

Transaction Reporting under Regulation 600/2014 ('MiFIR')

Operational and Technical Arrangements Central Bank of Ireland

Data standards and formats for MiFIR transaction reporting are prescribed in the legislation.

The MiFIR Transaction Reporting - Technical Reporting Instructions ('Reporting Instructions') published on the European Securities and Markets Authority's ('ESMA') website describe the elements of the interface that were built between Competent Authorities and reporting entities.

<https://www.esma.europa.eu/data-reporting/mifir-reporting#:~:text=MIFIR%20Transaction%20Reporting,for%20the%20various%20trading%20scenarios>.

This document sets out the operational and technical arrangements ('technical arrangements') for submitting transaction reports under MiFIR to the Central Bank of Ireland ('Central Bank') systems. It should be read in conjunction with the Reporting Instructions.

1.0 Access to the Central Bank's Systems

Transaction reports can only be submitted by authorised personnel within a Submitting Entity.

Transaction reports may be submitted to the Central Bank by:

- a. Investment firms which execute transactions in financial instruments;
- b. Approved Reporting Mechanisms ('ARMs') acting on behalf of investment firms; and
- c. Operators of trading venues through whose system the transaction was completed.

These entities are referred to as Submitting Entities for the purposes of these technical arrangements.

Entities that execute transactions in financial instruments and whose transaction reports are submitted on their behalf by an ARM, hereafter referred to as 'Executing Entities', will also be given access to view and retrieve transaction report data that was submitted on their behalf (see section 9.0 below). Such entities should pre-advise the Central Bank of their proposed arrangements in order that they, and the ARM, are given relevant access permissions.

In order that the relevant system accesses can be arranged please complete Appendix 1 and submit it to OnlineReturns@centralbank.ie¹

References to ‘investment firms’ in this document are to be read as including ‘credit institutions’ as applicable².

2.0 **Methods of Submission**

Transaction reports must be submitted to the Central Bank via

- a. the secure Online Reporting website (‘Online Reporting System’ or
- b. an automated ‘Machine to Machine’ channel (‘Machine to Machine’).

Both systems will be available on a 365 / 7 day week basis (excluding maintenance downtime) with support available during Central Bank business hours. Firms will have until 23.59 hrs to successfully submit their transactions to comply with the T+1 reporting deadline. Firms can choose to report transactions real time or via batches.

2.1 **File Upload via the Online Reporting System (‘ONR’)**

- a. The ONR system will display a ‘MiFIR Transaction Reporting’ return type option.
- b. Up to 500,000 transaction reports can be uploaded to the website in a single file.
- c. A maximum of 999 files can be uploaded in a single day by each Submitting Entity.
- d. The file must be named according to the standard naming convention (see section 3.0 below).
- e. The maximum file size that can be uploaded is 50 megabytes
- f. Files must be uploaded in a compressed (zipped) format, i.e., the file must have a *.zip extension.
- g. Each compressed file that is uploaded must only contain one Transaction Report file which must be an XML file.
- h. The name of the Transaction Report file must be the same as that of the ‘zip’ file that contains it.
- i. Files must be sent in sequence starting at ‘001’ and this integer should be reset daily (see section 3.1 below).

2.2 **File Upload via Machine to Machine**

The Machine to Machine channel allows Submitting Entities to interface their systems directly into the Central Bank’s systems in order to upload Transaction Report files.

In order to upload files via Machine to Machine, Submitting Entities are required to:

1. Have relevant **access permissions for ONR** (see Section 1.0 above); **and**

¹A non PDF version of Appendix 1 is available separately on the Central Bank’s website <https://www.centralbank.ie/regulation/industry-market-sectors/investment-firms/mifid-firms/reporting-requirements>

² Regulation 600/2014, Article 1(2)

2. Complete a **two-step authentication process** on connection to the Machine to Machine channel as follows:

a. **IP Address**

The connection to the Machine to Machine channel must come from an IP address that was previously supplied to the Central Bank by the Submitting Entity. If the attempt to connect does not come from such a ‘whitelisted’ IP address, the Submitting Entity will not be permitted to upload a Transaction Report file.

b. **Account authentication**

The Submitting Entity must provide its ONR access details (e.g. Institution Code, Login Name and Password) that will allow permission to upload a file via the Machine to Machine channel.

A separate technical specification document for Machine to Machine is available upon request. (In order to arrange Machine to Machine access Appendix 2 requires completion and submission to OnlineReturns@centralbank.ie³.)

Once the Submitting Entity’s system has authenticated against the Machine to Machine channel, a Transaction Report file can be uploaded.

Files uploaded via this channel are subject to the following criteria:

- a. Up to 500,000 transaction reports can be uploaded in a single file.
- b. The maximum volume of data that a Submitting Entity can upload in a single day is 5 gigabytes. Certain accounts are allowed more on a case-by-case basis.
- c. The file must be named according to the standard naming convention (see section 3.0 below).
- d. The maximum file size that can be uploaded is 50 megabytes.
- e. Files must be uploaded in a compressed (zipped) format, i.e., the file must have a *.zip extension.
- f. Each uploaded compressed file must only contain one Transaction Report file which must be an XML file.
- g. The name of the Transaction Report file must be the same as that of the ‘zip’ file that contains it.
- j. Files must be sent in sequence starting at ‘001’ and this integer should be reset daily (see section 3.1 below).

3.0 **File Naming Convention – Transaction Reporting Files**

Transaction Reporting files must adhere to the following naming convention:

- a. CCCCCC_DDDDD_YYYYMMDD_NNN.zip
- b. CCCCCC – This is the ‘C code’ used by the Submitting Entity to log into the system.

³ A non PDF version of Appendix 2 is available separately on the Central Bank’s website <https://www.centralbank.ie/regulation/industry-market-sectors/investment-firms/mifid-firms/reporting-requirements>

- c. DDDDD – This is an optional departmental code specific to the Submitting Entity.
- d. YYYYMMDD – This is the submission date of the file.
- e. NNN – This is a sequential integer from 001 to 999 to uniquely identify the file (see section 3.1 below).
- f. .zip - This is the file extension which must be .zip, i.e. the file must be compressed.

The file naming conventions for file upload via ONR and Machine to Machine are the same.

3.1 ‘NNN’

- a. Files must be submitted in sequence by Submitting Entities;
- b. Sequencing of files will be determined by the file sequence number i.e., ‘NNN’ component of the file name;
- c. On each calendar day the ‘NNN’ should start at ‘001’ for each Submitting Entity;
- d. This number should be incremented by ‘1’ for each subsequent file submitted by a Submitting Entity; and
- e. The sequence number should be reset to 001 each calendar day.

Transactions executed on day T should be reported no later than 23:59:59 on day T+1.

Submitted transaction reporting files that are not processed on the submission date due to technical issues with Central Bank systems will not require resubmission by Submitting Firms the next, or subsequent, days (with amended dates and new sequence numbers).

3.2 Business Application Header for Transaction Report Files

The Business Application Header of a transaction report file will be as set out in Section 6.4 of the Reporting Instructions. The Business Message Identifier is specified at National Level - for entities submitting transaction reports to the Central Bank this is the Transaction Report Filename (as set out above)

| Field Name | Field Description | Value (for Transaction Report file from Submitting Entity) |
|-----------------------------|---|--|
| From | LEI of the Submitting Entity | LEI |
| To | Country Code of the Competent Authority | ‘IE’ |
| Business Message Identifier | A unique identifier for the file. Specified at-national level | For entities submitting transaction reports to the Central Bank of Ireland this is the Transaction Report Filename, i.e, |

| | | |
|-------------------------------|---|-----------------------------------|
| | | CCCCCC_DDDDD_YYYYMMDD_NNN.zip |
| Message Definition Identifier | Identifies the message type, e.g. transaction data message, status advice message (feedback) etc. | 'auth.016.001.01' |
| Business Service | Specifies the business context of the use of the message. It is not used for Transaction Reporting purposes | NA |
| Creation Date | Date and Time the message was created | Date and Time of message creation |
| Related | For status advice messages this field contains the BAH of the original Transaction Report file. This allows submitting Entities to link the status advice message to the uploaded Transaction Report file that it refers to | NA |

4.0 **File Contents**

The uploaded Transaction Report file must contain ISO 20022 compliant XML that is valid according to the Transaction Reporting schema (refer to the Reporting Instructions, Annex 2).

5.0 **Validation**

For each Transaction Report file submitted there are two types of data validation:

- a. File Validation
- b. Content Validation

5.1 **File Validation**

5.1.1 **File Validation - Sequencing**

In the event that 'out of sequence' file processing occurs a 'reminder' process will apply.

Validation will verify compliance of the file sequencing and in the event of no discrepancies file validation as set out in section 5.1.2 will progress.

If 'out of sequence' files occurs

- a. A feedback file will be available to the Submitting Entity (after 30 minutes⁴) advising that the file will have a 'Reminder' status pending the receipt of the missing file(s).
- b. If the missing file is received within the specified timeframe (i.e. 4 hours), the validation of the 'Reminder' file(s) will proceed (see section 3.1.2).
- c. If the missing file is not received within 4 hours
 - i. the 'Reminder' files will be rejected and feedback⁵ will be provided accordingly to the Submitting Entity; and
 - ii. the Submitting Entity will then need to (a) submit the file with missing sequence number and (b) resubmit the rejected 'Reminder' files with updated sequence numbers (i.e. follow on from the last rejected file).

5.1.2 File Validation - Other

Where no sequencing errors occur file validation will progress.

- a. File validation will verify compliance of the file with the XML schema (syntax of the whole file and specific transaction reports).
- b. If the file is not compliant, the whole file (all transaction reports in the file) is rejected.

Please refer to Appendix 3 for a list of error codes that apply to Transaction Report files submitted to the Central Bank. The Central Bank has added file validation rules that are specific for its systems (associated error codes are denoted with 'IEX').

5.2 Content Validation

- a. A set of validation rules are executed for each transaction report and examine the content of specific fields.
- b. Individual transaction reports that do not pass validation are rejected.
- c. Valid transaction reports are processed in further steps.
- d. The validation rules include validations dependent on instrument reference data.

The list of content validation rules, including error codes and messages, are set out in Annex 1 of the Reporting Instructions.

5.3 Transaction Reports submitted on Trade Date

Transaction reports submitted on the same date as the trade date will be

- assigned a status of 'received' ['RCVD'] on submission date as per Section 6.3.2, paragraph 106 of the Reporting Instructions; and
- validated on T+1 after reference data for day T is received from ESMA.

See section 7.4 for further detail.

⁴ This timeframe is configurable and may be subject to change.

⁵ For submissions via ONR an email will issue to the Submitting Entity indicating that feedback is available. For submissions via the Machine to Machine Channel the Submitting Entity's system should 'poll' for possible feedback.

6.0 File Statuses and Error Codes

6.1 File Statuses

In addition to the File statuses set out in section 6.3.1 of the Reporting Instructions and summarised here:

| Statuses | Definition |
|--------------------|--|
| Accepted | MiFIR transaction reporting file has been accepted. |
| Partially Accepted | MiFIR transaction report file has been partially accepted. A number of transactions have been accepted, whereas another number of transactions have not yet been accepted. |
| Rejected | Whole MiFIR transaction reporting file has been rejected. |
| Corrupted File | MiFIR transaction reporting file is corrupt. |
| Reminder | The corresponding MiFiR transaction reporting file for the previous file sequence number has not been received. |

the following File statuses will be used by the Central Bank's systems:

| | |
|------------|--|
| Received | The file has been received and will be added to the queue for processing |
| Queued | The file is in the queue awaiting processing |
| Processing | The file is currently being processed |
| Processed | The file has been processed |

6.2 Viewing File Status

To ascertain the status of uploaded Transaction Report files Submitting Entities can:

- Access ONR and view the file status through the User Interface (UI); or
- Download associated feedback files from the Machine to Machine service in XML format.

The status of all uploaded Transaction Report files will be displayed via the ONR UI regardless of the channel used to upload them.

6.2.1 View File Status via ONR

Once a Transaction Report file is uploaded it will be possible to view its status via the ONR UI, regardless of the channel used to upload it.

This view will show:

- a. The name of the file.
- b. The name of the user that uploaded the file.
- c. The date and time that the file was uploaded.
- d. When the file is processed the date and time that processing finished.
- e. The current file status (see section 6.1 above for statuses).
- f. The channel the file was uploaded through (ONR or Machine to Machine).

6.3 Error Codes

Where the Transaction Report file status is 'Partially Accepted', 'Rejected' or 'Corrupted' the system will display a warning that there are errors associated with the file. File errors and content errors can be exported from the system (ONR channel) or downloaded (Machine to Machine channel) in a feedback file in XML format.

7.0 Feedback Process

Files that are uploaded will be added to a queue and processed as soon as possible. The length of time this takes will depend on how busy the system is at time of upload. A feedback file will be generated for each Transaction Report File submitted.

7.1 ONR

Once a file is processed, the system will send an email notification to the Submitting Entity informing them that the file is processed and what the current status is. It will not include any details other than this for security reasons. Authorised Firm Personnel from the Submitting Entity will need to access the ONR to view details of the Transaction Report files uploaded including error messages, etc.

7.2 Machine to Machine

For every submitted Transaction Report file, a 'feedback' file will be created.

This file contains details such as errors associated with the file or individual transaction reports. The Submitting Entity's systems are able to download this file through the Machine to Machine channel.

As per section 2.0 of the 'Machine to Machine Technical Specification', once the Submitting Entity has downloaded the files it should delete the files from the folders on the Central Bank's system (such files will remain available via ONR). If they are not so deleted by the Submitting Entity they will remain available for a set period, after which they will be removed by the Central Bank, i.e. Feedback Files after 14 calendar days and Statistics Files after 90 calendar days.

In the event that the Submitting Entity submits a duplicate file (i.e. duplicate file name) via Machine to Machine channel it will receive a feedback file which contains a FIL-107 error (i.e. the file has already been submitted once) for the second file submission. Additionally, the feedback file for the second file submission will replace the feedback file for the first file submission in the 'OUT' folder. (The feedback for both files will remain available via ONR.)

7.3 File Naming Convention – Feedback Files

File Naming Convention is the original filename_ with "_Feedback" appended i.e. CCCCCC_DDDDD_YYYYMMDD_NNN_Feedback.xml (for ONR) or CCCCCC_DDDDD_YYYYMMDD_NNN_Feedback.zip (for Machine to Machine)

where

- a. CCCCCC – This is the ‘C code’ used by the Submitting Entity to log into the system.
- b. DDDDD – This is an optional departmental code specific to the Submitting Entity.
- c. YYYYMMDD – This is the submission date of the file.
- d. NNN – This is an integer from 001 to 999 to uniquely identify the file.
- e. .xml - This is the file extension applied for ONR feedback
- f. .zip - This is the file extension applied for Machine to Machine Feedback

To note When unzipped the format for Machine to Machine XML feedback file is TrackingID_Feedback.xml. The Tracking ID is a 16 digit GUID and randomly generated.

Example

Tracking ID is 33c9962d-0beb-46fb-807d-36d33d439b75

Feedback will be 33c9962d-0beb-46fb-807d-36d33d439b75_Feedback.xml

7.4 ‘Received’ Transaction Reports Feedback

Further to section 5.3 above, the generation of the ‘Received’ transaction report file(s), and associated feedback file(s), will differ depending on how many transaction reports with a ‘received’ status are uploaded by a Submitting Entity each day.

7.4.1 Less than 1 million ‘Received’ transaction reports submitted in one day by Submitting Entity

Where applicable, **a single file** will be created by the Central Bank overnight for each Submitting Entity that will **contain all transactions reports** with a ‘received’ status. This ‘Received Transaction’ file will be processed the following day (after the receipt of the relevant reference data by the Central Bank from ESMA).

Following this processing (a) an email will issue and (b) a feedback file will be made available to the Submitting Entity.

The naming convention for this Received Transaction file is CCCCCC_YYYYMMDD_ReceivedTransactions.zip.

The naming convention for the associated feedback file on ONR is CCCCC_YYYYMMDD_ReceivedTransactions_Feedback.xml. The file extension for the associated feedback file on Machine to Machine is .zip. Please refer to section 7.3(f) of this document for information in this regard.

7.4.2 1 million or more ‘Received’ transaction reports submitted in one day by Submitting Entity

Different arrangements apply. If a Submitting Entity intends to submit 1 million, or more, ‘received’ transaction reports in one day, the Central Bank should be notified in advance so that the necessary technical arrangements can be pre-arranged with the Submitting Entity in advance of such submissions.

Where 1 million or more ‘received’ transaction reports are uploaded by a Submitting Entity on a particular day, a **separate Received Transactions file** will be created by the Central Bank overnight **for each file** submitted by the Submitting Entity that **contains transactions with a ‘received’ status**. (In the event that a particular file does not contain ‘received’ transaction reports no ‘received’ file will be generated for it.) These ‘Received Transaction’ files will be processed the following day (after the receipt of the relevant reference data by the Central Bank from ESMA.)

Following this processing (a) emails will issue and (b) feedback files will be made available to the Submitting Entity.

The naming convention for these Received Transaction files is CCCCCC_YYYYMMDD_ReceivedTransactions-NNN.zip.

- NNN is a sequence number starting at 001 each day and incremented by 1 for each subsequent Received Transaction file generated for the Submitting Entity.

The naming convention for the associated feedback files on ONR is CCCCCC_YYYYMMDD_ReceivedTransactions-NNN_Feedback.xml.

- NNN is a sequence number starting at 001 each day and incremented by 1 for each subsequent Received Transaction file generated for the Submitting Entity. The NNN section of the feedback file name will match the NNN in the name of the Received Transaction file created by the Central Bank overnight.
- The file extension for the associated feedback file on Machine to Machine is .zip. Please refer to section 7.3(f) of this document for information in this regard.

7.4.3 A summary of transactions reports in received status on a particular day can be accessed via the ‘Transaction Summary’ on the ONR (please refer to section 6 of the MiFIR Transaction Reporting User Procedure Document).

7.5 ‘Pending’ Transaction Reports Feedback

A file will be created by the Central Bank overnight for each Submitting Entity of all pending transactions. This Pending Transaction file will be processed the following day (after the receipt of the relevant reference data by the Central from ESMA). Following this processing (a) an email will issue and (b) a feedback file will be made available to the Submitting Entity.

It should be noted that where a transaction report goes into ‘pending’ status following validation, feedback will be provided that the transaction report is ‘pending’. Should the transaction report remain in pending on subsequent days, it will not be included in the feedback files again until the relevant transaction report has either been accepted or rejected (as its status has not changed). Please refer to the examples in section 68 of the Reporting Instructions.

A summary of transaction reports in pending status on a particular day can be accessed via the ‘Transaction Summary’ on the ONR (please refer to section 6 of the MiFIR Transaction Reporting User Procedure Document).

8.0 Cancellation of Transaction Reports

To update a transaction report, the original transaction report must be cancelled and a new transaction report submitted (refer to the Reporting Instructions).

9.0 Accessing and Retrieving Transaction Report Data in ONR

Executing and Submitting Entities will be able to view and retrieve transaction report data submitted by them or on their behalf via the ONR MiFIR Transaction Reporting UI.

Firms will be able to execute transaction report data searches based on predefined filters (e.g. trade date, transaction reference number) and the result of the search will be made available in .XML format.

The maximum timeframe for viewing and retrieving historical data, will be one year based on submission date unless otherwise stated herein.

The following options will be available to the user in ONR:

- View the processing status of uploaded Transaction Report files and download associated Feedback Files;
- View and download previously uploaded Transaction Report Files;
- Search for and download individual transactions previously submitted (transactions submitted in the last 30 calendar days will be available for selection and download, **specific arrangements apply in relation to queries relating to 500,000 or more transaction reports for a specific trade date/submitted date (please see section 9.1 below)**);
- View and download Monthly Statistics Report on the submitted transactions; and
- View and download Reconciliation Request Status.

Processing of the daily transaction report files takes precedence over query requests, thus there may be delays in responses when the system is busy and / or if the request results are very large.

Downloaded Transaction Reports File: Filename and contents will be as per the uploaded transaction report file. File format follows the standard ESMA Schema.

Downloaded Feedback Files:

Filename is the uploaded transaction report filename_Feedback; File format will be .XML.

e.g. CCCCCC_DDDDD_YYYYMMDD_NNN_Feedback.xml

Monthly Statistics Report: Filename and File format will be .XML Schema.

Reconciliation Report: Filename and File format will be .XML Schema.

9.1 Retrieving transaction report data i.e, 500,000 or more transaction reports

Where the query result returns 500,000 or more transaction reports ('high volume query') a zipped file will be generated which will contain 1 or more files.

- The naming convention of the zipped file will be xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx, where x is an alphanumeric character, e.g., abcd1ae-b373-f011-7552-00620b040452;
- The naming convention of the files therein will have _1, _2, etc., appended, e.g., ReconciliationRequest_CCCCCC_1; and
- Each of these will contain a maximum of 500,000 transaction reports.

The query results will be generated outside of business hours / overnight. Firms should await these response files before generating another query for a particular trade date or submission date.

10.0 Statistics on Submitted Transaction Reports

There are two statistical reports available in the system:

1. The daily statistics are available via Transaction Summary. This provides a view in tabular format and is updated as files are processed.
2. The monthly statistics report will include summary details on volumes of transaction report files and transaction report statuses during the previous month.

11.0 Data Security

ONR uses the Transport Layer Security ('TLS') standard protocol and the Machine to Machine channel uses the Secure Shell ('SSH') standard protocol – this ensures that both channels are encrypted end to end.

There is no further requirement to encrypt files on upload or download.

12.0 Notification of LEI and Changes to LEI

In order to use the transaction search functionality, the LEI of the relevant Submitting Entity / Executing Entity is required. This should be preadvised to the Central Bank in order that relevant system accesses are granted.

If the Submitting Entity / Executing Entity LEI code changes, please advise the Central Bank of such changes (i.e. the old code and the new code) including the effective date so that our systems can be updated.

13.0 MiFID 1 Transaction Reports

It is not possible to submit MiFID 1 data nor amend data already submitted. (It is still possible to view MiFID 1 data via the MiFID 1 ONR platform.)

14.0 Test Environments

ONR and Machine to Machine test environments are available. Accesses thereto can be arranged and Submitting Entities should complete successful testing on ONR in advance of progressing to Machine to Machine testing.

15.0 Other

Please note that these operational and technical arrangements may be updated from time to time.

Appendix 1

MiFIR Transaction Reporting

Information Required for onboarding to the Central Bank of Ireland's Online Reporting ('ONR') External Test and Production Environments for MiFIR Transaction Reporting

In order that accesses can be arranged to the Central Bank of Ireland's ONR External Test Environment and Production Environments in relation to MIFIR Transaction Reporting please provide the following information to OnlineReturns@centralbank.ie

| | |
|---|--|
| Institution Name | <i>Name of institution</i> |
| Institution Code | <i>This is your institution's 'C' Code for the Central Bank's ONR system</i> <i>Note:</i> <ul style="list-style-type: none">• <i>Firms that are currently authorised / supervised by the Central Bank will use their existing Institution Codes.</i>• <i>Firms that are not currently authorised / supervised by the Central Bank will be provided with an Institution Code.</i> |
| Access Type: | <i>Submitting Entity or Executing Entity</i> |
| Institutional LEI | <i>This is your institutions Legal Entity Identifier</i> |
| Name of Institution's Submitting Entity (where an ARM is being used) | <i>Name of ARM (if applicable)</i> |
| Admin Full Name | <i>This is / will be the administrator on the ONR system in your institution</i> |
| Admin Login | <i>This is / will be the 'user login' for the system administrator within your institution</i> |
| Administrator Contact e-mail address | <i>Administrator's e-mail address</i> |
| Set up required on Test ONR System | <i>Yes / No</i> <i>Please indicate if your institution is required to be set up on our test version of the ONR system, i.e., yes if your firm does not currently have access to the Central Bank's ONR test site.</i> |

Applicant non-Irish ARM:

| | |
|---|--|
| Institution Legal Name | |
| Institution LEI | |
| Institution Code (with Central Bank) | As a newly establishing entity this will be provided by the Central Bank |
| Authorisation Status | |
| Authorised Activities (e.g. ARM, APA,) | |
| Institution Address | |
| Admin Full Name for (Test) ONR | <i>This is / will be the administrator on the ONR system in your institution</i> |
| Institution Financial Year End | |
| Admin Login for (Test) ONR | <i>This is / will be the 'user login' for the system administrator within your institution</i> |
| Administrator Contact e-mail address | <i>Administrator's e-mail address</i> |
| | |
| Name of proposed Irish client | |

Appendix 2

MiFIR Transaction Reporting

Information Required for onboarding to the Central Bank of Ireland's Machine to Machine ('M2M') External Test and Production Environments for MiFIR Transaction Reporting

In order that accesses can be arranged to the Central Bank of Ireland's M2M External Test Environment and Production Environments in relation to MiFIR Transaction Reporting please provide the following information to OnlineReturns@centralbank.ie

| | |
|--|--|
| Institution Name | <i>Name of institution</i> |
| Institution Code | <i>This is your institution's 'C' Code for the Central Bank's ONR system</i> |
| Institutional LEI | <i>This is your institution's Legal Entity Identifier</i> |
| Institution's IP address(es) for the M2M External Test and Production Environments | <i>See section 1.4 of the M2M Technical Specification</i> |
| Institution's contact person and address to whom the Central Bank will issue the SSH keys | <i>Name of individual and address to whom Central Bank will issue letter</i> |

Appendix 3

List of Error Codes applying to MiFIR Transaction Reporting files

| Error Reference | Error Message | Corrective Action |
|------------------------|--|---|
| IEX-112 | An unhandled exception has occurred in the file processing. | Contact the Central Bank of Ireland (OnlineReturns@centralbank.ie). |
| IEX-113 | The maximum size permissible for an uploaded file is limited to 500,000 transaction reports. | Ensure that the compressed file that is being uploaded contains 500,000 transaction reports or less. |
| IEX-114 | File name does not follow the required naming convention. | Rename the file so that it follows the file naming convention. |
| IEX-115 | The file extension must be .zip and .xml within the zip. | Ensure that the file that is being uploaded has been compressed. |
| IEX-116 | You do not have the necessary permissions to perform this action. | Consult your Online Reporting Business Administrator. |
| IEX-117 | The file sequence number is higher than the next expected sequence number | Ensure that the file being uploaded is in sequence. |
| FIL-101 | The file cannot be decompressed. | Check your compression and correct the problem. |
| FIL-102 | The file contains more than 1 XML file. | Resend the files with only one XML file per Zip file. |
| FIL-103 | The name of the XML file is not consistent with the name of its container ZIP file. | Resend the file with the same name for the XML and Zip. |
| FIL-104 | The ISO 20022 Message Identifier in the BAH must refer to the latest schema approved. | Correct the Message Identifier according to the latest XSD schema. |
| FIL-105 | The file structure does not correspond to the XML schema : [result of XML validation]. | Check the result of the validation, it should correspond to formats defined in the 'MiFIR Transaction Reporting – Technical Reporting Instruments' document. |
| FIL-107 | File <Filename> has already been submitted once. | If the file has to be sent, increase the sequence number and resend the file. |
| FIL-108 | The previous version of the file has been accepted. | Only one version of a file can be accepted by the Central Bank of Ireland. If the previous version of the file has been accepted and there are changes to be made to the transactions included in the accepted version of the file, the Submitting Entity shall include those changes in a file with a new sequence number. |
| FIL-109 | The corresponding file for the previous file sequence number has not been received. | Submitting Entity should verify reasons for missing file and take corresponding action (e.g. submit the missing file with appropriate sequence number). |