

## **STINA user guidelines**

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### **Spreadsheet solution**

#### **Contents**

Introduction.....	1
1. Starting up electronic reporting.....	2
Installation of extra programs .....	2
Requirements for setup of Excel and communication with the Internet ..	3
Opening the spreadsheet from the CD-ROM.....	3
Downloading the spreadsheet from the Internet .....	5
2. The first report.....	5
3. Transmission of the report to Danmarks Nationalbank .....	6
Automatic transmission.....	6
Manual transmission (Manual Upload).....	7
Evaluation at Danmarks Nationalbank.....	7
4. Description of copy/paste.....	7
5. The menu item "Danmarks Nationalbank" .....	8
Transfer end of month/year to beginning of next month/year .....	8
Add rows .....	9
Delete rows.....	9
Transmit report.....	9
Save as XML .....	9
Import > Read XML file .....	10
Import > Read result file .....	10
Import > Import XML file.....	10
Import > Undo XML import .....	10
Import > Import text file.....	11
Import > Undo import text file.....	11
Setup.....	11
6. Further information .....	13

#### **Introduction**

The user guidelines are intended for staff within enterprises reporting to Danmarks Nationalbank via STINA's spreadsheet solution.

Data can be entered manually, pasted via Windows ordinary copy/paste or read as comma separated (CSV) or XML files. The guidelines describe the

process step by step. The spreadsheet solution is developed for up to 2,000 rows in each reporting form, but the total number of possible rows in the file depends on the capacity of your PC. For larger data quantities, you should consider automated reporting.

### **1. Starting up electronic reporting**

Before you can report via STINA, you must first install up to 4 extra programs<sup>1</sup> from Microsoft on your PC. These can all be found on the CD-ROM and at Danmarks Nationalbank's website<sup>2</sup>. Follow the detailed descriptions on the next couple of pages and carry out what is necessary for your local platform.

All the user guidelines referred to can also be found on the CD-ROM and at Danmarks Nationalbank's website.

Filling in, saving and transmitting the actual report are described in the following sections.

However, please note that if your PC is re-installed or replaced, or if you borrow a colleague's PC for reporting purposes, the procedures in this section must be repeated.

Also please note that during the installation process the spreadsheet is adapted to the individual characteristics of the PC. Therefore it is not possible to move the spreadsheet from one PC to another, unless the PCs have identical versions of Windows, Excel and extra programs. Instead you should use the spreadsheet from the CD-ROM or from Danmarks Nationalbank's website.

#### ***Installation of extra programs***

The following extra programs must be installed on your PC if the spreadsheet is to include all STINA functionalities:

- ◆ Microsoft Soap-toolkit, version 2.0 (the files MsSOAPLib.dll and WsdlGenlib.dll)
- ◆ Microsoft Scripting Host, version 5.6 (the file VPScript\_regExp)
- ◆ Microsoft MS XML version 4.0 or 5.0 (the file MsXML2)
- ◆ (VB 6.0 Runtime, if your operating system is Windows 98 (the file MsForms)).

The functionality of the individual extra programs are described in the table:

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<sup>1</sup> We recommend that you contact your IT unit about "Installation of extra programs" and "Requirements for setup of Excel and communication with the Internet".

<sup>2</sup> [www.nationalbanken.dk](http://www.nationalbanken.dk) under Rules > Statistics – Electronic reporting (STINA) > STINA ver. 2.0.

<b>Program</b>	<b>Function</b>
MsSOAPLib WsdGenLib	Both programs are part of the <b>SOAP Toolkit</b> which is necessary to send a report from the spreadsheet directly to Danmarks Nationalbank. This functionality makes the reporting easier. Is not mandatory. Instead of automatic transmission of reports you can use Manuel Upload (cf. <u>User guidelines for Manual Upload</u> ").
VBScript_RegExp	<b>Scripting Host</b> is used to do format control of digits and text before transmission to Danmarks Nationalbank. Is not mandatory, since the format control is also done when the report is received by Danmarks Nationalbank, but then errors are not so easily corrected.
MsXML2	<b>MSXML2</b> is used to make XML-files. <i>Mandatory.</i> Without the program the spreadsheet will not function correctly. MsXML2 have been part of Internet Explorer since version 4.01 and is found on most PCs. The spreadsheet can use all version of MsXML2 from 4.0
MsForms	Part of <b>Visual Basic Runtime</b> . <i>Mandatory.</i> Has been part of Windows since Windows Me and Windows 2000.

How to determine which programs are already installed on the PC, please refer to section 4 under "Setup", page 11.

For further details, see "User guidelines for installation of extra programs for the spreadsheet solution".

### ***Requirements for setup of Excel and communication with the Internet***

If your Excel has high security level (Tools, Macro, Security, Security Level), the level must be altered to Medium. If this is not possible the spreadsheet template must be installed with macros in another way. It is a precondition for the functioning of the spreadsheet that the macros are active. If the Excel menu line does not contain the item "Danmarks Nationalbank", the macros are not installed with the spreadsheet.

Is your Excel version XP or 2003, you must select Tools, Macro, Security, Trusted Sources and tick "Trust access to Visual Basic Project".

If your enterprise has a proxy server communicating with the Internet, the proxy server must be defined in the spreadsheet, cf. section 4 under "Setup", page 11.

### ***Opening the spreadsheet from the CD-ROM***

1. Create a special folder for storing STINA spreadsheets regardless of the type of report, in the following *spreadsheet folder*. If you do not enter anything, the spreadsheet will suggest C:\Nationalbanken as default. You may prefer to place the folders on a network drive, so that they can be shared by several PCs.
2. Under this folder, create folders for each of the report types to which you send information. The folders will contain copies of all the reports

you send to Danmarks Nationalbank; in the following the *report folders*. If you do not enter a folder name, the spreadsheet will suggest the technical name of the relevant report type. If your enterprise is to report to both Balance of payments (BOP) and Balance of payments and external debt (IIPM), two folders are created:

C:\Nationalbanken\BOP

C:\Nationalbanken\IIPM

3. Place the CD-ROM containing the reporting material in the drive, open Explorer and find the spreadsheet on D:\Excel-based reporting\<report name of statistics> (where D: is the CD-ROM drive on your PC).
4. Copy the spreadsheet to the spreadsheet folder, e.g. C:\Nationalbanken.
5. Launch Excel and select "Tools", "Macro", "Security". On the first tab "Security level" adjust the security level to Medium. On the next tab "Trusted Sources", make sure there is a tick in both "All add-on programs and templates are safe" and "Trust access to Visual Basic Project". Close the dialogue box.
6. Open the spreadsheet from the spreadsheet folder, e.g. C:\Nationalbanken. Select **Yes** if asked whether to open the template with macros. If the macros are not activated, the spreadsheet will not function as intended.
7. On the Excel menu line select "Danmarks Nationalbank", "Setup". Type the path to the report folder you created earlier, in "Full path to report file" (e.g. C:\Nationalbanken\BOP\). The report is automatically saved in this folder immediately before it is transmitted to Danmarks Nationalbank.
8. Press the "Test" button.  
In a window to the right, a list will specify which of the extra programs are already installed on the PC and which are not.  
Take a look in the table on page 4 and decide which programs you want to install.
9. Close Excel and install the programs.
10. Reboot the PC.
11. Launch Excel and open the STINA spreadsheet again.
12. On the Excel menu line select "Danmarks Nationalbank", "Setup".
13. If your enterprise uses a proxy server to communicate with the Internet, the proxy server must be defined under "Proxy setup". The definitions and check of the setup is described in section "4. The menu item "Danmarks Nationalbank"", "Setup", page 11.
14. Press "Test" again. If the answer is OK the installation of the spreadsheet is in order. If the answer is a ! and an error message the problem must be remedied before any report can be transmitted to Danmarks Nationalbank. Normally, communication problems must be dealt with by your IT unit. You are always welcome to contact STINA Helpdesk (+45 3363 6814) where we might be able to help you.

15. Save an empty version of the STINA spreadsheet, which you can start from when creating a new report. Select "File", "Save As..." and save the spreadsheet in the spreadsheet folder (e.g. C:\Nationalbanken). Close the spreadsheet. We *recommend* that you keep the file name from the CD-ROM as it states the version you use. Once the spreadsheet is saved we suggest that you activate write protection in order to avoid unintentional modifications.

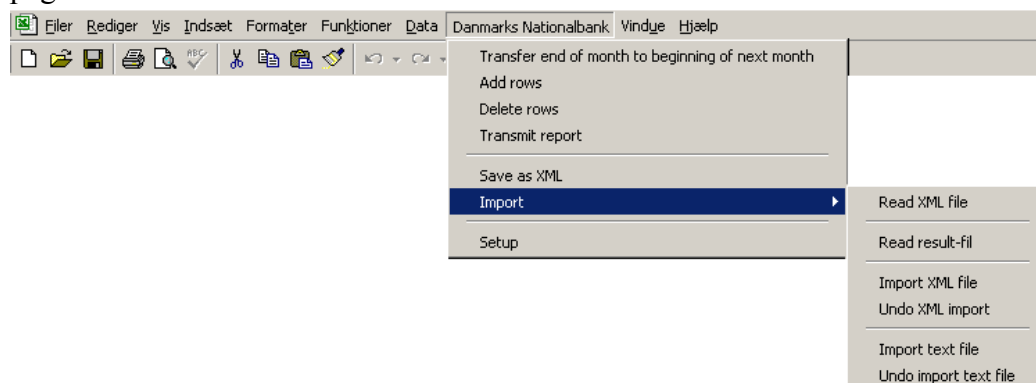
### ***Downloading the spreadsheet from the Internet***

1. Create the spreadsheet folder and the report folders as outlined in item 1 and 2 above.
2. Go to Danmarks Nationalbank's website, [www.nationalbanken.dk](http://www.nationalbanken.dk)
3. Click "English".
4. Click "Rules" > "Statistics – Electronic reporting (STINA)" > "STINA ver. 2.0" > "Reporting material" and the name of the report, the material of which you need.
5. Right-click on the link "Excel reporting spreadsheet for [reporting name]" and select "Save target as". In the dialogue box find the spreadsheet folder you created earlier (e.g. C:\Nationalbanken) and save the spreadsheet there.
6. Please note that it may take some time to download a template, depending on your Internet connection.
7. Continue with item 5 above under "Opening the spreadsheet from the CD-ROM".

### ***The first report***

1. Open the empty spreadsheet template you saved on your PC, cf. item 15 above. Remember to *activate* the macros.
2. Enter the relevant data in the sheets. For each field, a defined format is specified which must be complied with (e.g. a date format). For further details about the data to be entered, see the guidelines for the relevant reporting.
3. Please note that help will be displayed if you let the mouse pointer hover over the spreadsheet fields with red comments.
4. You can copy from your own spreadsheets to the STINA spreadsheet using the ordinary Windows copy-and-paste functions. The functionality of copy/paste has been enhanced for spreadsheets issued as from September 2005. Among other things new lines are automatically inserted when needed, and the paste function also takes into account fields in the report form that have been blocked for entry. Please refer to section 3.

- On the Excel menu line you find the item "Danmarks Nationalbank" under which are a number of features that you must use when filling in, saving and transmitting a report. For further description, see section 4, page 8.



- Please note that the reporting period must match the month/year *for* which you are reporting, not the month/year *in* which you are reporting.
- Always start a new reporting period with the serial number 1.* It is important that you do not change the serial number, except for setting it at 1 for the first report for the month/year. The spreadsheet automatically increases the serial number if required.
- When working with the report, you can save it to the report folder and later retrieve it for further work. After entering the data, you can save the report as an XML file via the menu line "Danmarks Nationalbank", "Save as XML". The spreadsheet will suggest a name based on the principle: report type\_cvr-no\_reporting period\_serial number (e.g. BOP\_61092919\_200501\_01.xml). This corresponds to the default name which is used when the report is transmitted to Danmarks Nationalbank. We *recommend* that you do not change the name.

## 2. Transmission of the report to Danmarks Nationalbank

### *Automatic transmission*

When all data have been entered, the report must be transmitted to Danmarks Nationalbank. If you have installed the Soap Toolkit and the communication test was OK this can be done from the spreadsheet itself. If the test was unsuccessful you must use Manual Upload.

- On the menu line select "Danmarks Nationalbank", "Transmit report". A copy of the report is automatically saved in XML format to the report folder with the same name as suggested above.
- The report is validated, and a moment later you will receive a response from Danmarks Nationalbank.
- If the message in the displayed dialogue box is "The report contained 0 errors", it has been received and registered by Danmarks Nationalbank.
- If the message in the dialogue box is "The report contained x errors", you can press either the "Export to spreadsheet" button, which inserts

the error list as the last sheet on your spreadsheet, or the "Print" button to print out the error list.

5. Correct the errors indicated in the error list. The sheets and fields where they were found are indicated. In addition, the individual fields have been highlighted in red, and the error description is displayed if you let the mouse pointer hover over the field.
6. When the errors have been corrected, repeat from item 1 until you get the result in item 3.

### ***Manual transmission (Manual Upload)***

If the communication test was unsuccessful during the installation, cf. page 4, you must use Manuel Upload to transmit the report to Danmarks Nationalbank. This is described in a separate user guideline. Below you will find only the principal steps.

1. In the Excel menu line select "Danmarks Nationalbank", "Save as XML". Save the report as a suggested by the spreadsheet.
2. Open Internet Explorer and enter in the address line: <https://stina.nationalbanken.dk/upload/>. By pressing the "Gennemse" (View) button, find the XML file you just saved. Press "Send".
3. The report is validated, and a moment later you will receive a response from Danmarks Nationalbank on the same webpage.
4. If the message is "The report contained 0 errors", it has been received and registered by Danmarks Nationalbank.
5. If the message is "The report contained x errors", you must go back to the spreadsheet and correct the errors.
6. Correct the errors indicated in the error list. The sheets and fields with error are indicated.
7. When the errors have been corrected, repeat from item 1 until you get the result in item 3.

### ***Evaluation at Danmarks Nationalbank***

When Danmarks Nationalbank has received and registered the report, it is reviewed for major deviations and changes in relation to previous month/years. If we have any queries, you will be contacted.

### **3. Description of copy/paste**

You can copy and paste data from other spreadsheets or data sources to the STINA spreadsheet.

*Copying* of data is the same as for normal Excel spreadsheets.

*Pasting* always starts in the entry field you have selected and continues on the lines below, inserting new lines as necessary.

Pasting operates only on a single group of rows. A group in this case is a number of rows with the same text in the first column.

Pasting of data is a little different from normal spreadsheets, as paste in STINA spreadsheets *automatically* inserts new lines if you try to paste more lines than can fit into a single group on the spreadsheet. Please note that all lines to be pasted must belong to the same group. Moreover data is only pasted into entry fields (white an light grey). If you try to paste data into blocked fields the value that you try to insert is ignored.

Example of "Paste" function:

This is the spreadsheet we want to populate (not in English at present)

	ISO-landekode	Primo regnskabsåret	Ultimo regnskabsåret	Afkast	Fritekst
Individuelle hensættelser (brutto)					

with data from the following spreadsheet

	A	B	C	D	E
1	US	7.500.000	5.000.000	Bliver ikke sat ind	En kommentar
2	DE	3.500.000	2.900.000	Bliver ikke sat ind	En kommentar

Select the column "ISO-landekode" (ISO country code) and paste data. The spreadsheet will look like this:

	ISO-landekode	Primo regnskabsåret	Ultimo regnskabsåret	Afkast	Fritekst
Individuelle hensættelser (brutto)	US	7.500.000	5.000.000		En kommentar
Individuelle hensættelser (brutto)	DE	3.500.000	2.900.000		En kommentar

You may notice that a new line has been added, and the fields D1 and D2 from the spreadsheet copied from are ignored as the column "Afkast" is blocked for entry.

#### 4. The menu item "Danmarks Nationalbank"

Under this menu item you will find a number of features to be used when filling in, saving and transmitting a report.

##### *Transfer end of month/year to beginning of next month/year*

This menu item is used to prepare a new reporting period by moving all relevant information from the report of the preceding month/year to the new month/year's report, i.e. the fields where the content does not normally change from one reporting period to the next. The positions at the end of the preceding reporting period are entered as positions at the beginning of the new reporting period.

Open the empty spreadsheet template. To begin with, you read in the preceding month/year's XML file by selecting "Import", "Read XML file". Then select "Transfer end of month/year to beginning of next month/year". The feature automatically creates the necessary number and types of rows that existed in the report for the preceding month/year.

You should avoid combining "Transfer end of month/year to beginning of next month/year" with the features "Import", "Import XML file" and "Import text file" respectively, since the features *add* the number of rows contained in the files to the number of rows already existing in your new reporting spreadsheet.

### ***Add rows***

Is used for inserting more rows in a group on the spreadsheet. A group is rows with identical text in the first column. The number of rows to add is up to you.

Before the menu item is activated, an entry field (white) must be selected in the group where the rows are to be inserted. The rows are inserted below the position of the cursor.

### ***Delete rows***

Removes one or more selected rows. Only rows within the same group can be deleted. A group is rows with identical text in the first column.

Before the menu item is activated, an entry field (white) must be selected in the row to be deleted. If you want to delete several rows in the same group, highlight the entry fields downwards.

### ***Transmit report***

Saves the spreadsheet content as an XML file and automatically transmits it to Danmarks Nationalbank via the Internet. Shortly afterwards you will receive a file with the result of Danmarks Nationalbank's evaluation of the report.

A copy of the transmitted report is saved automatically to the report folder with the name based on report type\_cvr-no\_reporting period\_serial number (e.g. BOP\_61092919\_200501\_1.xml). The answer from Danmarks Nationalbank is saved as result.xml in the same folder. The result file is overwritten during the next transmission.

This menu item opens a dialogue box displaying status and error messages on a current basis. When it reads "Error list complete" in the box, you can insert the text from the box as the last sheet on the spreadsheet by pressing the "Export to spreadsheet" button, or you can print the text by pressing the "Print" button. This may make it easier for you to find the errors in the spreadsheet. In addition, the individual fields on the sheets containing errors are coloured red, and the error description is automatically displayed if you let the mouse pointer hover over the field.

### ***Save as XML***

Saves the spreadsheet content as an XML file which can then be read into the spreadsheet from the "Import" > "Read XML file" menu item. The struc-

ture of this XML file is the same as in the file created when you transmit to Danmarks Nationalbank.

#### ***Import > Read XML file***

The menu item is used primarily in combination with the feature "Transfer end of month/year to beginning of next month/year", cf. above, or with reading in a result file, cf. below.

Reads in an XML file to the spreadsheet. When the file is read, the spreadsheet content is cleared, and the XML file replaces the previous content. If you need to add anything to the existing content of the spreadsheet, use the "Import XML file" menu item instead.

The XML file must be formatted in the same way as the XML file reported to Danmarks Nationalbank. It may be generated on the basis of a spreadsheet template using the "Save as XML" menu item or by retrieval as described in the material on automated reporting.

#### ***Import > Read result file***

Reads in a result file (result.xml). The file contains the result of Danmarks Nationalbank's controls of the report. The file is used in connection with the automatic reports to generate error lists and to colour red the fields containing errors.

It is vital that the spreadsheet contains the exact same data as when the result file was generated. Otherwise it will not be possible to produce a correct error list, and the error markings will be displayed in the wrong fields.

This menu item is used as part of the transmission function Manual Upload, cf. the separate user guidelines.

#### ***Import > Import XML file***

Reads in an XML file without deleting the existing content of the spreadsheet. Therefore, the menu item can be used to import data from several separate XML files. The import feature automatically adds the necessary number of rows to the spreadsheet and can import data to several groups and form sheets at the same time.

As mentioned under the "Import" > "Read XML file" menu item, the XML file must be formatted as the report file for Danmarks Nationalbank. Please note that the XML file is added to the spreadsheet's existing rows. This means that no test is performed to see whether the same data have been imported previously.

#### ***Import > Undo XML import***

Immediately after having used "Import XML file" you can undo the import and remove all rows added.

### ***Import > Import text file***

This feature is used to import comma- and semicolon-separated (CSV) files.

On the sheet, select any field in the row where the text-file data are to be imported. Then select the menu item and the file to be imported.

Data can only be imported to one group on a sheet at a time, and for each line in the file the number of fields must be equal to the number of open cells in a spreadsheet row. Data are imported into new rows added after the already completed rows in the group. If there are fewer fields on a line in the text file than open cells in a row on the spreadsheet, no data will be imported in the last cells, and the import will continue in a new row in the spreadsheet for each line in the text file. Similarly surplus fields in the text file are discarded if there are more fields in the text file than open cells in a row on the spreadsheet.

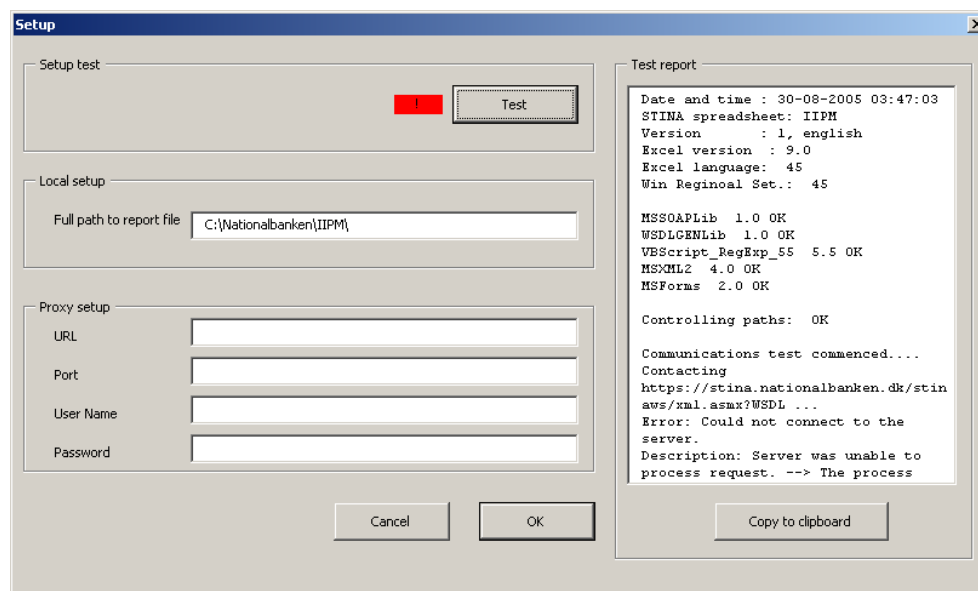
If the import looks incorrect, you can undo the imported rows by selecting "Import", "Undo import text file".

### ***Import > Undo import text file***

Immediately after having used "Import text file" you can undo the import and remove all new rows added.

### ***Setup***

This feature is primarily used when installing the spreadsheet for the first time, or if your enterprise makes changes in your platform.



### ***Setup test***

By pressing the "Test" button it is checked:

- ◆ which extra programs are installed on the PC,
- ◆ if the path name to the report file is indicated correctly under "Local setup", and
- ◆ if you have read and write access to the drive and the folder,
- ◆ if the spreadsheet can communicate with the IT-systems at Danmarks Nationalbank.

If an OK is shown to the left of the button, the information is in order. An ! shown in the same position indicates errors. Normally, your IT unit will have to deal with communication problems. You are always welcome to contact STINA Helpdesk (+45 3363 6814) where we can probably help you.

Below an example of a report from the setup test:

```
Date and time : 23-08-2005 07:00:24
STINA spreadsheet: IIPM
Version      : 1, english
Excel version : 11.0
Excel language: 45
Win Reginoal Set.: 45
```

The first part states a number of useful status informations, mainly for diagnostic purposes.

```
MSSOAPLib 1.0 OK
WSDLGENLib not installed
VBScript_RegExp_55 5.5 OK
MSXML2 4.0 OK
MSForms 2.0 OK
```

The second part shows which extra programs are installed on the pc. The example is derived from a new installation of Windows XP with Service pack 2 and Excel 2003. All the necessary extra programs are already installed on the PC as part of Windows XP, except WSDLGENLIB (part of the Soap Toolkit).

Controlling paths: OK

The third part shows that the path to the report folder is correct and that the user has full access to that folder.

```
Communications test commenced....
Contacting http://dnbop01/stinaws/xml.asmx?WSDL ...
Error: SOAP initialization failed
Description: WSDLReader:Loading of the WSDL file failed HRESULT=0x80070057 -
WSDLReader:XML Parser failed at linenumber 0, lineposition 0, reason is: The system could not find the required resource.
HRESULT=0x1
```

The last part is the communications test, which in this case fails, because the Soap Toolkit was not installed.

### *Local setup*

Indicate the path to the report folder. The report is automatically saved in this folder immediately before it is transmitted to Danmarks Nationalbank. The result of the automatic controls is automatically saved to a file "result.xml". This file is overwritten next time you report to Danmarks Nationalbank.

The default path suggested by Danmarks Nationalbank is C:\Nationalbanken\<reporting name>. If during the installation of the spreadsheet you created another folder structure, this must be entered here.

The above-mentioned path is suggested automatically when the menu item "Save as XML" is selected.

### *Proxy setup*

If your enterprise uses a proxy server<sup>3</sup> the spreadsheet will need some basic information for connecting to Danmarks Nationalbank. If you are not sure whether your enterprise uses a proxy server, please contact your IT unit.

The unit will also be able to enter the necessary values:

- ◆ URL: The network address of the proxy server can be an IP address or a server name.
- ◆ Port: The port is an interface for communicating with the proxy server – it is a number between 0 and 65535.
- ◆ User Name: The account name to logon to the proxy server.
- ◆ Password: The password for the account.

The User name and Password values can be left blank if no authentication is needed.

The spreadsheet is only able to use basic authentication. If your enterprise uses a proxy server with relies on integrated Microsoft Authentication (NTLM), the spreadsheet can not transmit the report to Danmarks Nationalbank. In this case we recommend that the enterprise uses the spreadsheet transmission function "Manual Upload" or uses STINA Online instead.

## **5. Further information**

The information on the spreadsheet features, reporting guidelines and control rules can be found at [www.nationalbanken.dk](http://www.nationalbanken.dk) under Rules > Statistics – Electronic reporting (STINA) > STINA ver. 2.0. Here you will also find country and currency codes.

You are also welcome to contact the STINA Helpdesk at +45 3363 6814 or by e-mail to [stina@nationalbanken.dk](mailto:stina@nationalbanken.dk).

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<sup>3</sup> A proxy server is a computer network service which allows clients to make indirect network connections to other network services. A client connects to the proxy server, then requests a connection, file, or other resource available on a different server. The proxy provides the resource, possibly by connecting to the specified server, or by serving it from a cache. In some cases, the proxy may alter the client's request or the server's response for various purposes. A common proxy application is a caching Web proxy. This provides a nearby cache of Web pages and files available on remote Web servers, allowing local network clients to access them more quickly or reliably.