC Archipelago Trading Services, Inc. Chicago, IL **HTDonline** Hartfield, Titus & Donnelly, LLC Jersey City, NJ ICAP Trading System **ICAP Corporates LLC** Jersey City, NJ **IDX Markets** IDX Markets, LLC New York, NY Instinct X New York, NY

| Instinet Continuous Block Crossing | Instinet, LLC | New York, NY |
|--|---|-------------------|
| System (CBX) | · | |
| Instinet, LLC | BlockCross | New York, NY |
| Instinet, LLC | Instinet Crossing, Instinet BLX | New York, NY |
| Interactive Brokers LLC | IBKR ATS | Greenwich, CT |
| JPB-X | JPB-X is owned and operated by J.P. Morgan Securities LLC ("JPMS") | New York, NY |
| J.P. Morgan ATS ("JPM-X") | J.P. Morgan Securities LLC | New York, NY |
| JSVC LLC | | Honolulu, HI |
| Lending Club Trading Market | Folio Investments, Inc. | McLean, VA |
| Liquidity Finance LP | Flow (by Liquidity Finance) | Stamford, CT |
| Liquidnet Fixed Income ATS | | New York, NY |
| LiquidNet H2O ATS | | New York, NY |
| Liquidnet Negotiation ATS | | New York, NY |
| Luminex Trading & Analytics LLC | Luminex | Boston, MA |
| Magma ATS | Tor Brokerage LLC | North Bergen, NJ |
| Maps ECN | Marco Polo Securities Inc. | New York, NY |
| MarketAxess Corporation Mid-X Trading System | Mid-X System; Mid-X | New York, NY |
| MarketAxess Corporation Single- Name CDS Central Limit Order Book | MarketAxess CDS CLOB | New York, NY |
| MBS Source eTrading, Inc. | MBS Marketplace | Mercer Island, WA |
| MTS BondsPro | | New York, NY |
| MuniAxis ATS | | Wellesley, MA |
| Nasdaq Fixed Income | Execution Access, LLC | New York, NY |
| National Financial Services, LLC | CrossStream, CrossStream BLOX SM (BLOCK Liquidity Opportunity Cross) | Boston, MA |
| NPM Securities, LLC | | New York, NY |
| NXP | Dash Financial Technologies LLC | Chicago, IL |
| OpenBondX LLC | | Miami Beach, FL |
| Orchard ATS | Orchard Platform Markets LLC | New York, NY |
| OTC Link ECN | | New York, NY |
| OTC Link LLC | OTC Link ATS | New York, NY |
| Ouisa Capital LLC | Ouisa Capital | New York, NY |
| POSIT | · | New York, NY |
| PRO Securities, LLC | | New York, NY |
| REALCADRE LLC | | New York, NY |
| Rialto Trading Network LLC | | New York, NY |
| Shares Post Financial Corporation | | San Bruno, CA |
| SIGMA X2 | Goldman, Sachs & Co. (GSCO) is the broker-dealer operator of the GSCO ATS | New York, NY |
| Spot Quote LLC | | Austin, TX |
| Spread Zero LLC | Spread Zero or Spread Zero ATS | New York, NY |
| Structured Credit Connection | , | New York, NY |
| TMC Bonds, LLC | | New York, NY |
| Tradeweb Direct LLC | Tradeweb Direct | New York, NY |

| TruMid ATS | | New York, NY |
|---|---|-------------------|
| Tullet Prebon Financial Services LLC | tpCreditDeal | Jersey City, NJ |
| UBS ATS | UBS Securities LLC | New York, NY |
| Ustocktrade | Ustockstrade Securities, Inc. | Newton, MA |
| Variable Investment Advisors, Inc. ATS (VIA-ATS) | www.AGSTOCKTRADE.COM, www.LIQUIDITYMAKER.COM | Sioux Falls, SD |
| Venovate Marketplace Inc. | | Cardiff, CA |
| Virtu BondPoint | BondPoint, a division of Virtu Americas LLC | New York, NY |
| Virtu Matchlt | Virtu MatchIt a division of Virtu Americas LLC | New York, NY |
| XE | Weeden & Co. LP | Greenwich, CT |
| Zanbato ATS | ZX | Mountain View, CA |

Ceased Operations

Full Name of Alternative Trading System (as provided in item 1.A. of Form ATS)

Name(s) Under Which Business Is Conducted (as provided in item 1.B. of Alternative Trading Form ATS)

City and State of System (as provided in item 1.F. of Form ATS)