



**RECORD STRUCTURE – SURVEY ON FOREIGN
SECURITY-BASED ASSETS AND LIABILITIES OF
NONFINANCIAL CORPORATIONS, FINANCIAL
CORPORATIONS AND CENTRAL GOVERNMENT
(SAVE)**

Version 1.3 (21 November 2008)

Valid from 1 January 2009

Version	Date	Valid	Details
1.0	15 April 2008		First version
1.1	26 May 2008	From 1 June 2008 to 31 August 2008	<ul style="list-style-type: none"> • Sector code list is changed to be based on Statistics Finland 2000 sector classification • Eurostat classification list is changed to the list of International organisations • Some definitions have been made for report-level validation rules
1.2	6 August 2008	From 1 September 2008 to 31 December 2008	<ul style="list-style-type: none"> • Validation rule for SBS record field 15 changed • Some definitions have been made for validation rules of SBS record fields 31,32,34: a field must fulfil a given condition only if it is mandatory • Examples corrected
1.3	21 November 2008	From 1 January 2009	<ul style="list-style-type: none"> • Some definitions have been made for general record descriptions (paragraph 4) • Identifiers have been added to report level validation rules (paragraph 4.3) • Data provider's identifier (field 3) of batch record must be the own business ID of the data provider • Validation rules for ISIN code (field 9) of SBS record changed: validation rules for 2 first characters have been deleted • Sector field (field 39) of SBS record allows codes with length of 6 characters • Rule SAVE.SBS.R2 (paragraph 4.3) changed to include contracting party's home country (field 29)



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1 INTRODUCTION

The Bank of Finland collects data from companies, financial and insurance institutions, municipalities and the state on a monthly basis on foreign securities-based assets and liabilities. This data is used in the compilation of financial and balance of payments statistics for Finland and the euro area. The statistics are sent to EU and international institutions, of which the most important is the European Central Bank (ECB). The statistics are published for use by the public on, for example, the Internet sites of the Bank of Finland and the ECB.

The Bank of Finland's authority to obtain information is based on the following legal provisions: sections 26 and 28 of the Act on the Bank of Finland (214/1998) and Council Regulation (2533/1998, as amended by Regulation 951/2009) concerning the collection of statistical information by the European Central Bank. The ECB guideline ECB/2004/15 and ECB/2007/3 requires a security-by-security data collection method.

This document describes the record structure used in the submission of security-by-security based data by reporting institutions.

2 SUBMISSION OF DATA TO THE BANK OF FINLAND

The report sent to the Bank of Finland on a monthly basis contains a statement on foreign securities-based assets and liabilities in respect of securities with and without ISIN codes as well as on securities underlying repo and lending agreements.

The reports must be submitted to the Bank of Finland on the 15th banking day of the month following the reporting month, at the latest.

The data to be reported is described in more detail in separate reporting instructions for security holders and issuers.¹

2.1 DCS data transfer

The data is submitted by the data provider or reporting entity to the Bank of Finland using the provided DCS service (Data Collection Service). The DCS service is maintained by the service provider, ie the DCS operator.

The reporting entity is responsible for reporting the data on a monthly basis to the DCS operator. For the purposes of data transfer, it is crucial that reporting entities compile a file with record structures as presented in this document.

The DCS operator acts as an intermediary and provides a suitable technical service platform. The service provider ensures the technical integrity and correctness of the record structure and submits the validated data to the Bank of Finland.

When a correction needs to be made to a report that has already been sent, the entire report must be sent again to the DCS operator.

Separate instructions apply to reporting entities' procedures with the DCS operator.

2.2 Testing

Reporting may be tested by marking the contents of the report as test data (see batch record field 5). Test reports are sent to the operator in the usual manner. Test results are sent to the contact person indicated by the reporting entity.

2.3 Paper reports and dispatch of portable data media

The data is transferred primarily via the DCS operator. In exceptional cases, the reports may be sent using a separate portable data medium (such as CD) or on paper. These cases must be agreed on specifically with the Bank of Finland.

¹ Reporting instructions for security-by-security based data collection in the foreign assets and liabilities survey, Bank of Finland.



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A paper report may be used to report a maximum of 10 securities.

If the report is sent using portable data media, a note must be appended containing technical information on the data media. The portable data media must be protected sufficiently for mail handling purposes.

The data is only reported once, either via the DCS operator, in portable data media, or on a paper form.

3 REPORT FILE

Report files are created as CSV (Comma Separated Value) files using a semicolon as the separator.

The character set used in the file must be ISO-Latin-1 (code name ISO 8859-1).

3.1 File structure

The file consists of a *batch record* and a variable number of *content records* describing actual data to be reported. The batch record is on the first line of the file.

Record type	Record ID (field 1)
Batch record	000
Content record	SBS

3.2 Naming of file

The name of the file consists of the code identifying the survey, ie 'SAVE', the month subject to reporting and the reporting entity's business ID without hyphen.

SAVE_<YYYY><Frequency><MM><Business ID without hyphen>.CSV

Example: February 2009 SAVE report:

SAVE_2009M02_01234562.CSV

3.3 Validation of file

The DCS operator validates the correctness of the report file. Validation is conducted at file, record and field level. Validation is performed in connection with data transfer and the reporting entity is informed of possible errors without delay.

In addition, the Bank of Finland conducts its own reviews of content on validated files transmitted by the DCS operator.

4 RECORD DESCRIPTIONS

The following general rules apply to the records:

- Fields are separated from each other with a semicolon (ASCII 59). There is no semicolon after the last field of the row.
- The contents of record fields may not contain quotation marks or CR (Carriage Return) or LF (Line Feed) characters.
- Records are separated from each other with the CR-LF character pair. The CR-LF character pair is added also to the last row of the file.
- Alphanumeric fields are demarcated with quotation marks. Quotation marks are not counted in the length of the field.
- Decimals, if any, of numeric values are separated with a comma.
- Numeric fields shall only include a negative sign.

Structure	Explanation
Number(x[,y])	Indicates numeric data. The maximum length of the field is given in parentheses. The number of potential decimals is shown with a comma. The comma and data after the comma are not obligatory if they are zeros. For example format 'Number(18,2)' indicates that the field may contain a maximum of 18 characters, of which 16 are integers and 2 decimals.
Char(x)	Indicates alphanumeric data comprising a fixed number of characters. The length of the field is given in parentheses. The value of the field is given either by leaving the field empty or entering the number of characters given in parentheses.
Varchar(x)	Indicates alphanumeric data comprising a variable number of characters. The maximum length of the field is given in parentheses.

In numeric fields the zero value is an acceptable mandatory value unless there is a specific validation rule in the field requiring another figure than zero.

If there is no data to be entered in an alphanumeric field, the field can be left empty and without quotation marks.

Fields marked as 'Reserved' are left empty and without quotation marks.

If there is no data to be entered in the last fields of a record, the semicolons of last empty fields can be left out.

If more than one code list may be used for reporting data in a specific field, the value entered in the field must be found in one of the code lists provided (for example, country code can be chosen from ISO 3166 standard or Eurostat's classification).

4.1 Batch record

The batch record contains the general information on the report. The report always includes one batch report, and it is the first record in the file.

4.1.1 Fields in the record

Sequence	Field	Structure
1	Record type "000" = Batch record	Varchar(4)
2	Type of data provider's identifier Identifier type is always "Y" (from 'Y-tunnus' denoting the Finnish business ID)	Char(1)
3	Data provider's identifier Data provider's business ID without hyphen in format NNNNNNNN	Char(8)
4	Survey code SAVE = Survey on foreign securities-based assets and liabilities of nonfinancial corporations, financial corporations and central government	Varchar(5)
5	Data type N = Test file, not transmitted to the Bank of Finland T = Test file, transmitted to the Bank of Finland P = Production data	Char(1)
6	Reporting period Month subject to reporting in format <YYYY>M<MM>	Char(7)
7	Creation date and time Date and time at which report was created in format <YYYY><MM><DD><HH><MM> (= year-month-day-hour-minutes)	Char(12)
8	Number of rows Number of rows in the file including batch record	Number(10)
9	Data provider's comment Possible short comment by the reporting entity	Varchar(500)

4.1.2 Validation

In addition to right type and size, batch record fields must fulfil the following conditions.

Sequence	Field	Rule
1	Record type	Value is mandatory Value is "000"
2	Type of data provider's identifier	Value is mandatory Value is "Y"
3	Data provider's identifier	Value is mandatory Value is in format NNNNNNNN (no hyphen) Identifier is data provider's valid business ID

4	Survey code	Value is mandatory Value is SAVE
5	Data type	Value is mandatory Value is N, T or P
6	Reporting period	Value is mandatory Value is in format <YYYY>M<MM>
7	Creation date and time	Value is mandatory Value is in format <YYYY><MM><DD><HH><MM>
8	Number of rows	Value is mandatory Value equals number of rows in the report
9	Data provider's comment	

4.1.3 Example

The batch record in the example below indicates that the test report includes 1523 rows in February 2009. The test report is not transmitted to the Bank of Finland. It is used for validating the report format with the DCS operator.

```
"000";"Y";"01234562";"SAVE";"N";"2009M02";"200903021254";1523;"This is a test report."
```

The batch record in the example below indicates that the report includes 1523 rows of production data in February 2009. The report is transmitted to the Bank of Finland.

```
"000";"Y";"01234562";"SAVE";"P";"2009M02";"200903021254";1523;
```

4.2 Content record

The actual securities-based assets and liabilities, repos and lending agreements are reported in content records.

4.2.1 Content record fields

A content record includes the following fields:

Group	Sequence	Field	Code list	Structure
Record type	1	Record type SBS =Security-by-security record	1: Record type	Varchar(4)
Data on reporting institution	2	Type of reporting entity's identifier Y = Business ID	3: Identifier type	Char(1)
	3	Reporting entity's identifier Business ID of company on which data is reported, without hyphen, in format NNNNNNNN.		Varchar(20)

Classifications	4	Category Security category code for conceptual classification of security.	4: Category	Char(1)
	5	Contract type Contract type code for classifying the contract type of repo or lending agreement which is valid at the end of reporting period.	5: Contract type	Char(2)
	6	Instrument Security classification code.	6: Instrument	Varchar(5)
	7	Reserved		
Instrument identification data	8	Internal identification code Internal unchangeable code used by reporting entity for security identification. For securities with ISIN code, the same value can be entered in this field as in field 9 (ISIN code).		Varchar(100)
	9	ISIN code Security's ISIN code in accordance with ISO 6166 standard.		Char(12)
	10	Reserved		
	11	Instrument's name Security's name as known by reporting entity.		Varchar(255)
	12	Reserved		
Data on number and value	13	Number of instruments Number of individual instruments.		Number(24,6)
	14	Total nominal value Aggregated nominal value of individual security with ISIN or internal identification code. Reported in selected currency rounded to two decimal places.		Number(20,2)
	15	Nominal currency Currency code in which total nominal value is reported.	8: Currency	Char(3)
	16	Reserved		
	17	Reserved		
	18	Reserved		
	19	Total market value Aggregated nominal value of individual security with ISIN or internal identification code. Reported in selected currency rounded to two decimal places.		Number(20,2)
	20	Market currency Currency code in which market value is reported.	8: Currency	Char(3)
	21	Reserved		

	22	Reserved		
	23	Dividends Gross dividends paid to holder during the month. Reported in selected currency rounded to two decimal places.		Number(20,2)
	24	Dividend currency Currency code in which dividends are reported.	8: Currency	Char(3)
	25	Reserved		
	26	Reserved		
	27	Reserved		
	28	Reserved		
	29	Contracting party's home country Contracting party's home country in accordance with ISO 3166 standard or International organisations classification.	10: Country, ISO 3166 11: International organisations	Char(2)
	30	Reserved		
Maturity and Coupon rate	31	Maturity date Maturity date of security in format YYYYMMDD.		Char(8)
	32	Next coupon date In format YYYYMMDD.		Char(8)
	33	Coupon rate Interest paid on the nominal value specified in the bond, rounded at maximum to four decimal places.		Number (22,4)
	34	Coupon frequency Number of coupon payments per year in integers.		Number (3)
Data on issuer	35	Reserved		
	36	Reserved		
	37	Reserved		
	38	Reserved		
	39	Issuer's sector Issuer's sectoral classification code in accordance with Statistics Finland 2000 sector classification.	9: Sector	Varchar(6)
	40	Issuer's home country Issuer's home country in accordance with ISO 3166 standard or International organisations classification.	10: Country, ISO 3166 11: International organisations	Char(2)

4.2.2 Validation

This chapter sets out the technical validation rules applicable to the data reported, the fulfilment of which is validated by the DCS operator. The conditions relating to the content of the data reported are stated in the Reporting instructions for securities holders and issuers.² Their fulfilment is verified at the Bank of Finland.

In addition to right type and size, content record fields must fulfil the following conditions.

Group	Sequence	Field	Code list	Rule
Record type	1	Record type	1: Record type	Value is mandatory. Value is SBS.
	2	Type of company's identifier	3: Identifier type	Value is mandatory. Value is Y.
	3	Company's identifier		Value is mandatory. Identifier is in format NNNNNNNN (no hyphen). Identifier is a valid business ID.
Classifications	4	Category	4: Category	Value is mandatory.
	5	Contract type	5: Contract type	Value is mandatory if category (field 4) is 'R'.
	6	Instrument	6: Instrument	Value is mandatory.
	7	Reserved		
Instrument identification data	8	Internal identification code		Value is mandatory.
	9	ISIN code	10: Country, ISO 3166 12: ISIN-validation	If ISIN code is entered in this field, the code has the following structure: - Length 12 characters - Characters 1–2: Letters - Characters 3–11: Alphanumeric characters - Character 12: Verification number for purposes of "Modulus 10 Double Add Double" calculation.
	10	Reserved		
	11	Instrument's name		Value is mandatory if ISIN code (field 9) has not been entered.
	12	Reserved		
Data on number and value	13	Number of instruments		Value is mandatory if instrument (field 6) begins with a '5'. If category code is 'L' or 'R' possible value is a non-negative figure.
	14	Total nominal value		Value is mandatory if instrument (field 6) begins with a '3'.

² Reporting instructions for security-by-security based data collection in the foreign assets and liabilities survey, Bank of Finland.

				If category code is 'L' or 'R' possible value is a non-negative figure.
	15	Nominal currency	8: Currency	Value is mandatory if nominal value (field 14) is other than zero.
	16	Reserved		
	17	Reserved		
	18	Reserved		
	17	Market value		Value is mandatory. If category code is 'L' or 'R' possible value is a non-negative figure.
	18	Market currency	8: Currency	Value is mandatory.
		Reserved		
		Reserved		
	23	Dividends		Value is mandatory if instrument (field 6) begins with '51'. Possible value is a non-negative figure.
	24	Dividend currency	8: Currency	Value is mandatory if dividends (field 23) exceed zero.
Data on counterparty	25	Reserved		
	26	Reserved		
	27	Reserved		
	28	Reserved		
	29	Contracting party's home country	10: Country, ISO 3166 11: International organisations	Value is mandatory if category (field 4) is 'R'.
	30	Reserved		
Maturity and coupon rate	31	Maturity date		Value is mandatory if - ISIN code (field 9) has not been entered AND - Coupon rate (field 33) has been entered AND - Next coupon date (field 32) has not been entered. Possible value is in format YYYYMMDD.
	32	Next coupon date		Value is mandatory if - ISIN code (field 9) has not been entered AND - Coupon rate (field 33) has been entered AND - Maturity date (field 31) has not been entered. Possible value is in format YYYYMMDD.
	33	Coupon rate		Value is mandatory if - ISIN code (field 9) has not been entered AND - Instrument (field 6) begins with a '3'
	34	Coupon frequency		Value is mandatory if - ISIN code (field 9) has not been entered AND - Coupon rate (field 33) has been entered.

				Possible value is a non-negative integer.
Data on issuer	35	Reserved		
	36	Reserved		
	37	Reserved		
	38	Reserved		
	39	Issuer's sector	9: Sector	Value is mandatory if - ISIN code (field 9) has not been entered AND - Category (field 4) is 'A'.
40	Issuer's home country	10: Country, ISO 3166 11: International organisations	Value is mandatory if - ISIN code (field 9) has not been entered AND - Category (field 4) is 'A'.	

4.2.3 Example

SBS example 1: Share with an ISIN code.

Share with an ISIN code. ISIN code has been used as an internal identification code. Semicolons denoting last empty fields have been left in.

```
"SBS";"Y";"01234562";"A";"51";"FI0003021865";"FI0003021865";";;120;";";;7689,83;"GBP";";;120,10;"GBP";";";";;";;
```

SBS example 2: Security without an ISIN code.

```
"SBS";"Y";"01234562";"A";"33";"JVK1";";;"JVKABC";";;120400,1;"GBP";";;130120;"GBP";";";";;"20091231";";1,5;2;";;"12201";"SE"
```

4.3 Report-level validation rules

The following validation rules do not relate to individual rows but pertain to the report on the whole. Empty field is also considered to be a value.

Rule SAVE.SBS.R1

- The same internal identification code (field 8) has always same values in the following fields, when data is entered:
 - Instrument (field 6)
 - ISIN code (field 9)
 - Nominal currency (field 15)
 - Issuer's sector (field 39)
 - Issuer's home country (field 40).

Rule SAVE.SBS.R2

- Reporter's data on one foreign asset or liability must be reported on one row. One file can contain only one SBS-row that has same values in the following fields, when data is entered:
 - Reporting entity's identifier (field 3)
 - Category (field 4)
 - Contract type (field 5)
 - Internal identification code (field 8)
 - Contracting party's home country (field 29).