



MiFID II HFT Reporting

External File Specification for Exchange Members

October 2017

Version 1.0

Revisions

Version	Date	Description of changes
1.0	26 Oct 2017	Initial Publication

This document (including any enclosures and attachments) has been prepared for the exclusive benefit of the Members and Customers of ICE, and solely for information purposes and the purposes of providing assistance in relation to MiFID II and the HFT reporting requirements contained therein.

Recipients should consult with their legal and any other advisors they deem appropriate in determining how to address the MiFID II legislation and the reporting requirements in their particular circumstances. For the avoidance of doubt, neither ICE nor the Exchanges will be responsible for any errors contained in this document.

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External File Specification for Exchange Members

1 Introduction

1.1 About MiFID II

The MiFID II¹/MiFIR² legislative package that will apply from 3 January 2018 imposes a number of new regulatory requirements on EU trading venues as well as their Members regardless of location. Pursuant to MiFID II, firms engaged in high-frequency trading technique (HFT) must be authorized with a competent authority. There are three criteria to determine whether a firm is using HFT, including:

- *a high message intraday rate (focus of this document),*
- *using latency-minimizing infrastructure such as colocation, proximity hosting or High Speed Direct Electronic Access, and*
- *using no human intervention in initiating, generating as well as routing, orders.*

The definition of the high message intraday rate has been specified by the European Commission in the MiFID II Delegated Act as an average message rate in liquid instruments exceeding 2 messages per second in a single financial instrument or 4 messages per second across the entire trading venue.

In order to allow firms to assess their trading activity against the above criterion, trading venues are obligated to provide their clients with data they can use to calculate their monthly estimates of the average of messages submitted per second, taking into account all messages submitted during the preceding 12 months. These reports should be provided within two weeks following the end of each calendar month.

This document sets out the technical details of a file that ICE makes available to all ICE Members on a monthly basis.

¹ Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU.

² Regulation (EU) No 600/2014 of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Regulation (EU) No 648/2012.

1.2 Document Purpose

This document provides technical specifications for the various files that ICE makes available to Exchange Members for their HFT report activity in MiFID II reportable markets. The intention of the document is to provide analysts and technical staff of those entities with sufficient information to design solutions for consuming and processing the files, as they deem necessary.

1.3 Document Conventions

- This document is written for the perspective of a given Exchange Member.
- This document assumes the reader is familiar with the following:
 - MiFID II - *Article 4(1)(40) and Article 19 in the supporting draft delegated act define three criteria that an investment firm must meet to be deemed to be using high frequency algorithmic trading techniques*

DISCLAIMER: *To avoid future rework, the document is written in present tense.*

1.4 FAQs

Some key topics to consider in the FAQ relative to this document are:

- MiFID II Reportable Products
- ISINs Pertaining to ICE Products

ICE may also publish circulars pertaining to MiFID II, which are found at the following links:

<https://www.theice.com/futures-europe/circulars>

<https://www.theice.com/endex/circulars>

1.5 Terms

Term	Definition
Exchanges / ICE Exchanges	Within the context of this document, unless otherwise indicated, the terms Exchange, Exchanges, and ICE Exchanges universally apply to the ICE MICs that have MiFID II reportable products. These are: IFEU, IFLL, IFLO, IFLX, and NDEX.
ICEU	ICE Clear Europe. The Clearing House/Central Counterparty on all MiFID II reportable transactions.
Locally Managed Account (LMA)	This type of clearing account is available where a participant is locally managing their pre-trade risk and does not wish to make use of the exchange level pre-trade risk management. LMAs are administered by ICE User Administration. The assignment of an LMA will allow trades to route to the default clearer of the trading company.
System Managed Account (SMA)	SMAs allow for pre-trade risk limits to be applied to a clearing account on an individual product basis. The limits are lot based and will be reset at the end of the trading session. SMAs are administered by a clearing firm. Accounts are assigned to a single company. Accounts can be shared by multiple traders within a company. A single trader could also map his Trader ID to multiple SMAs from multiple clearing firms
Strategy Trade	<p>A trade involving two or more financial instruments, in some combination of buying and/or selling of each instrument, at a single price. Example strategy trades:</p> <ul style="list-style-type: none"> • Buy a Jun17/Jul17 calendar spread is: <ul style="list-style-type: none"> ○ Buy Jun17 ○ Sell Jul 17 • Sell a Q4-17 quarter is <ul style="list-style-type: none"> ○ Sell Oct17 ○ Sell Nov17 ○ Sell Dec17
Strategy Parent Trade	In a strategy trade scenario, this is a single trade registered by the system to represent the strategy being traded, which is separate than the trades of each of the strategy's outright/leg markets. In the examples above, the system would have recorded strategy parent trades for both the Jun17/Jul17 market, as well as the Q4-17 market.

1.6 Additional References

MiFID Article 4(1)(40):

<https://ec.europa.eu/transparency/regdoc/rep/3/2016/EN/3-2016-2398-EN-F1-1.PDF>

ICE MFT User Guide for MiFID II Files:

<https://community.theice.com/docs/DOC-22224>

ICE Instrument List:

IFEU: <https://www.theice.com/marketdata/reports/232>³

NDEX: <https://www.theice.com/endex/market-resources>⁴

³ Availability early December 2017

⁴ Availability July 2017

2 MiFID II Reportable HFT Data provided by ICE

2.1 Data That Will Be Provided

ICE provides members with monthly reports taking into account all messages submitted during the previous month. The reports are provided on the ICE MiFID MFT environment. Reports for the previous 24 months are available on-line in the archive folder.

The HFT report provides statistics for each future and option market that the Member had order activity in, during the month reported. The data is provided from the perspective as it was traded on the Exchange. This allows for activity in strategy markets (e.g. spreads), including calendar shape markets (e.g. quarters, seasons, calendars, etc.), to be counted as submitted. The messages originating from the system where the trader was not able to influence their existence, e.g. partial matches, implied orders, are not included.

3 MiFID II Exchange Member HFT Data

3.1 File Availability

Reports are to be generated on the first weekday of each month, regardless of holidays and delivered to firms through MFT.

3.1.1 File Availability Times

TBD

3.2 Exchange Member Files

ICE produces monthly HFT files for each Exchange Member for which they have activity in a MiFID II reportable market. These files are organized by:

- Exchange MIC (IFEU, IFLL, IFLO, IFLX, NDEX)
- Exchange Member Mnemonic
- Legal Entity Identifier LEI
- Month End Date ie.20170131

All files are produced in CSV format.

3.2.1 File Characteristics

- Files are only created if there is data to be provided.
- All CSV files are provided in compressed “.zip” format.
- There is no officially prescribed sort order to records contained in the files.

3.2.2 File Names

File names have the following format:

HFT File:

T<MIC>_MIFIDDATHFT_<MNEMONIC>_<LEI>_<MonthEndDate>.zip

The following matrix shows the full set of data files that could be generated for Exchange Member ABC for the January 31, 2018 processing date based on the format above.

MIC	CSV
IFEU	TIFEU_MIFIDDATHFT_ABC_XYZ12345678901234567_20180131.csv.zip
IFLL	TIFLL_MIFIDDATHFT_ABC_XYZ12345678901234567_20180131.csv.zip
IFLO	TIFLO_MIFIDDATHFT_ABC_XYZ12345678901234567_20180115.csv.zip
IFLX	TIFLX_MIFIDDATHFT_ABC_XYZ12345678901234567_20180131.csv.zip
NDEX	TNDEX_MIFIDDATHFT_ABC_XYZ12345678901234567_20180131.csv.zip

3.2.3 CSV File Format and Mapping

The CSV HFT files have the following characteristics:

- The files are unix-style files with a single line-feed terminating each line.
- The files have one header row that contains the field names in the file.
- Each line of a given file is a single record.
- All field values are separated by a single comma character.
- String values are optionally enclosed with a starting and ending double-quote character.
- Blank values are represented only by their separator. Example of three fields where the middle field is blank: "Field 1 Value",,"Field 3 Value".

The table below provides a list of field names, and their corresponding description.

CSV Field Name	Field #	Description
T1_Begin_Date	1	The first date of the report
T2_End_Date	2	The last date of the report
T3_MNEMONIC	3	The abbreviation of a Member's company name used to identify the trading firm or trading group in TE
T4_Lei_of_Member	4	Legal Entity Identifier of Member
T5_Member_Name	5	The registered name of the LEI from the GLEIF
T6_Operational_MIC	6	Identification of the parent venue where the order was executed
T7_MIC	7	The Segment level ISO MIC code indicating where the security trades
T8_LMA_SMA_IND	8	Identifies the account type "S" (System managed) or "L" (Locally managed) originally assigned to the order at creation time
T9_Customer_Account_ID	9	The client account number
T10_Market_ID	10	The unique identifier of an individual tradable derivatives contract or series.
T11_Market_Description	11	Description of the market based on the primary market
T12_Strip_Description	12	The strip description of the contract
T13_Put_Call	13	Indicates whether an option contract is a call or a put
T14_Strike	14	Price at which the option holder may buy or sell the underlying security, as defined in the terms of the option contract. Also known as the Exercise Price
T15_Order_Count	15	Total Order count of member
T16_Duration_Time_For_Month	16	Total number of seconds the market was available for trading during the given period

3.3 Retrieving Files

The MFT MIFID Service allows Members to download the HFT reports published by the Exchange. All files described in this document are available via the Member's */mifid/reports/hft* Folder. The HFT directory contains the most recent generated HFT files. Members that need access to the MiFID MFT Service should complete a MIFID MFT request Form.

3.3.1 Historical File Availability

The MFT */mifid/reports/hft/archive* folder has files available for the last 24 months.

3.3.2 Automated File Download

The ICE MFT solution supports automated file download.