**NADABAS**


**National Account Data Base System**


**Version 2.1**


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# Users Guide

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# Contents

# National Account Data Base System (NADABAS)

This is a short description of an Excel add-in that allows for a flexible interaction between a series of Excel Spreadsheets and a Microsoft Access database. It is designed with a system for National Accounts in mind.

The intension is that all links between spreadsheets should be avoided and replaced by links through a database. Any sheet may publish data (by saving them in the database) that can then be obtained by other sheets.

This guide covers the functions that all users of the system can utilize.

For more information about the system, you are referred to the following guides
- The Developers Guide contains the information needed to setup the system and create the Excel workbooks that will be the actual system of National Account.
- The Administrators Guide contains information for administrators about how to do day to day administration of the system.
- The Installation Guide covers the installation of the system.

# A short introduction

A workbook that is part of the system contains a number of hidden worksheet that defines the relation between this workbook and the database.

A workbook may save data to the database, load data from the database or both. In order for the system to work properly each cell in the database must have a unique identifier. This identifier will be based on a number of classifications. For instance a figure may be about a certain product for a certain year according to a specific concept and a specific transaction. In this case the identifier will be composed from product code, code for year, code for concept and code for transaction. The system will normally have a number of different Key Families, where each key family determine the number of classifiers used for the cells belonging to the Key Family. There could a Key Family for products, another for sectors etc.

Any value in the database should be saved from one workbook only to ensure the consistency of the system. It may be loaded from any number of workbooks. You may get information from the system on the origin (and definition) of a certain cell and the links established through the database, both on the level of a specific cell or the entire workbook.

When the system is installed, the menu item Nadabas is added to the Excel menu. You use this menu to invoke the system.

Nadabas will also provide a special menu for opening all the workbooks belonging to the system. The workbooks can be divided into a number of groups and each workbook may have a short description attached to make it easier to navigate the system and to ensure that you are opening the correct workbook. Even if you my open a workbook using the Open File from Excel, it is recommended to use the menu to ensure you get a workbook that is properly linked with the system.

You may be provided with a special Excel workbook that is used as a common entry to the system by providing access to the Nadabas menu.

Documents related to the system may also be accessed though the menu. It may be Word documents, other Excel files etc. This allows for easy access to supplementary information.

Finally the system includes a system for sending and receiving messages related to the content of a cell (within the scope of the database). This enables a user of certain cells to initiate a conversation with the creator of the cell if the content seems to be problematic.

# The Menu

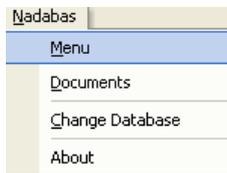When the Startbook is loaded the following menu is available



Figure 1

'**Menu'** allows you to open a workbook within the system.

'**Documents'** allows you to open documents.

'**Change database'** provides an option to select a database. The function is intended for the administrator only and will normally be protected by a password. For further information refer to administrators guide.

**About** will display information about the system including version information like



Figure 2

It should be noted, that if you are using the Startup workbook, the system will test that you are actually have the current version of the Nadabas system running. In case you are not a warning message will appear.
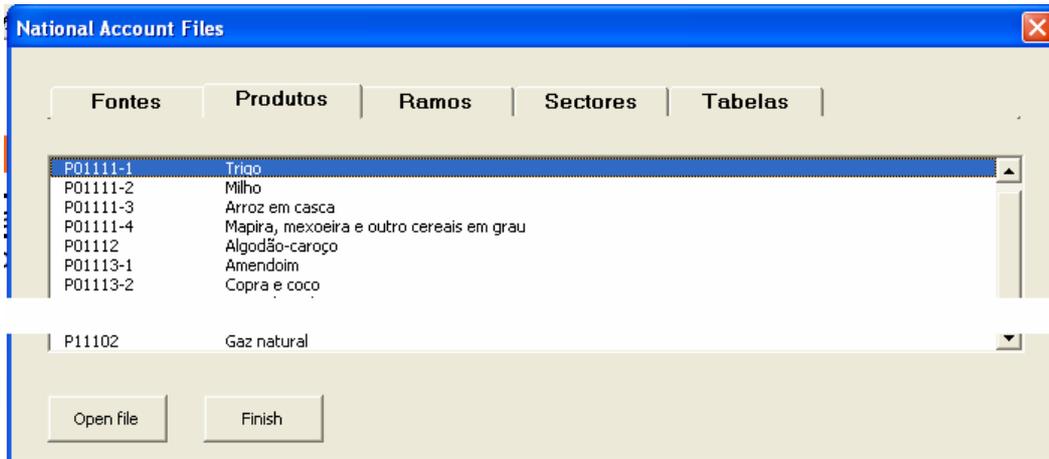
## Using Menu



Figure 3

**Menu** is only available if the Administrator has set up the system to use the Menu.

The files are normally divided into group as in Figure 3.

Click on the group where the file you want to open is located, and then select open file. Or simply double click on the file. The workbook will then be opened.

Workbooks may be protected in a way that not all users may edit any workbook. If you open a workbook for which you are not having authorization it will open in read only mode.

Access to workbooks may be restricted to certain operators. In case you are not authorised for a workbook, you will only be allowed to open it as read-only. If you need to open a workbook for update and do not have the rights contact your administrator.

## Documents

**Documents** is only available if any documents has been stored in the system.

**Documents** can be general documents or they can be associated with a group (from the Menu, see above) or even with a single file.

When you press **Documents**, you are presented with those documents that are associated with the currently active file, its group and general documents. If you are currently in the Startup workbook, on general documents are shown.

Click on the group where the document you want to open is located, and then select open f. Or simply double click on the document. The workbook will then be opened.
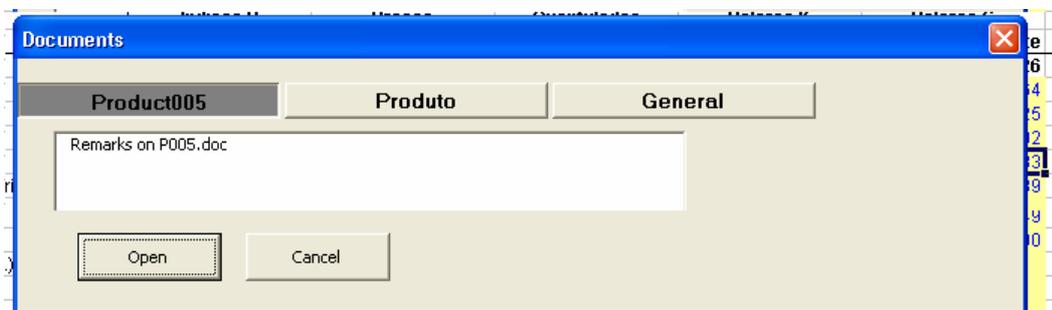


Figure 4

# Workbooks and Nadabas

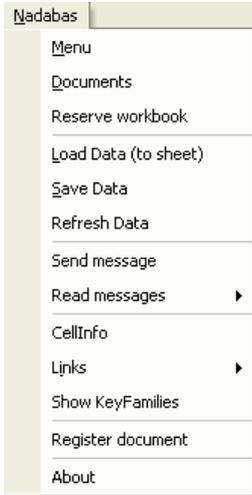When a workbook is open the menu changes as in Figure 5



Figure 5

Depending on the type of the workbook and the status of the workbook, some of the items may not be shown or not be available, i.e. if the workbook is not loading any data, then Load Data will not be available.

**Menu**, **Documents** and **About** are as described above (The Menu).

## Loading Data

**Load Data** loads data from the database into the current workbook. When you select this item, you will be asked to confirm the operation. Note that after **Load Data**, the workbook will be saved.

Depending on the setting made by the administrator, cells saved to the database may be marked using a background colour, a text colour and/or may be in italic.

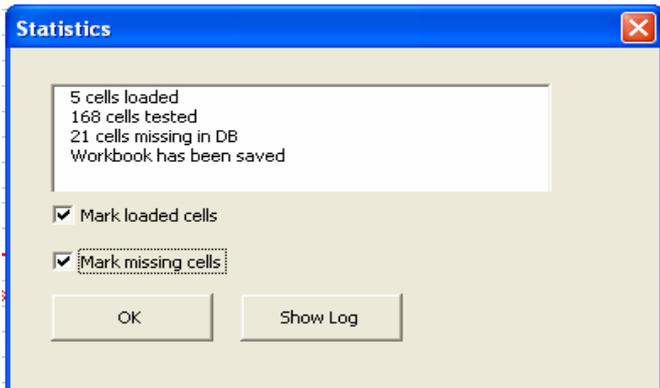After data has been loaded the following dialog box is displayed



Figure 6

If you put a checkmark in Mark loaded cells and/or Mark missing cells as above, the cells loaded are given a background colour and similar for missing cells as in the figure below. The actual colours may be different from the example. It should be noted, that the system only load cells that has actually been changed since the sheet was last loaded. Only such cells are marked.



Figure 7

When cells are marked, a new item is added to the menu



Figure 8

Use these options to locate the cells marked or to clear the marks. Whenever you Load data, the marks are automatically cleared.

In the case, that one of the cells to be loaded contains a formula, this is regarded as an error.
You may get this messagebox



Figure 9

Press Yes to ignore input from the database and keep the formulas or press No to accept input from the database (and destroy the formula).

If more formulas are found they are handled the same way (without showing the message box).

The statistics box will contain a message that this has happened and the log will contain more detailed information like
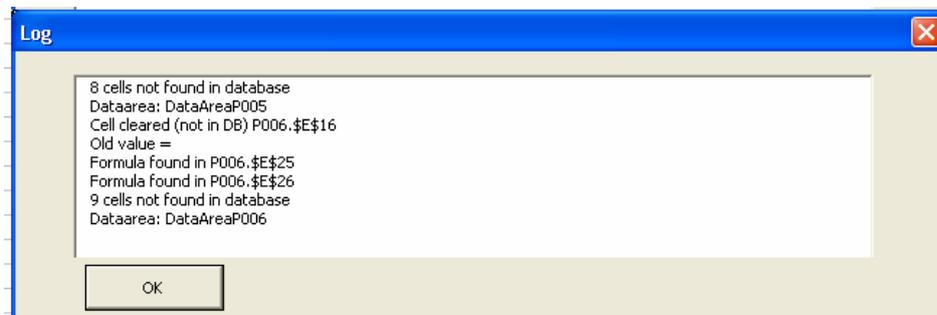


Figure 10

## Saving Data

**Save Data** saves data from the current workbook into the database. When you select this item, you will be asked to confirm the operation.

When the operation is completed you will be informed of the result. Note, that only cells that have changed since the last save operation will actually be updated in the database and that the workbook is saved as well.
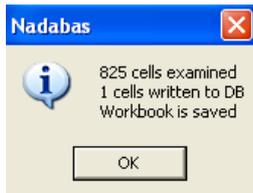


Figure 11

Depending on the setting made by the administrator, cells saved to the database may be marked using a background colour, a text colour and/or may be in italic.

**Refresh Data** reloads saved data from the database. It may be used to get rid of changes made since the data was last saved by taking the saved values from the database. Note that **Refresh Data** not only loads values but also will re-establish any formula and comment for the cells affected. **Refresh Data** should be used with care.

## Keeping the database and workbook in sync

As you enter data into the workbook, the changes are not automatically reflected in the database. Not until you use the **Save Data**, data is actually made available to other sheets through the database.
If you make changes and do not save data yourself, when closing the workbook, you will be asked if you want to save changes to the database now. You would normally save your data at this point. However, you may just be interrupting a major revision of the workbook leaving the workbook in an inconsistent state. You can then chose not the save your work to the database until a later point. See also **Reserve Workbook** and **Free Workbook** later.

When you open a workbook, the system will test if any of the workbooks that are the origin of cells loaded into this workbook. If any of these workbooks has been updated at a later time than your last **Load Data**
If there are any differences, you can select to load new data from the database. But you may also postpone this if you want to carry on working on the data in the workbook and then use **Load Data** later.

## Integrity controls

When you save data to the database, if any of the cells you want to save has previously been saved by another sheet, you will get an error message and the operation is cancelled. Inform the administrator og designer of the system to get the inconsistency corrected.

If you are an administrator of the system however, you will be given the option to save the cells (overwriting those saved from the other workbook). You should only do so, if you for example have renamed the sheet or for any other reason is confident that you can continue safely.  As a general rule, any specific value, i.e. the value of transaction P1 for product P005, Final value in Current prices, should be saved from one and only one place; i.e. one specific cell in one spreadsheet.

## Reserving and freeing a workbook

While you are working on a workbook (Excel file), Windows keeps track of this and another use can not open the same workbook except as read only.
However, when you close the workbook, Windows no longer prevents other users from opening and making changes to the work book.
If you have work in progress that you can not finish and want to close the workbook, you may reserve the workbook using **Reserve Workbook** in the menu. If you do so, other users will be prevented from opening the book except as read-only. When you are working with a reserved workbook the menu will have the item **Free Workbook** in place of **Reserve Workbook.**
Once you no longer need to have exclusive rights, use **Free Workbook** to give other users access to the workbook.
Only the person who reserved a workbook or an administrator can use **Free Workbook**.

# Messages

The system includes a function to exchange messages between the users of the system.
A message should always be related to a single cell that is loaded from the database.
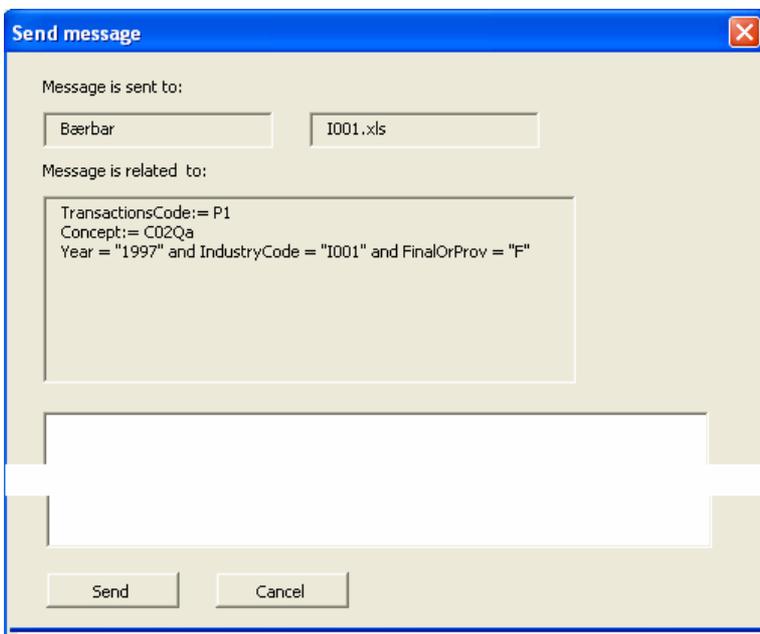
This feature makes it possible to make comments or ask for changes or clarifications to a specific value.

The message is addressed to the workbook (Excel file) responsible for saving the cell and to the user who saved the cell. Whenever the user opens a new workbook (within the system) or any user open the workbook that saved the cell, information will be giving if new messages are available.

To send a message, make the cell to witch the message is related active. The select **Send Message** from the menu.
If the active cell is not a cell loaded from the database, you will get an error message.
If it is related to an active cell you this window



Figure 12

Enter the message at pres Send to send the message.

To read any message related to the actual workbook or yourself, select **Read Messages** from the menu and then **Inbox** and you will get this window
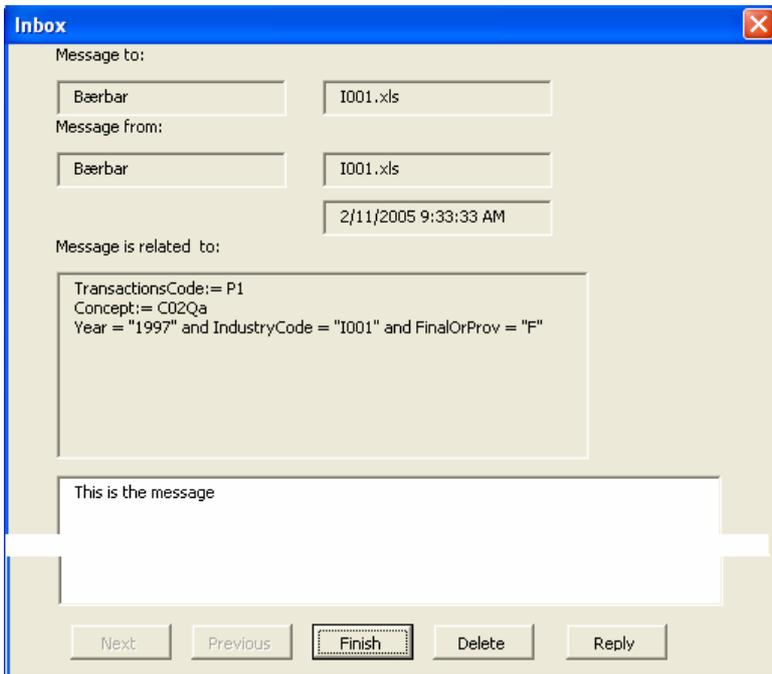


Figure 13

If there a more than one message, use Next and Previous to see the next or previous message. Messages are presented with the most recent first.

Press Finish to stop reading messages.

Press Delete to Delete a message.

Press Reply to send a message back to the sender (both workbook and person).
You'll get a window similar to send, but the text of the message is preserved and information about sender etc, is inserted in the message. The original message is deleted. The new message now appears in the Inbox of the original sender (and the original workbook). This person can then make a new reply, in fact a dialog can be initiated this way.

The menu item **Read Messages** / **Sent mail** allows to check any message sent by you or from the current workbook that has not been deleted.

# Getting information

The next group of items in the menu can be used to obtain information about the actual workbook in relation to the Nadabas system.

**Cell info** will display information about the active cell, if this cell is part of a data area.
It gives the value of all classifications used to identify the cell and the name of the key-family (table).
It also gives information about when, who and from where the cell was saved.



Figure 14

**Links** has three sub options



Figure 15

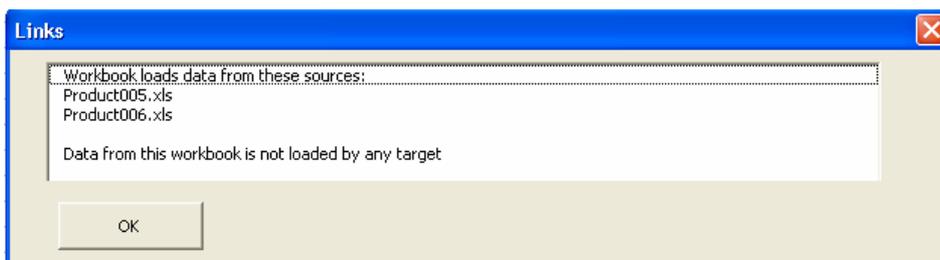**Workbook** shows all links to and from this workbook to other workbooks.



Figure 16

**Cell** shows a list of all the Workbooks that are using the active cell.



Figure 17

**Unresolved** are used to detect errors in the links. A cell is unresolved, if the sheet has tried to load the cell from the database, but not corresponding item was found, i.e. no other workbook has saved a cell with the actual dimensions. This may either be due to the fact that the workbook holding the cell was not saved, but it may be due to a definition error in this sheet (wrong value for one or more dimensions or constants etc.

Unresolved reports the coordinates of all cells not resolved and mark the cells with red background colour so they can be spotted. You are recommended to save your workbook before using this command so you could get rid of these marks in an easy way.

This option should be used with care as it may not be relevant in your environment. Some implementations of the system based on common templates may by design have a large number of unresolved links.
This option may not be available if you are not an administrator.

**Show key families** is used to show information about the key families defined in the database.
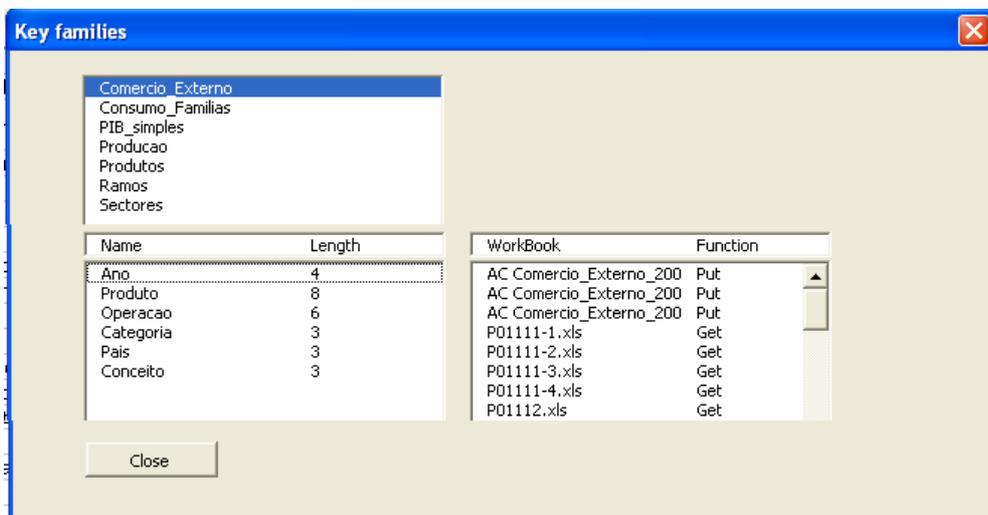


Figure 18

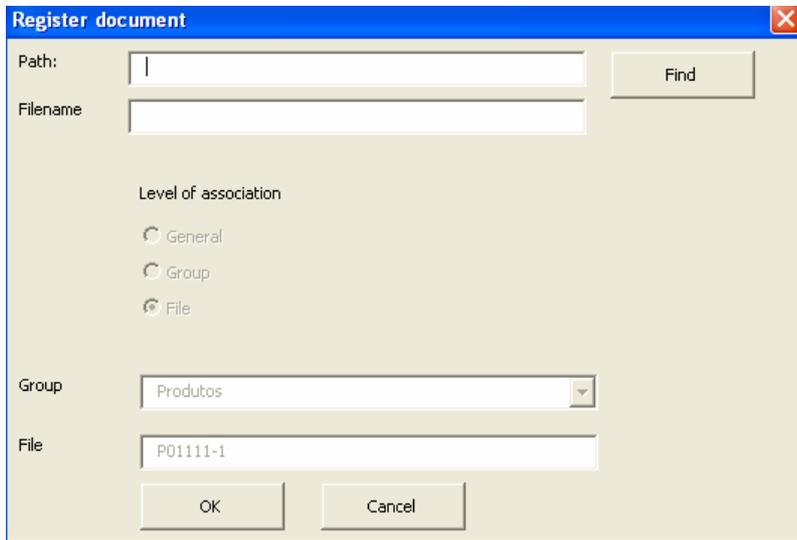The upper window will hold the names of all Key Families.

The lower left window contains information about the dimensions of the currently selected family. The lower right window contains information about workbooks that have saved or loaded information to the key family.

Pres **Close** to close then window

This is for information only unless you are a designer, refer to the Designers guide for more information.

## Register Document

**Register document** allow you to make a document with information related available for other users in the Document menu described above. Unless you are an administrator you may only register a document related to a workbook that you have permissions to.



Figure 19

You may enter the Path or Filename or use the Find to locate the file using a dialog box similar to open file.
You may not change level of association or the file and group of association if you are not an administrator

# Permissions

NADABAS provides an option to protect the individual workbooks through a system of permissions.
If workbooks are protected, a workbook can only be modified by users who has an explicit permission to handle the workbook or by an administrator.

All other users may open the workbook as read only. When the book is opened, the user will get this message



Figure 20

The user can modify the book and use Save As, but can not save the book back to its original position.