Description of electronic reporting of PEF reports

1 Overview

This document describes the data structure of the survey of private equity funds (PEF) and the submission of the data to the Bank of Finland. The PEF schema files and PEF validation file referred to in the document are available on the website of the reporting system reform:https://www.suomenpankki.fi/en/statistics2/to-the-reporter/raportointijarjestelman-uudistus/ohjeet/. Reporting instructions for the PEF data collection and other material related to reporting are available on the Bank of Finland's website at https://www.suomenpankki.fi/en/statistics2/to-the-reporter/private-equity-funds/

The data for PEF reporting are generated and submitted to the Bank of Finland in accordance with the descriptions provided in this document when reporting for the first time the data for the period 2024Q03.

2 Transfer of data to the Bank of Finland

The data for PEF reporting are submitted to the Bank of Finland through the eRegulatory data collection service provided by Regnology France. The system is the same used in reporting to the FIN-FSA. Entities under the reporting obligation may either use the service themselves or authorise a reporter of their choosing to submit the data on their behalf. The eRegulatory data collection service is logged in via Suomi.fi authentication. Before logging in the data collection service, the obliged entity must authorise the reporting persons to report in the PEF data collection in the authorisation service of the Suomi.fi portal. Without an authorisation, reporting is not possible. More detailed instructions about Suomi.fi authorisations are available here.

There are three ways available for report submission:
- Reporting in a web template
- File submission as file upload (https upload)
- Direct encrypted access protocol between the company and the data collection service (SFTP Secure File Transfer Protocol).

Reporting in a web template is suitable for entities under the reporting obligation with little to report. The submission of a file as file upload is suitable for obliged entities that have a lot to report and generate the report file from their own systems. Reporting using an SFTP connection is suitable for obliged entities with a lot of reportable data or reporting they want to automate. When using the SFTP data transfer, the reporter and the data collection service establish an SFTP connection between themselves to conduct the report file transfer. To order an SFTP identifier, the reporter must contact the Bank of Finland by email at ReportingSupport(at)bof.fi.

The data are submitted in the production environment of the data collection system, in addition to which reporting can be tested in a separate test environment. The test environment and production environment will open in September 2024. The exact date will be communicated later.

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The data collection service checks the technical integrity and structural validity of submitted report files and forwards valid report files to the Bank of Finland. Erroneous reports will not be forwarded to the Bank of Finland, but automatic feedback will be given on detected errors. Any errors must be corrected and the whole report resubmitted. A file with the same name may only be submitted once. The new submission will be identified by an updated time stamp (see more about naming the report in section 3.1. File naming). The time stamp will have to be updated both in the report name and Header section.

3 Report file

The file must be in the XML format (Extensible Markup Language), and the character set used is UTF-8.

The technical format of the file is defined in the schema files and content validations. The data content is defined in the reporting instructions.

When using the manual web template for data submission, the data will be automatically in the correct format.

The following paragraphs present the naming of the file and the main aspects of the structure of the file, using examples.

3.1 File naming

The file name consists of six elements: reporter's identifier, type of reporter's identifier, frequency, survey code, reporting period and the creation date and time of the report. The separator of the elements is the underscore ("_").

Example: 12345678#001_FSAFUNDID_Q_PEF_2024-03-31_20240404104924000.XML

Meaning of the file name components:
- **Reporter's identifier: valid fund ID.** The reporter's unique identifier used in the reporting is the investment fund identifier provided by the FIN-FSA (FSAFUNDID). The identifier of an investment fund is in format <NNNNNNNN>#<NNN> if the management company is Finnish. Otherwise, the identifier is in format <NNNNNNN>#<NNN>. The reporter's identifier in the examples above is 12345678#001.
- **Type of reporter's identifier FSAFUNDID.** The identifier type used in PEF is always FSAFUNDID.
- **Frequency: Q.** In quarterly reporting, the frequency is always Q (quartal).
- **Survey code: PEF**
- **Reporting period: last day of the reference period.** The reporting period is the last day of the reportable (reference) period. Example 1 above is concerned with the data for the first quartal of 2024 (i.e., data for the period 1 January – 31 March 2024), and so the reporting period is indicated as 2024-03-31.

- **Creation date and time: <YYYY><MM><DD><HH><MM><SS>< 000> (time stamp).** Time stamp is the time when the data for the report was retrieved. It is unique for each data submission. In the case of a revision file, the time stamp will have to be replaced, since it is not possible to re-send a report with the exact same name. The data retrieval time takes the format: year + month + day + hour + minute + second + 000. The last three digits are always 000. (i.e., 17 characters, zeroes in the front where necessary).
- **Note. The elements of the file name are separated by an underscore ("_").**

3.2 Structure of this report

The structure of the XML document is defined by the PEF schema, consisting of two separate XSD files: the XSD file defining the file structure, named as PEF_1.0.xsd and the XSD file defining the data content of the file, named PEF_Types_1.0.xsd. In addition, the structure/data content is defined by content validations presented in the document PEF reporting – validation rules.

The file consists of general specifications at the beginning, one Header section and one or more so-called content sections.

3.2.1 General information

At the beginning of the report, there is a description of the XML version, character set used, schema information and description of the name universe. The schema version changes when changes are made to the PEF schema. One schema is valid on each reporting date. When revising an old report from a period with a different schema from that used on the revision date, the revision report must be based on the schema valid during the period of the report being revised (identifying the schema version by the version number of the PEFschema).

Table 1: general information

XML version	1.0
Character set used	utf-8
Schema instance	http://www.w3.org/2001/XMLSchema-instance
Schema	http://www.w3.org/2001/XMLSchema
Schema version	1.0 (version number of the PEF schema)
Definition of the name universe	xmlns="http://bof.fi/PEF"

Example: General information at the beginning of the report

```
<?xml version="1.0" encoding="utf-8"?>
<pefReport xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema" schemaVersion="1.0"
xmlns="http://bof.fi/PEF">
```

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3.2.2 Header section

The first section of the report is a Header section, which always includes the mandatory meta data to be included in the report: These are the type of management company's identifier, management company's VAT or TK code, type of reporter's identifier, reporter's FSAFUNDID code, identifier of the data collection, last date of the reporting reference period, reporting frequency, report creation date and time and possibly a comment concerning the report. The elements contained in the Header section and their more detailed explanations are provided in Table 2, *Elements contained in the Header section.*

Table 2. Elements contained in the Header section

Element name	Explanation
typeOfManagementCompanyIdentifier	Type of management company's identifier, "VAT" or "TK"
managementCompanyIdentifier	Management company's VAT or TK number in format FI<NNNNNNNN> or TK<NNNNNNN>
typeOfReporterIdentifier	Type of reporter's identifier, "FSAFUNDID"
reporterIdentifier	Reporter's fund ID in format <NNNNNNNN>#<NNN> or <NNNNNNN>#<NNN>
reporterName	Name specified in the fund's regulations
surveyCode	"PEF"
reportingPeriodEnd	Last day of the reportable month, YYYY-MM-DD
frequency	"Q"
creationDate	Creation date and time <YYYY>-<MM>-<DD>T<HH>:<MM>:<SS>
entitysComment	Possible short comment relating to the report.

Example: Header section of the 2023Q03 report

```
4   <header>
5     <typeOfManagementCompanyIdentifier>VAT</typeOfManagementCompanyIdentifier>
6     <managementCompanyIdentifier>FI12345671</managementCompanyIdentifier>
7     <typeOfReporterIdentifier>FSAFUNDID</typeOfReporterIdentifier>
8     <reporterIdentifier>12345671#001</reporterIdentifier>
9     <reporterName>testfund</reporterName>
10    <surveyCode>PEF</surveyCode>
11    <reportingPeriodEnd>2024-03-31</reportingPeriodEnd>
12    <frequency>Q</frequency>
13    <creationDate>2024-04-04T10:49:24</creationDate>
14    <entitysComment>Test</entitysComment>
15  </header>
```

3.2.3 Content sections of the report

The content sections are named in the structural part of the PEF schema file (PEF_1.0.xsd) as follows:

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- IF = ifRecords
- PEF = pefRecords

Actual data contents are reported using content elements (records), comprising if elements and pef elements. The number of the content elements is presented in the following table.

Table 3. Number of content elements/records.

Report	Content section	Number of content sections	The content section contains the following content elements/records	Number of content elements/records
Q	IF (ifRecords)*	1	if	1
	PEF (pefRecords)	0–1	pef	0 - rajoittamaton

* The content section is always mandatory

Data items (elements) contained in the content elements/records have been listed in the tables at the end of this document. They are also found in the schema file PEF_Type.xsd and PEF validation rules, which also define the details of the data types, threshold values, content requirements, value accuracies, code lists used and required formats.

3.3 Comparison of CSV and xml reports

In the CSV file, data on the reporter and reporting period as well as other general information are provided in the batch record on the 000 row at the beginning of the report. The header section of the XML report corresponds to the 000 row of the CSV report.

The actual reportable statistics i.e., individual records are reported in the CSV file as rows. For example, the corresponding data in the XML report is reported within the IF element located in the ifRecords element. Hence, each content element of the XML report (i.e. individual if- and pef -element) corresponds to an individual row in the CSV report.

If the reportable data element is not applicable to the reportable content element, the XML element concerned must be left altogether unreported. The reporting of empty XML elements is not allowed.

4 Further information

Further inquiries about the submission of the report should be sent by email at ReportingSupport(at)bof.fi. Further inquiries about the content should be sent by email at sijoitusrahastot(at)bof.fi.

APPENDIX 1: Elements contained in the content elements/records as a table

Elements contained in an IF element (IF Record)

XML element	Explanation
exchangeRate	Exchange rate
currencyOfExchangeRate	Currency of exchange rate
balanceSheetTotal	Balance sheet total
balanceSheetCurrency	Balance sheet currency
totalNumberOfUnitholders	Total number of unitholders

Elements contained in an PEF element (PEF Record)

XML element	Explanation
category	Category
contractType	Contract type
instrument	Instrument
internalIdentificationCode	Internal identification code
isinCode	ISIN code in accordance with ISO 6166
numberOfInstruments	Number of instruments
totalNominalValue	Total nominal value
nominalValueCurrency	ISO 4217 code if currency
totalMarketValueDirty	Total market value (dirty)
totalMarketValueClean	Total market value (clean)
capitalFlows	Capital flows (net)
loanLosses	Loan losses
typeOfCounterpartysIdentifier	Type of counterparty's identifier
counterpartysIdentifier	Counterparty's identifier
counterpartysName	Counterparty's name
counterpartysSector	Counterparty's sector code in accordance with Statistics Finland classification 2023
counterpartysHomeCountry	Counterparty's home country
issueDate	Issue date
maturityDate	Maturity date
typeOfIssuersIdentifier	Type of issuer's identifier
issuersIdentifier	Issuer's identifier
issuersName	Issuer's name
issuersSector	Issuer's sector code in accordance with Statistics Finland classification 2023
issuersHomeCountry	Issuer's home country