

Part I; Item 8: 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.

Primary Business Name: GOLDMAN SACHS & CO. LLC

BD Number: 361

BD - AMENDMENT

02/13/2025 07/27/2026

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.S.No., IRS Tax #, Emp. ID)
BOSWORTH, MICHAEL SCOTT	I	MANAGING DIRECTOR, GENERAL COUNSEL, MANAGER	07/2026	NA	Y	N	7631615
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
GREEFF, BRIAN MICHAEL	I	CO-PRINCIPAL OPERATIONS OFFICER	09/2023	NA	N	N	4273392
MATTHIAS, THOMAS FAIRBANKS	I	CHIEF COMPLIANCE OFFICER	09/2017	NA	N	N	2872690
MCCASKILL, MARK	I	MANAGING DIRECTOR, PRINCIPAL OPERATIONS OFFICER	06/2022	NA	N	N	3272131
RUEMMLER, KATHRYN HELEN	I	MANAGING DIRECTOR, CLO, MANAGER	03/2021	NA	Y	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
VENEZIA, CARMINE ANTHONY	I	CHIEF COMPLIANCE OFFICER	02/2025	NA	N	N	4117304
WALDRON, JOHN EDWARD	I	MANAGING DIRECTOR, CEO, MANAGER	12/2018	NA	Y	N	2569337

Part II; Item 1.a: Broker-Dealer Operator Trading Activities on the ATS

a. Are business units of the Broker-Dealer Operator permitted to enter or direct the entry of orders and trading interest (e.g., quotes, conditional orders, or indications of interest) into the NMS Stock ATS?

X Yes No

If yes, name and describe each type of business unit of the Broker-Dealer Operator that enters or directs the entry of orders and trading interest into the ATS (e.g., NMS Stock ATS, type of trading desks, market maker, sales or client desk) and, for each business unit, provide the applicable MPID and list the capacity of its orders and trading interest (e.g., principal, agency, riskless principal).

Yes. GSCO is a leading global investment banking, securities and investment management firm that provides a wide range of financial services to a substantial and diversified client base that includes corporations, financial institutions, governments and individuals. As such, GSCO has a number of business units that engage in various securities trading activities that may enter and/or direct the entry of orders to Sigma X2 using limit, market (for Benchmark Cross orders only) or Peg order types, and using GSCO systems that include GSCO order handling algorithms, smart order routing, or directed orders. Sigma X2 accepts Firm orders, Conditional orders (including Benchmark Cross orders), and Firm Up orders associated with Conditional orders ("Firm and Conditional orders" unless otherwise specified) as further described in Part III, Item 7 (Order Types and Attributes) and Item 9 (Conditional Orders and Indications of Interest). The system does not accept any other form of trading interest. Set forth below are the GSCO business units that are responsible for facilitating GSCO's trading activities on Sigma X2 in an agency or principal capacity:

SALES TRADING & GSET: The Goldman Sachs Electronic Trading ("GSET") business unit and the Sales Trading business unit provide execution services to high-touch (Sales Trading) and low-touch (GSET) clients in single stock, derivatives, program trades, or synthetics/ETFs. Sales Trading personnel may facilitate the routing of orders to internal GS trading desks or to various listed exchanges and/or liquidity pools, which can include order routing to Sigma X2 for execution. GSET provides clients with access to algorithmic strategies and systems the clients can use to route orders to various listed exchanges and/or liquidity pools, which can include order routing to Sigma X2 for execution. These business units can send orders to Sigma X2 in an agency capacity under the MPIDs GSCO, GSCS and GSLT.

EQUITY ONE DELTA - AMERICAS: This GSCO business unit engages in market making and market making-related activities in equities products (including single stocks and ETFs) and hedges the risks associated with those activities. The activities of this business unit include block positioning, effecting transactions on exchanges, creation and redemption of ETFs and corresponding equity underlier baskets, and OTC facilitation of client, customer, and counterparty transactions in equities products. This business unit sends orders to Sigma X2 in agency and principal capacities under the MPID GSCO.

EQUITY FLOW FINANCING - AMERICAS: This GSCO business unit engages in market making-related activities in one delta equity synthetic products and conducts hedging related to its own market making activities. The activities of this business unit include OTC facilitation of client, customer and counterparty transactions. This business unit sends orders to Sigma X2 in a principal capacity under the MPID GSCO.

EQUITY DERIVATIVES: The GSCO business unit within Global Derivatives engages in market making and market making-related activities in single stock and index based listed/exchange-traded derivative securities and OTC instruments (e.g. convertibles and derivatives), and performs hedging of corresponding risk associated with those activities. The activities of this business unit include agency execution of exchange-traded derivative securities, as well as listed and OTC facilitation of client, customer, and counterparty derivatives transactions. This business unit sends orders to Sigma X2 in agency and principal capacities under the MPID GSCO.

CREDIT - US FLOW TRADING: The GSCO business within Global Credit engages in market making-related activities in credit products, including fixed income, currency and commodity ETFs, and hedges the risks associated with these activities. These activities include market making, OTC facilitation of client, customer and counterparty transactions, and transactions executed

on various third-party electronic trading platforms in the United States. This business unit sends orders to Sigma X2 in agency and principal capacities under the MPID GSCO.

CREDIT - EM CREDIT: The GSCO Emerging Markets Credit business within Global Currencies and Emerging Markets engages in market making-related activities in emerging markets products and hedges the risks associated with these activities with emerging market ETFs. This business unit sends orders to Sigma X2 in a principal capacity under the MPID GSCO.

IRP - AMERICAS RATES: This GSCO business unit engages in market making-related activities in interest rate products, including interest rate ETFs, and hedges the risks associated with these activities. These activities include market making and OTC facilitation of client, customer and counterparty transactions. This business unit sends orders to Sigma X2 in agency and principal capacities under the MPID GSCO.

In addition to the above referenced business units, the Equities Delta Hedging Facility ("EDHF"), is the Firm's automated hedging tool used to manage its equities-related principal risk positions. As part of the Firm's process for managing principal risk, various above-described business units within GSCO's equities business may send principal equities orders to EDHF. EDHF then uses the GSCO algorithms and smart order router (SOR) to manage the Firm's risk position. Such orders can be routed to Sigma X2 in a principal capacity under the MPID GSCO. ~~The profits and losses associated with such hedging are allocated back to the above-described equities businesses.~~ The EDHF tool operates within the Equity Derivatives business unit.

Part II, Item 2.a: Item 2: Affiliates Trading Activities on the ATS

a. Are Affiliates of the Broker-Dealer Operator permitted to enter or direct the entry of orders and trading interest into the NMS Stock ATS?

X Yes No

If yes, name and describe each type of Affiliate that enters or directs the entry of orders and trading interest into the ATS (e.g., broker-dealer, NMS Stock ATS, investment company, hedge fund, market maker, principal trading firm), and, for each Affiliate, provide the applicable MPID and list the capacity of its orders and trading interest (e.g., principal, agency, riskless principal).

GSCO has a number of affiliate organizations that are classified as Broker-Dealers and Investment Advisors (domestic and foreign) that engage in various securities trading activities. Currently Goldman Sachs International ("GSI"), Goldman Sachs Bank Europe SE ("GSOH") and Goldman Sachs Canada, Inc. ("GSCD") are foreign affiliates that are not registered in the U.S., and are entitled to send Firm and Conditional orders to GSCO which, where warranted, may be entered or directed to Sigma X2 by GSCO using GSCO's algorithms or the GSCO SOR. Such GSI and GSOH orders may be principal and/or agency orders, and such GSCD orders may be agency orders. These orders have GSCO's MPID attached to them. GSI, GSOH and GSCD are referred to herein as either "GSCO Affiliates" or "GSCO Affiliate" as warranted.

Please note that while GSCO's affiliate Goldman Sachs Asset Management, L.P. ("GSAM"), a U.S. registered entity, routinely interacts and routes orders to GSCO to facilitate trade execution, GSAM is not permitted to enter or direct the entry of orders to Sigma X2.

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 [Long-Term Stock Exchange \(LTSE\)](#), [24X National Exchange \(24EX\)](#), and the [Texas Stock Exchange \(TXSE\)](#). 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.

VWAP prices for Benchmark Cross executions are calculated using executions reported to the SIP as discussed above in Part III Item 11.c.