



MFI CONSOLIDATED DATA COLLECTION (KOTI) RECORD STRUCTURE

Version 1.5

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Version	Date	Validity	Changes
1.0	29 May 2009	1 June 2009	First version of record structure
1.1	11 September 2009	14 September 2009	Some concepts specified and errors corrected
1.1.1	2 October 2009	5 October 2009	Email address on page 6 corrected
1.2	4 December 2009	7 December 2009	New report-level validation rules KOTI.ALL.R1 KOTI.ALL.R2 KOTI.ALL.R3 Changes to validations of following CS record fields Transaction (field 5) BIS unit (field 6) Country code (field 10) Misspellings corrected in some record fields.
1.3	17 March 2010	1 April 2010	Changes to validations of following 000 record field: - Reporting period (field 6) Changes to validations of following CS record fields: - Transaction (field 5) - BIS unit (field 6) - Instrument (field 7) - Conversion currency (field 12) - KOTI.ALL.R3
1.4	1 July 2010	1 July 2010	Changes to validations of following CS record fields: - Transaction (field 5)
1.5	31 July 2013	1 April 2014	New BIS Stage 2 requirements added: <ul style="list-style-type: none"> • Changes to the following BS record fields: <ul style="list-style-type: none"> - Risk-weighted assets (field 12) - Tier 1 capital (field 13)



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Version	Date	Validity	Changes
			<ul style="list-style-type: none"> - Total consolidated assets (field 14) changed to <i>Consolidated balance sheet</i> • Changes to the following CS record fields (domestic claims and balance sheet liabilities are also to be reported): <ul style="list-style-type: none"> - New BIS unit “D” = Domestic branch/subsidiary or head of office (field 6) - Description of instrument “111” (cross-border claims) changed to <i>Financial claims excl. derivatives</i> (field 7) - Code for instrument “114” (derivatives) changed to “34” (field 7) - Description of instrument “115” (local claim or liability of a foreign affiliate) changed to <i>Local financial claims or liabilities (excl. derivatives) of local units</i> (field 7) - New instruments (field 7): <ul style="list-style-type: none"> “22” = Deposits “33” = Securities other than shares and equity, excluding derivatives “51” = Shares and other equity excluding investment fund shares “7” = Other assets and liabilities “81” = Other capital and reserves “82” = Fixed assets <p>Added reference to the new classification of sectors (2012)</p> <p>Validation 003 removed from CS record field 6 (BIS unit)</p> <p>Changes to the following validations on CS record:</p> <ul style="list-style-type: none"> • Field 5 (Transaction) validation 001 • Field 7 (Instrument) validation 001 • Field 7 (Instrument) validation 003 • Field 9 (Sector) validation 001



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			<ul style="list-style-type: none"> • Field 10 (Country code) validation 001 • Field 16 (Remaining maturity) validation 001 <p>New validations to CS record:</p> <ul style="list-style-type: none"> • Field 4 (Allocation of balance sheet items) validation 002 • Field 5 (Transaction) validation 003 • Field 7 (Instrument) validation 004 • Field 7 (Instrument) validation 005 • Field 9 (Sector) validation 004 • Field 10 (Country code) validation 002 • Field 12 (Conversion currency) validation 002 • Field 16 (Remaining maturity) validation 002 <p>Changes to the following validations on BS record:</p> <ul style="list-style-type: none"> • Field 12 (Risk-weighted assets) validation 001 • Field 13 (Tier 1 capital) validation 001 <p>Report-level validation KOTI.ALL.R3 removed</p> <p>Report-level validations KOTI.ASSETS.R3 and KOTI.LIABILITIES.R4 added</p>
1.5	5 September 2013	1 April 2014	New validation 003 to CS record field 10 (Country code)



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1 INTRODUCTION

This document describes the structure of records and submission of data to the Bank of Finland relating to MFI consolidated data collection (KOTI). KOTI reporting instructions and classifications are described in document INSTRUCTIONS FOR MFI STATISTICAL REPORTING.

The Bank of Finland can be contacted on questions relating to record structures and submission of data. Please direct any questions to Rahoitustilastot@bof.fi.



2 SUBMISSION OF DATA TO THE BANK OF FINLAND

KOTI data are submitted to the Bank of Finland no later than the last banking day of the month following the reference period. The data are submitted electronically using the DCS service (Data Collection Service).

2.1 DCS data transfer

Reporters submit the data to the Bank of Finland using the DCS service. The service is maintained by the service provider, ie the DCS operator. The DCS operator is Itella Information Oy.

The reporter (or alternatively the data provider) should first order a DCS service user ID via the ID order service at <https://sol.itella.net/ec/bof-tunnustilaus>. Once the ID order has been approved, the reporter will receive by post a key code card which is needed, in addition to user ID and password, for logging into the DCS system.

The DCS service is used to transmit a report file consisting of reported data as described in the record descriptions presented in this document. The file is validated at the DCS service for data content, eg the technical integrity of the data and the correctness of record field structures and contents. These checks are done as described in this document.

A validated and approved report file is transmitted to the Bank of Finland. Erroneous reports are not transmitted to the Bank of Finland; instead, the DCS service sends an error report to the data provider. Errors must be corrected and the entire report sent again via the DCS service. Correspondingly, when a correction needs to be made to a report that has already been sent, the entire report must be sent again via the DCS service.

2.2 Testing

Reporting may be tested in the DCS service's separate test environment by designating the contents of the report as test data (see batch record field 5). Test reports are sent to the operator in the usual manner and the data are validated according to this record structure.

2.3 Problem situations

As part of the DCS service, the operator provides a help desk service, Itella Information Service Desk, available 24 hours a day, 7 days a week (24/7). The Service Desk can be contacted by phone, tel. +358 204 529 348, or by email: information.fi@itella.com. Itella Information Service Desk provides advice in the following matters:



- problems with functioning of DCS service
- user IDs, passwords, key code lists
- data connection (VPN-secured FTP or SFTP)

The Bank of Finland provides advice on contents of report files and other matters, and related questions should preferably be directed to rahoitustilastot@bof.fi.

3 REPORT FILE

Report files are created as CSV (Comma Separated Value) files using semicolons as separators. The character set used in the file must be ISO Latin 9 (ISO 8859-15).

3.1 Naming of file

The name of the file is the code that identifies the survey, ie KOTI, the period subject to reporting and the reporting credit institution's business ID (8 digits, no hyphen):

KOTI_<YYYY>Q<qq>_<Reporter's business ID>.CSV.

Example: KOTI report for the first quarter of 2009 (January – March):

KOTI_2009Q01_01234562.CSV

Q refers to quarterly data.

If the reporter corrects data that have already been sent, the same file name must always be used.

The DCS operator deletes the file after processing it. If the transfer directory still contains a previous (unprocessed) file, overwriting or deletion of the previous file prevents the processing of the corrected file.

3.2 File structure

A file consist of **one** reporter's KOTI data. Each reporter's report comprises one batch record, a variable number of consolidated records (CS) and one balance sheet record (BS). Batch record is always the first record. Except for the batch record, the records can be in any order.

The following table gives the different record types:

Record	Record type (first field in the row)	Usage	Number of fields
Technical batch record	000	Technical record that begins the file	1
Content record	CS	Consolidated record	1...N
Balance sheet record	BS	Balance sheet total and other totals	1

4 RECORD DESCRIPTIONS

The following general rules apply to the fields:

- 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, CR (Carriage Return) or LF (Line Feed) characters. The CR-LF character pair is added to the last row of the file.
- Records are separated from each other with the CR-LF character pair.
- 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	Usage
Number(x[,y])	Indicates numeric data. Maximum length of the field in parentheses. Number of potential or mandatory decimals is shown with comma. The comma and following numbers are not obligatory if zero. For example, format <i>Number(18,2)</i> indicates that the field may contain a maximum of 18 characters, of which 16 integers and 2 decimals.
Char(x)	Indicates alphanumeric data of a fixed number of characters. Length of the field in parentheses. Value of the field is either empty or contains the specified number of characters.
Varchar(x)	Indicates alphanumeric data comprising a variable number of characters. Maximum length of the field in parentheses.

In numeric fields the value zero is an acceptable mandatory value unless there is a specific validation rule in the field requiring a non-zero figure. If there are no data to be entered in an alphanumeric field, the field can be left empty and



without quotation marks. Fields marked *Reserved* are left empty and without quotation marks. If there are no data to be entered in the last fields of a record, the semicolons of those fields can be omitted.

If more than one code list is mentioned in connection with a field, the value entered in the field must be from one of the code lists provided (for example, country code can be chosen from ISO 3166 country list or international organisations code list). Not all values in code lists are necessarily usable.

4.1 Batch record 000

The batch record (000 record) contains general information on the record. The report always includes one batch record, and it is the first record of the file.

4.1.1 Record fields and validations

Sequence	Field	Code list	Structure	Rule	Left-hand side	Operator	Right-hand side
01	Record type "000" = Batch record	1: Record type	Char(3)	001	Value of 000 record field 1 (Record type)	=	"000"
02	Type of data provider's identifier Valid business ID of data providers operating in Finland.	3: Type of identifier	Char(1)	001	Value of 000 record field 2 (Type of data provider's identifier)	=	Value from "Type of identifier" (code list 3)
03	Data provider's identifier Valid business ID of data providers operating in Finland without hyphen in format NNNNNNNN.		Char(8)	001 002	Value of 000 record field 3 (Data provider's identifier) IF value of 000 record field 2 (Type of data provider's identifier) is "Y", THEN value of 003 record field 3 (Data provider's identifier)	= =	Mandatory Valid business ID
04	Survey code "KOTI" = Consolidated data collection survey		Char(4)	001	Value of 000 record field 4 (Survey code)	=	"KOTI"



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Sequence	Field	Code list	Structure	Rule	Left-hand side	Operator	Right-hand side
05	Data type "N"= Test data; not transmitted to the Bank of Finland "T"= Test data, transmitted to the Bank of Finland "P"= Production data	2: Data type	Char(1)	001	Value of 000 record field 5 (Data type)	=	Value from "Data type" (code list 2)
06	Reporting period Quarter subject to reporting in format <YYYY>Q<qq>		Char(7)	001 002	Value of 000 record field 6 (Reporting period) Value of 000 record field 6 (Reporting period)	= =	In format <YYYY>Q<qq> Part of the name of file <YYYY>Q<qq> <Reporter's business ID> CSV that is in format <YYYY>Q<qq>
07	Creation date and time Date and time at which report was created in format <YYYY><MM><DD><HH><MM>		Char(12)	001	Value of 000 record field 7 (Creation date and time)	=	in format <YYYY><MM><DD><HH><MM>
08	Number of rows Number of rows in the file including batch record.		Number(7)	001	Value of 000 record field 8 (Number of rows)	=	Value must equal number of rows in the report
09	Reporter's comment Possible short comment relating to the report.		Varchar(500)				

4.1.2 Examples

The batch record in the example below indicates that the file contains a test report comprising 122 rows. The correctness of the report is validated by the DCS service but the file is not transmitted to the Bank of Finland.

"000";"Y";"12345671";"KOTI";"N";"2009Q01";"200903051234";122;"Test report"

The batch record in the example below indicates that the report includes 1523 rows of production data for the second quarter (April–June) of 2009.

"000";"Y";"12345671";"KOTI";"P";"2009Q02";"200903051234";1523

4.2 Consolidated record CS

4.2.1 Record fields and validation

Sequence	Field	Code list	Structure	Rule	Left-hand side	Operator	Right-hand side
01	Record type "CS" = Consolidated record	1: Record type	Char(4)	001	Value of CS record field 1 (Record type)	=	"CS"
02	Type of reporter's identifier Type of identifier, always "Y" = business ID	3: Type of identifier	Char(1)	001	Value of CS record field 2 (Type of reporter's identifier)	=	"Y"
03	Reporter's identifier MFI's business ID without hyphen in format NNNNNNNN		Char(8)	001	Value of CS record field 3 (Reporter's identifier)	is in format	"NNNNNNNN"
04	Allocation of balance sheet items "A" = Asset "L" = Liability "O" = Off-balance sheet item	5: Allocation of balance sheet items	Char(1)	001 002	Value of CS record field 4 (Allocation of balance sheet items) Value of CS record field 4 (Allocation of balance sheet items)	= =	Mandatory Value from "Allocation of balance sheet items" (code list 5)



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Sequence	Field	Code list	Structure	Rule	Left-hand side	Operator	Right-hand side
05	Transaction "S" = Stock "I" = Inward risk transfer "O" = Outward risk transfer	6: Transaction	Char(1)	001	IF value of record field 4 (Allocation of balance sheet items) is "A" AND value of CS record field 7 (Instrument) is "111" OR "115", THEN value of CS record field 5 (Transaction)	=	"S", "O" OR "I"
				002	OTHERWISE value of CS record field 5 (Transaction)	=	"S"
				003	Value of CS record field 5 (Transaction)	=	Value from "Transaction" (code list 6)
06	BIS unit "G" = Group "F" = Foreign branch/subsidiary "D" = Domestic branch/subsidiary or head office	26: BIS unit	Char(1)	001	Value of CS record field 6 (BIS unit)	=	Value from "BIS unit" (code list 26)
				002	IF value of record field 4 (Allocation of balance sheet items) is "O", THEN value of CS record field 6 (BIS unit)	=	"G"
07	Instrument "111" = Financial claims excl. derivatives "112" = Commitments given to a third party on behalf of a customer "113" = Irrevocable commitments given in favour of a customer "115" = Local financial claims or liabilities (excl. derivatives) of local units "22" = Deposits	8b: Instrument (KOTI)	Varchar(3)	001	IF value of CS field 4 (Allocation of balance sheet items) is "A" AND value of CS record field 6 (BIS unit) is "G", THEN value of CS record field 7 (instrument)	=	"111", "34" OR "82"
				002	IF value of CS field 4 (Allocation of balance sheet items) is "O" AND value of CS record field 6 (BIS unit) is "G", THEN value of CS record field 7 (Instrument)	=	"112" OR "113"
				003	IF value of CS record field 6 (BIS unit) is "F" OR "D", THEN value of CS record field 7 (Instrument)	=	"115"



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Sequence	Field	Code list	Structure	Rule	Left-hand side	Operator	Right-hand side
	"33" = Securities other than shares and equity, excluding derivatives "34" = Derivatives "51" = Shares and other equity excluding investment fund shares "7" = Other assets and liabilities "81" = Other capital and reserves "82" = Fixed assets			004	IF value of CS record field 4 (Allocation of balance sheet items) is "L" AND value of CS record field 6 (BIS unit) is "G", THEN value of CS record field 7 (Instrument)	=	"22", "33", "34", "51", "7" OR "81"
				005	Value of CS record field 7 (Instrument)	=	Value from "Instrument (KOTI)" (code list 8b)
08	Internal identifier Internal unchangeable code used by reporter for identification of security.		Varchar(100)				
09	Sector Sector code of counterparty to the item in accordance with Statistics Finland's Classification of Sectors 2012, without prefix "S.".	11: Sector (Statistics Finland 2012)	Varchar(6)	001	IF value of CS record field 4 (Allocation of balance sheet items) is "A" OR "O" AND value of CS record field 7 (Instrument) is "111", "112", "113", "115" OR "34", THEN value of CS record field 9 (Sector)	=	Mandatory
				002	IF value of CS record field 10 (Country code) is "FI", THEN value of CS record field 9 (Sector)	<>	1314" OR "1312"
				003	IF value of CS record field 10 (Country code) is <> "FI", THEN value of CS record field 9 (Sector)	<>	""13141" OR "13149"
				004	Value of CS record field 9 (Sector)	=	Value from "Sector (Statistics Finland 2012)" (code list 11)



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Sequence	Field	Code list	Structure	Rule	Left-hand side	Operator	Right-hand side
10	Country code Home country of item counterparty in accordance with ISO 3166 or list of international organisations.	9: Country (ISO 3166) 9b: International organisations 9c: Unknown country	Varchar(5)	001	IF value of CS record field 4 (Allocation of balance sheet items) is "A" OR "O" AND value of CS record field 7 (Instrument) is "111", "112", "113", "115" OR "34", THEN value of CS record field 10 (Country code)	=	Mandatory
				002	Value of CS record field 10 (Country code)	=	Value from "Country (ISO 3166)" (code list 9), "International organisations" (code list 9b) OR "Unknown country" (code list 9c)
				003	IF value of CS record field 4 (Allocation of balance sheet items) is "L" AND value of CS record field 7 (Instrument) is "115", THEN value of CS record field 10 (Country code)	=	Mandatory
11	Reserved			001	Value of CS record field 11	=	null
12	Conversion currency ISO 4217 code of currency from which book value (field 13) has been converted.	10: Currency (ISO 4217) 10b: Unknown currency 10c: Currency (withdrawn)	Char(3)	001	IF value of CS record field 5 (Transaction) is "S" AND value of CS record field 7 (Instrument) is "111" OR "115", THEN value of CS record field 12 (Conversion currency)	=	Mandatory
				002	Value of CS record field 12 (Conversion currency)	=	Value from "Currency (ISO 4217)" (code list 10), "Unknown currency" (code list 10b) OR "Currency (withdrawn)" (code list 10c)



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Sequence	Field	Code list	Structure	Rule	Left-hand side	Operator	Right-hand side
13	Book value Total book value of the instrument reported in EUR and rounded to two decimal places.		Number(20,2)	001	Value of CS record field 13 (Book value)	=	Mandatory
14	Book value currency ISO 4217 code of currency in which book value (field 13) is reported. Currency of value is always "EUR".	10: Currency (ISO 4217)	Char(3)	001	Value of CS record field 14 (Book value currency)	=	"EUR"
15	Reserved			001	Value of CS record field 15	=	null
16	Remaining maturity Remaining maturity of financial claims or liabilities "1" = Up to 1 year "2" = Over 1 year and up to 2 years "3" = Over 2 years	14: Remaining maturity	Char(1)	001 002	IF value of CS record field 5 (Transaction) is "S" AND value of CS record field 7 (Instrument) is "111", "115" OR "33", THEN value of CS record field 16 (Remaining maturity) Value of CS record field 16 (Remaining maturity)	= =	Mandatory Value from "Remaining maturity" (code list 14)

4.2.2 Examples

"CS";"Y";"12345671";"A";"S";"G";"111";;"11102";"JP";;"JPY";1200300,00;"EUR";"3"

"CS";"Y";"12345671";"L";"S";"G";"114";;"1221";"FI";;"EUR";2200300,00;"EUR"

4.3 Balance sheet record BS

The balance sheet record BS is used for reporting the group's balance sheet total. In addition to rules on structure and mandatoriness, the record must also fulfil the following conditions.

4.3.1 Record fields and validation

	Sequence	Field	Code list	Structure	Rule	Left-hand side	Operator	Right-hand side
Record type	01	Record type "BS" = Balance sheet record	1: Record type	Char(2)	001	Value of BS record field 1 (Record type)	=	"BS"
Data on reporter	02	Type of reporter's identifier Type of identifier, always "Y" = business ID	3: Type of identifier	Char(1)	001	Value of BS record field 2 (Type of reporter's identifier)	=	"Y"
	03	Reporter's identifier MFI's business ID without hyphen in format NNNNNNNN		Char(8)	001	Value of BS record field 3 (Reporter's identifier)	=	"NNNNNNNN"
	04	Reporting frequency	4: Reporting frequency	Char(1)	001	Value of BS record field 4 (Reporting frequency)	=	"Q"
	05	Reporter's name		Varchar (100)	001	Value of BS record field 5 (Reporter's name)	=	Mandatory
	06	Reserved			001	Value of BS record field 6	=	null
	07	Reserved			001	Value of BS record field 7	=	null
	08	Reserved			001	Value of BS record field 8	=	null
	09	Reserved			001	Value of BS record field 9	=	null
	10	Reserved			001	Value of BS record field 10	=	null
	11	Reserved			001	Value of BS record field 11	=	null
Solvency	12	Risk-weighted assets Total consolidated risk-weighted assets		Number (20,2)	001	Value of BS record field 12 (Risk-weighted assets)	≥	0,00



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	Sequence	Field	Code list	Structure	Rule	Left-hand side	Operator	Right-hand side
	13	Tier 1 capital Total consolidated Tier 1 capital		Number (20,2)	001	Value of BS record field 13 (Tier 1 capital)	≥	0,00
Consolidated balance sheet	14	Consolidated balance sheet Consolidated balance sheet total		Number (20,2)	001	Value of BS record field 14 (Consolidated balance sheet)	>	0,00

4.3.2 Examples

"BS";"Y";"12345671";"Q";"Abc";;;;;;;;;;500;100;1000;

4.4 Report-level validation rules

The following validation rules do not relate to individual fields but pertain to a combination of several fields or the report on the whole.

4.4.1 Coherency

Rule KOTI.ALL.R1:

The report file includes the records of one (1) reporter. Hence, the field Reporter's identifier (field 3) has identical value in batch and content records.

Rule KOTI.ALL.R2:

The report file must include at least both the 000 and the BS records.

Rule KOTI.ASSETS.R3: Total figure (3) calculated from the rows of the report and Consolidated balance sheet total (1) reported with BS record units may deviate (+-) EUR 5000,00.

No	Reported item	Record code	Instrument	Allocation of balance sheet items	Transaction	Fields to be summed up	Operator
1	TOTAL CONSOLIDATED ASSETS	BS		Consolidated balance sheet (field 14)			
2	Total liabilities					Book value (field 13)	=
	Deposits	CS	22	L	S	x	+
	Securities other than shares and equity, excluding derivatives	CS	33	L	S	x	+
	Derivatives	CS	34	L	S	x	+
	Shares and other equity excluding investment fund shares	CS	51	L	S	x	+
	Other liabilities	CS	7	L	S	x	+
	Other capital and reserves	CS	81	L	S	x	+
3	TOTAL CONSOLIDATED LIABILITIES					=2	=
	DIFFERENCE					=1-3	

Rule KOTI.LIABILITIES.R4: Total figure (3) calculated from the rows of the report and Consolidated balance sheet total (1) reported with BS record units may deviate (+-) EUR 5000,00.

No	Reported item	Record code	Instrument	Allocation of balance sheet items	Transaction	Fields to be summed up	Operator
1	TOTAL CONSOLIDATED LIABILITIES	BS		Consolidated balance sheet (field 14)			
2	Total assets					Book value (field 13)	=
	Financial claims (excl. derivatives)	CS	111	A	S	x	+
	Derivatives	CS	34	A	S	x	+
	Fixed assets	CS	82	A	S	x	+
3	TOTAL CONSOLIDATED ASSETS					=2	=
	DIFFERENCE					=1-3	