

Part I, Item 8 – Identifying Information

Attach as Exhibit 1, the most recently filed or amended Schedule A of Form BD for the Broker-Dealer Operator disclosing information related to direct owners and executive officers.

7/5/22, 3:32 PM Web CRD - BD Historical Filing » Schedule A [User Name: kamure, OrgID: 361]

Primary Business Name: GOLDMAN SACHS & CO. LLC

BD Number: 361

BD - AMENDMENT

02/16/2023~~06/15/2022~~

BD - DIRECT OWNERS/EXECUTIVE OFFICERS

Are there any indirect owners of the *applicant* required to be reported on Schedule B?

☐ Yes ☒ No

**Ownership Codes: NA - less than 5% B- 10% but less than 25% D- 50% but less than 75%
A - 5% but less than 10% C - 25% but less than 50% E - 75% or more**

Full Legal Name	DE/FE/I	Title or Status	Date Acquired	Own. Code	Control Person	PR	CRD # (or S IRS Tax #, E ID)
BROADBERY, MICHAEL MARY	I	CHIEF COMPLIANCE OFFICER	11/2018	NA	N	N	6947899
COLEMAN, DENIS PATRICK III	I	MANAGING DIRECTOR, MANAGER	01/2022	NA	Y	N	2782373
DOYLE, BRIAN RICHARD	I	MANAGING DIRECTOR, CFO	11/2019	NA	N	N	6003685
HEMPSELL, RICHARD IAN	I	MANAGING DIRECTOR, PRINCIPAL OPERATIONS OFFICER	02/2022	NA	N	N	6001487
HORAN, ERICKA T	I	MANAGING DIRECTOR, MANAGER	02/2022	NA	Y	N	4902526
MATTHIAS, THOMAS FAIRBANKS	I	CHIEF COMPLIANCE OFFICER - INVESTMENT ADVISERS ACT	09/2017	NA	N	N	2872690

MCCASKILL, MARK	I	MANAGING DIRECTOR, PRINCIPAL OPERATIONS OFFICER	06/2022	NA	N	N	3272131
CONNELL, JOHN MAURICE	I	CHIEF COMPLIANCE OFFICER	11/2018	NA	N	N	1335506
RUEMMLER, KATHRYN HELEN	I	MANAGING DIRECTOR, CLO	03/2021	NA	N	N	7250761
SOLOMON, DAVID MICHAEL	I	MANAGING DIRECTOR, MANAGER	04/2017	NA	Y	N	1616414
THE GOLDMAN SACHS GROUP, INC.	DE	CLASS A MEMBER	04/2017	E	Y	Y	13-4019460
WALDRON, JOHN EDWARD	I	MANAGING DIRECTOR, CEO, MANAGER	12/2018	NA	Y	N	2569337
WONDRACK, JON JOSEPH	I	MANAGING DIRECTOR, PRINCIPAL OPERATIONS OFFICER	03/2022	NA	N	N	6001847

https://crd.finra.org/FRM/BDBDW/CRD_FRM_BDViewHist.aspx?FR=Print6&FL=6&RefNum=&form=BD&type=AMENDMENT&PrintHistorical=-1&Hist...

4/17/23, 4:41 PM
kamure, OrgID: 361]

Web CRD - BD Historical Filing » Schedule A [User Name:

© 2022 FINRA. All rights reserved. FINRA is a registered trademark of the Financial Industry Regulatory Authority, Inc.
[Privacy](#) | [Legal](#) | [Terms & Conditions](#)

Part III, Item 23 (Market Data)

- a. Identify the sources of market data used by the NMS Stock ATS (e.g., proprietary feed from a national securities exchange, feed from the securities information processor ("SIP")), and how the ATS uses market data from these sources to provide the services that it offers, including how the ATS uses market data to determine the NBBO and protected quotes, and display, price, prioritize, execute, and remove orders and trading interest on the ATS.

Sigma X2 executes orders using an NBBO constructed by Ocean, a third-party technology provider for Sigma X2. Ocean constructs the NBBO using a combination of full network redundant direct market data feeds and market data disseminated by the Securities Information Processors ("SIPs") (the "Constructed NBBO"). Specifically, Sigma X2 uses direct market data feeds for all exchanges other than LTSE (which does not offer a direct market data feed), ~~NYSE National, and NYSE Chicago (for which it uses the SIP)~~. Separately, Sigma X2 uses full network redundant SIP feeds as a secondary source of the NBBO.

The Constructed NBBO is used to price, prioritize, and execute orders. The ATS will arbitrate between the two feeds, direct or SIP, based on the detection of any market data latency. If there is an issue with the Constructed NBBO, transactions in Sigma X2 will be priced solely using the NBBO disseminated by the SIPs. Accordingly, all executions in Sigma X2 are programmed to match at or within the Constructed NBBO or the SIP NBBO.