

## **Technical reporting guidelines**

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### **MFI statistics**

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#### **1. Introduction**

These guidelines supplement the reporting guidelines for the MFI statistics and the STINA guidelines entitled "Automated reporting". The guidelines are intended for reporters as well as technical staff involved in reporting to Danmarks Nationalbank's MFI statistics.

These guidelines describe a number of practical and technical issues concerning automated reporting to the MFI statistics. Moreover, some of the technical questions we have received so far are answered. This document is dynamic and

will be adjusted on an ongoing basis to accommodate the comments and questions received by Danmarks Nationalbank from the reporters.

## **2. STINA in brief**

### **2.1. MFI reporting via STINA**

MFI reporting is made to Danmarks Nationalbank's STINA system. The use of STINA is not discussed here, but further information on STINA, including the structure of the XML file and uploading via web service, can be found in the guidelines "Automated reporting" at Danmarks Nationalbank's website

[https://www.nationalbanken.dk/C1256B730054214F/sysOakFil/20110412%20STINA%20vejledning/\\$File/STINA\\_vejledning\\_automatiseret\\_indberetning.pdf](https://www.nationalbanken.dk/C1256B730054214F/sysOakFil/20110412%20STINA%20vejledning/$File/STINA_vejledning_automatiseret_indberetning.pdf)

### **2.2. Accessibility and monitoring of the web service**

The web service is accessible 24/7/365, but it is only monitored from 9 am to 5 pm on banking days.

### **2.3. Reporting of web service errors**

Operational errors in the web service and any reporting errors can be reported to [stina@nationalbanken.dk](mailto:stina@nationalbanken.dk).

### **2.4. The test and submit methods**

The reporter may choose between two methods for submitting data, i.e. the test method or the submit method. The test method is used if the reporting is only tested in STINA. The submit method is used for reporting that is forwarded in Danmarks Nationalbank's systems. A reporter that wishes to test the reporting in MARKOS should use the submit method and enter "no" in the field asking if the reporting is final. See also section 2.6 below and section 3.2.2 in the guidelines "Automated reporting".

### **2.5. Controls and formatting of error response**

Irrespective of whether the test or the submit method is used, the data is tested for mandatory and free fields, field length and type, and the reporter will receive – immediately after receipt – a reply from STINA with the result of the control performed, in the form of an XML file (result.xml) sent to the web service client of the reporter. See also section 3.3.in "Automated reporting".

Reporting for which the submit method has been used is forwarded in Danmarks Nationalbank's system – irrespective of whether the field "Is the reporting final?" is completed with "yes" or "no". See also section 2.6 below. Reporting for which the test method has been used is not forwarded in Danmarks Nationalbank's system.

Besides the controls mentioned above, the data submitted via the submit method is also subject to analytical and objective controls when it has entered Danmarks Nationalbank's systems.

## 2.6. Final reporting

If the submit method is used, the field "Is the reporting final (yes/no)" *must* be completed. If the reporting is final, state "yes", otherwise state "no", but Danmarks Nationalbank considers the reporting obligation to be met only after having received a report with "yes" in this field (see example 1 – the Master data sheet).

### Example 1

#### Master data - Information on the reporter

Registration number	9999
Reporting period (yyyymm)	201105
Serial number	1
Is the reporting final (Yes=ja/No=nej)	ja

#### Information on the company

Name of the company	Bank A
Street name and number	Hovedgaden 100
Postal code	9999
Postbox	
Town/city	København
Telephone number	33636363

#### Contacts

Name	Telephone number	E-mail address
A. Hansen	33636363	<a href="mailto:hansen@banka.dk">hansen@banka.dk</a>

## 3. File format

### 3.1. Codepage

To facilitate the treatment of Æ, Ø, Å and other special characters, it is important to create the XML file with the right codepage. This avoids having to convert these characters into HTML notation as &Aring;, &Oslash and &AElig. Windows-1252 must be used as the codepage for the XML file to ensure correct receipt of these characters.

### 3.2. Encoding (UTF-8, UNICODE and Windows-1252) is to be specified in the XML Header

It is important that the encoding is also stated in the header of the XML file in order to ensure that the XML interpreter uses the right encoding for decoding the file on receipt.

The encodings allowed for creating XML files for reporting are UTF-8 or UNICODE. Both must start with their respective Byte Order Mark (BOM).

### 3.3. Sheet formatting

The reports are divided into a number of sheets. Each of these sheets covers a limited area of the report in accordance with the descriptions in the guidelines. Each of these sheets include as a minimum one group of instruments for which information are provided (dimensions and data variables). There is a table in the list of codes to the guidelines which shows the relation between sheets, groups, and instruments. When creating the XML files for reporting the names of sheets and groups from this table should be used. See examples of the use of names for sheets and groups in the XML-file in the technical material.

## 4. Field formatting

### 4.1. Serial number

The reportings submitted must have consecutive serial numbers for each reporting period. Consequently, the first reporting submitted for the period in question must be number 1, and subsequent replacement reportings must be number 2, 3, etc.

For the reporting period in question, any reporting for which the test method is used must also be part of the consecutive numbering, but the number is not "used" in the STINA control. The next reporting for which the submit method is used must therefore have the serial number immediately following the latest reporting via the submit method (see example 2) even though this number has already been used for reporting via the test method.

#### Example 2

Method	Serial number
Submit	1
Submit	2
Test	3
Test	3
Submit	3
Test	4
Submit	4

After having received the reporting, Danmarks Nationalbank changes the reporter's serial numbers to a decimal point and 4 decimal places (for example, reporting no. 1 may be changed to 1.0000). The decimal places have no significance for the reporter.

### 4.2. Casing

Free casing applies to the dimension and data values in the reporting. However, in the dimension fields, Danmarks Nationalbank's system will convert small caps to all caps on receipt of the reporting. The reporter will be able to see the conversion when controlling the reporting via FREM.

In the XML file, the names of tags and attributes must be consistent with the casing as defined in the XSD file.

### **4.3. Date format**

Dates must be formatted as YYYY-MM-DD, where YYYY is the year, MM the month and DD the date. The date and month always consist of two digits. For example, 1 January must be written as 01-01. The year always consists of all four digits. As regards the Master data sheet and the Company sheet, the reporting period and any changes in the company structure are reported as YYYYMM.

### **4.4. Decimal point and thousand separator**

US notation applies to all figures in the reporting. This means that decimal numbers must be reported using a decimal point as separator. The thousand separator is not allowed.

### **4.5. Options**

The options of each dimension mean the possible outcomes that can be entered for the dimension. A distinction is drawn between:

- ◆ closed options that are consistent with the code lists in the reporting guidelines
- ◆ open options where the reporter is to enter the dimension, e.g. date or business registration number
- ◆ data variables

(see example 3 – Sheet for dimensions and data variables for holdings of securities other than derivatives).

All dimensions marked with an "X" in the reporting guidelines must be reported in accordance with the description of the dimension in question in the guidelines.

If a dimension is marked with "-" (e.g. the dimension Revaluation adjustments due to exchange-rate changes in the SupSec sheet), neither the name nor the value of the attribute should be stated in the row.

As regards closed options, all dimensions not to be specified are marked with "ZZ" in the reporting guidelines and must be reported as "ZZ". If the value of a closed option is unknown, "99" should be reported, and "ZZ" if not collected.

As regards open options, the reporting must match the code list if the dimension is unknown or not collected (e.g. "1900-01-01" for not collected date variables).

#### **4.5.1. Data variables**

As regards data variables, a numerical value ("0" is considered a value) must always be reported in the mandatory fields. If the field is not mandatory (appears from the schema file (.XSD)), and there is no value, neither the name nor the value of the attribute should be included in the row.

### Example 3

#### DIMENSIONS AND DATA VARIABLES FOR HOLDINGS OF SECURITIES OTHER THAN DERIVATIVES

DIMENSION/ DATA VARIABLE	INSTRUMENT																				DATA VARIABLES														
	ISIN-code	Internal code	Country	Currency	Sector	Industry	Group	Registered with VP Securities A/S	Issuance category	CFI code	Pooling scheme	Issued by the reporter	Conversion type	Issue date	Maturity date	Coupon frequency	Listed	Date of index value	Valuation principle	Opening balance	Net transactions	Revaluations due to exchange-rate changes	Revaluations due to price changes	Reclassifications	Closing balance	Index factor - Principal	Index factor - Coupon	Opening balance – Nominal value	Closing balance – Nominal value	Opening balance – Number of units	Closing balance – Number of units	Coupon rate – Nominal value	Dividend		
Code list	-	-	L2	L3	L4	L5	L6	L12	L24	-	L12	L12	L22	-	-	-	L12	-	L26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Column in sheet	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34		
Shares and other equity with ISIN code	X	-	-	-	-	-	X	X	-	-	X	X	-	-	-	-	-	-	X	X	X	X	X	X	X	-	-	-	-	X	X	-	-	X	
Shares and other equity without ISIN code	-	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	X	-	X	X	X	X	X	X	X	-	-	-	-	X	X	-	-	X	
Debt instruments with ISIN code	X	-	-	-	-	-	X	X	-	-	X	X	X	-	-	-	-	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-	
Debt instruments without ISIN code	-	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	-	X	-	-	

Note: Orange dimensions relate to counterparties, and green dimensions relate to instruments. Shaded instrument dimensions are open dimensions. Data variables are yellow. The column numbers refer to columns in the reporting sheet for the dimension in question.

## **5. Other questions and answers**

### **5.1. Company information, replacement reporting**

For replacement reporting, the company information must be the information applicable on the same date as the rest of the reporting, i.e. at the end of the reporting period. Consequently, the information should be changed only in case of errors in the original reporting. The information on contacts should be changed if the contacts have changed.

### **5.2. Use of web services in STINA for testing**

The guidelines "Automated reporting" mention two web services, both of which can be used for test reporting.