

EURONEXT MARKETS

ORDER ENTRY GATEWAY SESSIONS FEE GUIDE

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INTRODUCTION AND CONTENTS

This guide is designed to provide members with a detailed overview of the fees for order entry sessions on Euronext Markets.

If you have any questions concerning the content of this guide or would like further information on Euronext Market services, please contact the Operational Client Services team on clientsupport@euronext.com.

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MAIN CHANGES FROM THE PREVIOUS EDITION

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1. LOGICAL ACCESS PRICING AND CAPACITY IN PRODUCTION: GENERAL PRINCIPLES

- The OEG Logical Access pricing model applies to all OEG Logical Accesses on the SFTI infrastructure for all supported protocols (SBE and FIX 5.0), directly, or indirectly via an Extranet Service Provider (ESP) or an Application Service Provider (ASP).
- OEG Logical Accesses are invoiced by Euronext directly to members and independently from any network connectivity charges. As such, technology partners such as ASPs and ISVs are not invoiced for OEG Logical Accesses.
- CASH: The price for an OEG connection on the Euronext Cash Markets is a combination of a fixed cost and a variable incremental cost based on the order entry capacity (throughput, measured in messages per second).
- DERIVATIVES: The price for an OEG connection on the Euronext Derivatives Markets is a fixed fee per month based on the type of connection and the order entry capacity (throughput, measured in messages per second).
- Once a new OEG Logical Access has been fully activated with Production connectivity access, billing will start automatically, regardless of whether the OEG Logical Access has been effectively used or not. Full payment is due for every calendar month, and OEG Logical Access fees are not pro-rated in the event of a cancellation or modification.
- OEG Logical Accesses supporting several member codes from the same member Group¹ are charged only once. OEG Logical Accesses supporting several member codes from different member entities are charged per member code.
- Drop Copy sessions are charged at a flat rate regardless of the number of Drop Copy Logical Accesses ordered.
- Euronext reserves the right to negotiate bilateral arrangements and/or pilot programmes relating to fees and charges with members from time to time when it considers it appropriate to do so.
- Detailed Pricing and Throughput Allocation Models are described below.

¹ 'Member Group' as defined in Rule 3.4 of Euronext Rulebook 1: affiliates of the same firm with a 95% capital link are considered as part of the same Member Group

2. EURONEXT CASH MARKETS LOGICAL ACCESS PRICING AND CAPACITY IN PRODUCTION

Euronext Cash Markets OEG Logical Access Pricing and Capacity in the Optiq® Production Environment.

A. STANDARD LOGICAL ACCESSES: EURONEXT CASH MARKET

MONTHLY CHARGES PER MEMBER CODE/ MEMBER GROUP IN PRODUCTION ENVIRONMENT

Flat fee:	€400 per OEG Logical Access
Maximum Capacity:	200 messages/second/partition per OEG Logical Access
Minimum Capacity & Capacity Increment:	5 messages/second/partition per OEG Logical Access
Order entry capacity charge:	€18/message/second

Retail flow provider:

Access fees for the Euronext Cash market would be capped at €10,000 per month if:

- Member registers as an RMO for the Euronext Cash Equity franchise
- Member reaches a monthly turnover of > €3bn across the Euronext Cash Equities Markets being flagged as Best of Book transactions
- At least 70% of the member's orders on all Cash Market logical accesses are RMO orders for the month being invoiced

B. LOGICAL ACCESSES DEDICATED TO SPECIFIC USAGE: EURONEXT CASH MARKET

Specific Pricing and Capacity are available for OEG Logical Accesses entirely dedicated to:

- Liquidity Provision on Cash Equity Instruments
- Liquidity Provision on Exchange-Traded Funds (ETFs), Exchange-Traded Vehicles (ETVs) and Exchange-Traded Notes (ETNs)
- 'Omega 2' fee scheme

MONTHLY CHARGES PER MEMBER CODE IN PRODUCTION ENVIRONMENT

Flat fee:	€400 per OEG Logical Access
Maximum Capacity:	400 messages/second/partition per OEG Logical Access
Minimum Capacity & Capacity Increment:	5 messages/second/partition per OEG Logical Access
Order entry capacity charge:	€6/message/second

Notes on Liquidity Provision dedicated OEG Logical Accesses

Full details of Liquidity Provider fees and charges are based on individual Liquidity Provider Contracts¹.

C. EURONEXT CASH MARKET EXTENDED RLP

Members participating in the Extended Retail Liquidity Provider (RLP) Programme can benefit from two logical accesses free of charge, with a capacity up to 400msg/s each.

These dedicated logical accesses may not be used for any other purpose than for providing RLP quotes.

Should these dedicated logical accesses be used fully or partially for other flow, standard logical access rates shall apply.

D. EXCHANGE-TRADED FUNDS LP

For Exchange-Traded Fund (ETF) trading participants, the total costs of LP sessions on the ETF segment will be capped at €20,000 per month.

E. FIXED INCOME LP

Liquidity Providers that are connected solely to the Fixed Income segment of Optiq® can benefit from one logical access free of charge, with a capacity up to 400msg/s.

This dedicated logical access may not be used for any other purpose than for providing LP quotes.

Should this dedicated logical access be used fully or partially for other flow, standard logical access rates shall apply.

F. LOGICAL ACCESSES DEDICATED TO STRUCTURED PRODUCTS LIQUIDITY PROVISION**Standard OEG Logical Access:**

Specific Pricing and Capacity are available for OEG Logical Accesses entirely dedicated to Liquidity Provision on Structured Products (Warrants Optiq® segment):

MONTHLY CHARGES PER MEMBER CODE IN PRODUCTION ENVIRONMENT

Flat fee:	€200 per OEG Logical Access
Maximum Capacity:	200 messages/second/partition per OEG Logical Access
Minimum Capacity & Capacity Increment:	5 messages/second/partition per OEG Logical Access
Order entry capacity charge:	€6/message/second

¹ For more information, please contact Euronext's Membership department at MCC@euronext.com.

LP Command OEG Logical Access (on the Request For Execution market model):

Additionally, each member registered as Liquidity Provider on Structured Products (trading on the Request For Execution market model) may request some additional capacity dedicated to sending messages other than (Bulk) Quotes, e.g. LP commands or Price Input messages:

MONTHLY CHARGES PER MEMBER CODE IN PRODUCTION ENVIRONMENT

LP Command Capacity:	Up to 20 messages/second/partition across all the LP Command OEG Logical Accesses of the member
Number of LP Command OEG Logical Accesses per member:	Up to 2 LP Command OEG Logical Accesses per member
Minimum Capacity & Capacity Increment:	5 messages/second/partition per LP Command OEG Logical Access
Flat fee:	€0 per LP Command OEG Logical Access
Order entry capacity charge:	€0/message/second

In case an LP Command OEG Logical Access would also be used for sending (Bulk) Quote messages, it would be charged as a standard OEG Logical Access under section F.

Should this dedicated Liquidity Provision logical access be used fully or partially for other flow, standard logical access rates shall apply.

G. FREE PACKAGE

Each “Member Group”¹ on the Euronext Cash Markets may have a free package consisting of:

- A maximum of one OEG Logical Access per Optiq® Segment.
- A minimum capacity and minimum increment of 2 msg/s.
- A maximum capacity of 30 messages per second across all market segments and Logical Accesses for the “Member Group” opting for the free package

Additional Notes:

- The Free Package cannot be combined with paid access.
- The Member Group must either opt for the free package or choose a paid option.

¹ ‘Member Group’ as defined in Rule 3.4 of Euronext Rulebook 1: affiliates of the same firm with a 95% capital link are considered as part of the same Member Group.

H. OSLO LOCAL MEMBER TRANSITION SCHEME

Members of the Oslo Børs Exchange that were not active members of Euronext markets on the 1st of January 2020 will benefit from a fee cap corresponding to their respective average monthly connectivity fees paid in 2019 (unless requested otherwise) until 31 August 2022. This fee cap is applicable for Cash Equities, ETFs as well as Warrants and Certificate. Not applicable for Fixed Income connectivity.

I. DROP COPIES

Drop copy use on the Euronext Markets is charged at a flat fee of €1000 per “Member Group”, regardless of the number of drop copy Logical Accesses created.

J. TCS (TRADE CONFIRMATION SYSTEM) OEG LOGICAL ACCESSES

Euronext Cash Market OEG Logical Accesses dedicated to the Trade Confirmation System (TCS) with a maximum capacity of 10 messages/second are free of charge.

K. EURONEXT CASH MARKETS: ORDER ENTRY CAPACITY PER OEG LOGICAL ACCESS / PARTITION

The order entry capacity per OEG Logical Access is always defined at the partition level. If an Optiq® segment has several partitions, the total throughput on this segment equals capacity times number of partition.

For invoicing purposes, capacity at the level of the partition is charged.

The order entry capacity per OEG Logical Access/Partition starts at 5 messages per second.

It is capped at:

- 200 messages per second per partition for Standard OEG Logical Accesses
- 400 messages per second per partition for Liquidity Provision Dedicated OEG Logical Accesses

Members may allocate capacity across OEG Logical Accesses according to the principles described above and with a minimum increment of 5 messages/second/partition.

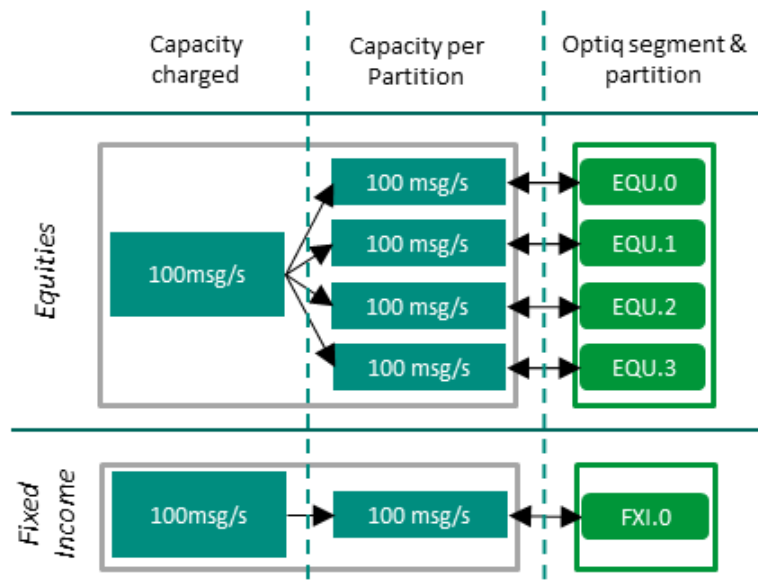
EXAMPLE 1: CAPACITY ON SINGLE AND MULTI-PARTITION OPTIQ® SEGMENT

A Member Group trading on the Euronext Cash Markets holds 1 OEG Standard Logical Access with 100msg/s on an Optiq® segment with 1 partition, and 1 OEG Standard Logical Access with 100msg/s on an Optiq® segment with 4 partitions.

On the Optiq® segment with 1 partition, the capacity of the connection is 100 msg/s

On the Optiq® segment with 4 partitions, the capacity of the connection to each partition is 100 msg/s with a total capacity of $4 \times 100 \text{ msg/s} = 400 \text{ msg/s}$

The monthly charge for this Member Group is $2 \times (\text{€}400 + \text{€}18 \times 100 \text{ msg/s}) = \text{€}4,400$



EXAMPLE 2: ADDING A PARTITION TO AN OPTIQ® SEGMENT

A Member Group trading on the Euronext Cash Markets holds 1 OEG Standard Logical Accesses with 100msg/s on an Optiq® segment with 2 partitions. 1 new partition is added to the Optiq® segment.

- Before the new partition is added, the capacity of the connection to each partition is 100 msg/s with a total capacity of $2 \times 100 \text{ msg/s} = 200 \text{ msg/s}$
- After the new partition is added, the capacity of the connection to each partition remains 100 msg/s with an increased total capacity of $3 \times 100 \text{ msg/s} = 300 \text{ msg/s}$

The monthly charge for this Member Group does not change with the addition or removal of a partition to an Optiq® segment.

3. EURONEXT FINANCIAL DERIVATIVES MARKETS: OEG LOGICAL ACCESS PRICING AND CAPACITY IN PRODUCTION

Euronext Financial Derivatives Markets OEG Logical Access Pricing and Capacity in the Optiq® Production Environment.

The Financial Derivatives Markets are considered to refer to the following segments:

- Equity Derivatives Segment (EQD)
- Index Derivatives Segment (IDD)
- Financial Derivatives Segment (FID)

Pricing and capacity for the Commodity Derivative Markets segment can be found in section 4 of this guide.

A. STANDARD LOGICAL ACCESSES FOR FINANCIAL DERIVATIVES MARKET

SUBTYPE	MAX CAPACITY PER SESSION/PER PARTITION	FLAT FEE PER MONTH	QUOTES INCLUDED	PROTOCOL SUPPORTED
LIGHT	30 msg/s	€150	No	SBE or FIX
FULL	100 msg/s	€300		

B. MARKET MAKER LOGICAL ACCESS FOR FINANCIAL DERIVATIVES MARKETS ON OPTIQ®

SUBTYPE	MAX CAPACITY PER SESSION/PER PARTITION	FLAT FEE PER MONTH	QUOTES INCLUDED	PROTOCOL SUPPORTED
LIGHT	50 msg/s	€250	Yes	SBE
FULL	400 msg/s	€750		

C. FREE LOGICAL ACCESS FOR FINANCIAL DERIVATIVES MARKETS ON OPTIQ®

All members are entitled to 1 free Standard access (Light) on the first segment to which they are connected¹.

Market Makers are entitled to 1 additional free Market Maker access (Light) on the first segment they are connected to¹.

LOGICAL ACCESS	SUBTYPE	MAX CAPACITY PER SESSION/PER PARTITION	FLAT FEE PER MONTH	QUOTES INCLUDED	PROTOCOL SUPPORTED
Standard	LIGHT	30 msg/s	€0	No	SBE or FIX
Market Maker	LIGHT	50 msg/s	€0	Yes	SBE

¹ For members with access to multiple financial derivative segments (EQD/IDD/FID), only the first segment connected will be free of charge.

D. LOGICAL ACCESSES FOR RISKGUARD

Logical Accesses used solely for RiskGuard are free of charge.

E. DROP COPIES

Drop copy use is charged a flat fee of €1000 per “Member Group”, regardless of the number of drop copy Logical Accesses created.

F. EURONEXT FINANCIAL DERIVATIVES MARKETS: OEG LOGICAL ACCESS CAPACITIES

The Logical Access capacity is defined at the partition level.

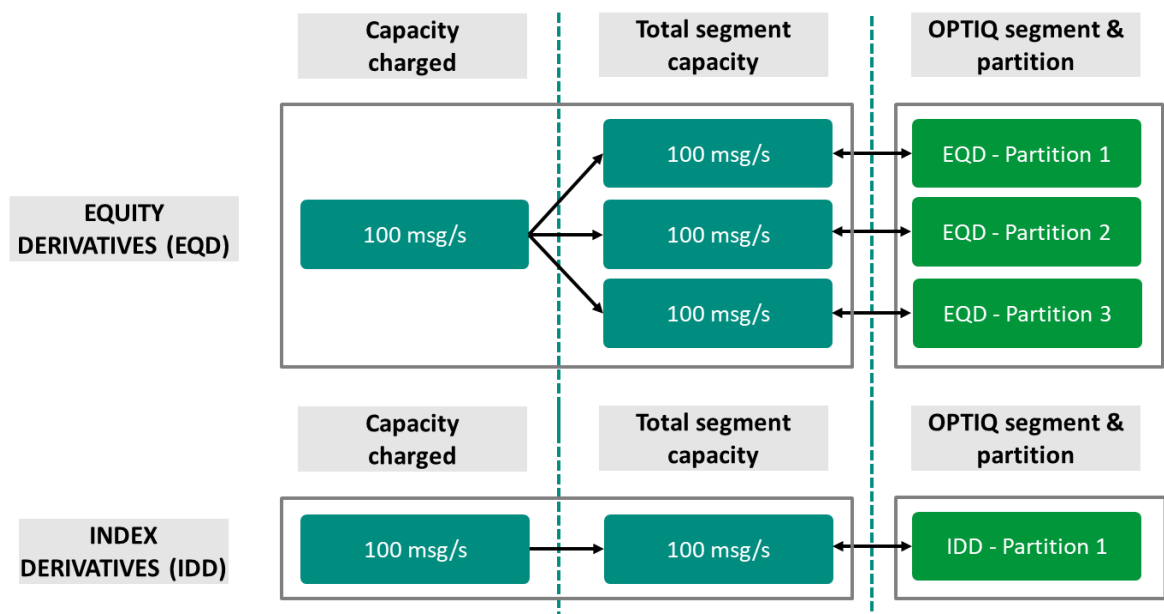
The Equity Derivatives Segment (EQD) has 3 partitions, and is the only derivatives asset class to have more than one partition. The flexibility of the Optiq platform allows Euronext to add or remove partitions to match capacity requirements. Monthly charges will not change with the addition or removal of partitions.

For invoicing purposes, capacity at the level of the partition is charged.

EXAMPLE

A Member holds 1 Full Standard Logical Access for the Equity Derivatives Segment (EQD) with 100 msg/s, and 1 Full Standard Logical Access for the Index Derivatives Segment (IDD) with 100 msg/s:

- On the EQD segment with 3 partitions, the capacity of the connection to each partition is 100 msg/s, so the total capacity is 3 x 100 msg/s = 300 msg/s.
- On the IDD segment, the capacity of the connection is 100 msg/s as there is only one partition.



The monthly charge for this Member would be:

1 Standard Logical Access for Equity Derivatives Segment (EQD)	€300
1 Standard Logical Access for Index Derivatives Segment (IDD)	€300
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Total fees	€600
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G. STANDARD ACCESS VERSUS MARKET MAKER ACCESS

As Market Maker access in Optiq® is optimised for market quoting activity, members should be aware that there could be extra latency observed if Market Maker accesses are used to support low-latency trading through individual orders.

Thus for the purposes of latency optimisation, members are advised to order Standard accesses to support their trading activity, and Market Maker accesses to support their quoting activity.

H. OSLO LOCAL MEMBER TRANSITION SCHEME

Members of the Oslo Børs Exchange that were not active members of Euronext markets on the 1st of January 2020 will benefit from a fee cap corresponding to their respective average monthly connectivity fees paid in 2019 (unless requested otherwise) until 31 August 2022.

4. LOGICAL ACCESSES FOR COMMODITY DERIVATIVES MARKET

Euronext Commodity Derivatives Markets OEG Logical Access Pricing in the Optiq® Production Environment.

All members are entitled to 1 free Standard Light Logical Access to the Commodity Derivatives market segment per “Member Group”, providing up to 30 msg/s.

If further Standard Light Logical Access are required to access the Commodity Derivatives market segment then there will be a monthly flat fee of €625 per “Member Group” regardless of the number of Logical Accesses created.

LOGICAL ACCESS	SUBTYPE	MAX CAPACITY PER SESSION/PER PARTITION	FLAT FEE PER MONTH	QUOTES INCLUDED	PROTOCOL SUPPORTED
Standard	LIGHT	30 msg/s	€625	No	SBE or FIX
Market Maker	LIGHT	50 msg/s	€*	Yes	SBE

**Additionally if Market Maker Logical Access is required for a member providing market maker support to Commodity Derivatives then Market Maker Logical Access units will also fall under the monthly flat fee of €625.*

5. OEG LOGICAL ACCESS PRICING AND CAPACITIES – EUA ENVIRONMENT

All OEG Logical Accesses are free of charge in the External User Acceptance (EUA) test environments.

6. PROCESS FOR ORDERING / MODIFYING / CANCELLING OEG LOGICAL ACCESSES

To order new OEG Logical Accesses in the Production or EUA environments, or to cancel or modify a Logical Access, an online form is available on the [Connect website](#).

Note: this form can only be completed by a nominated **Member Connectivity Administrator (MCA)**.