



Manual

Risk Processor

Corporate

Enterprise Risk register

Contents

1	Introduction	4
2	Installation of the software and start the application	5
2.1	Install software	5
2.2	Start the application.....	5
3	Structure of the application	6
3.1	Introduction risk register	6
3.2	Risk Processor Corporate integrated with Risk Processor versions.....	6
3.3	Screens and worksheets	7
3.4	Colour conventions.....	9
3.5	Protection of worksheets	10
3.6	Worksheet C_Dashboard	10
4	Configuration of the application	12
4.1	Add frequencies	12
4.2	Define effect matrix	13
4.3	Set language	15
4.4	User specific labels	15
4.5	Change Label set	16
4.6	Datalists: determine departments	16
4.7	Scaling.....	17
5	Import risks.....	18
5.1	General operation Risk Processor Corporate	18
5.2	Import risk register.....	19
5.3	View imported risks on department dashboard.....	23
5.4	Process imported risks in Corporate risk matrix.....	25
5.5	View risk data on Corporate dashboard.....	25
6	Reporting risks	32
6.1	Show information of risks	32
6.2	Redraw graph and manual filtering	33
6.3	Re-assess risks	34
6.4	Select Scaling.....	35
7	Secure data.....	36
7.1	Save data	36
7.2	Create a spare copy	36
7.3	Export data	36
7.4	Copy data to Excel	37
7.5	Autosave.....	38

8	Advanced control of the risk register	38
8.1	Erase Corporate risk register	38
8.2	Sheet 'C_Riskregister'	39
8.3	Load risk data: import backup	39
8.4	Worksheets Risk register, effect matrix and scale	41
9	Trouble shooting	41
10	Frequently asked questions	42
10.1	How can I use a smaller matrix (e.g. 4 x 4)?	42
10.2	How can I get insight into the risk level before and after mitigation?	43
10.3	How can I make reports?	43
10.4	Where can I find general hints and tips?	43

Manual version	Belongs to software version
manual risk processor corporate en v5_12_1.docx	This guide is part of Risk Processor version 5.12.

Do you have comments about this manual, or did you find errors? If so please let us know on info@assetresolutions.nl

© 2018 AssetResolutions B.V. All information contained herein remains the property of AssetResolutions B.V. This publication is provided in strict confidence and will not be wholly or partially reproduced without the permission of AssetResolutions B.V.

1 Introduction

Congratulations with the purchase of Risk Processor Corporate. The aim of the system is to support the efficient management of risks within a corporate structure with different departments, business units or regions (which use Risk Processor) and a central department ('Corporate' - Enterprise Risk Management). In this document the functionality of Risk Processor Corporate is described. The structure of this manual is as follows:

1. A general introduction is described in this chapter
2. Installation of the software is mentioned in chapter 2
3. In chapter 3 the structure of the program is described. Think of functions such as buttons and the function per button, worksheets and links to where they are explained in this manual. Also the dashboard is addressed
4. Configuration of the application is described in chapter 4 (e.g. to set the language, frequency band and effect matrix on Corporate level)
5. Chapter 5 described dealing with importing risks on Corporate level
6. Reporting on the risk register on Corporate level is discussed in chapter 6
7. Securing data is explained in chapter 7
8. In chapter 8 the advanced management of the risk register is described (manually updating data lists)
9. Troubleshooting is dealt with in chapter 9
10. Frequently asked questions can be found in chapter 10.

Always make sure you have a backup of the software. Other starting points are mentioned in the license agreement.

2 Installation of the software and start the application

2.1 Install software

The software can be installed and used in every directory, where you have sufficient authorizations. In case there is a company computer network, it could be efficient to install the software on this network. The software contains of a number of an Excel file with the extension xlsx.

The installation consists of a number of easy steps:

1. create a directory in which the tool needs to be installed
2. copy the file with extension .xlsx in this directory.

The application can be started via the Windows browser and double click on the xlsx file, see paragraph 2.2.

2.2 Start the application

The application can be started via standard Windows functionality. If for example the Windows Explorer is applied, then double click on the application. In the Explorer the application can (dependent on the version) be recognized by this icon (Figure 1):



Figure 1 Icon application

In order to make use of the application basic Microsoft Windows and Excel knowledge is required. When the application is started, acceptance of the license is required. The application does not start when the license is rejected.

After accepting the license agreement, this agreement can be seen via the sheet 'license'.

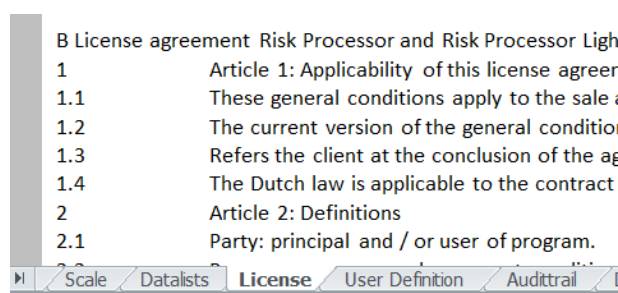


Figure 2 Sheet license

3 Structure of the application

In this chapter the structure of the program explained. After a brief introduction on the risk register, the screens and worksheets are discussed. Referral is made to the relevant chapters and paragraphs in this manual. Colour conventions are also explained and the protection of the worksheets is described. Finally the worksheet Dashboard is explained.

In this document in a number of cases is referred to cells. If for example R2C9 is mentioned, we mean Row 2 Column 9 on the relative worksheet (if another language version of Excel is applied different codes could be used, e.g. R2K9).

3.1 Introduction risk register

Each company faces risks. Risks can affect different business values, such as financial, quality, environment and safety. Companies define mitigation measures for the risks. These risks can be recorded in a risk register. Risk Processor is a risk register. See our website <http://www.assetresolutions.nl/en/products>).

Because companies generally have limited budget to spend, a company first wants implement those measures which have the highest added value across the business values. This is possible with an optimization program for the portfolio. With such an application it is possible to select measures which have the highest added value¹.

The application is able to capture for each risk the likelihood and impact of the risk. For each risk the impact on various business values can be determined as well as the total monetary impact. The risks can be shown on a risk matrix. If necessary, the risk register can will be integrated into an enterprise-wide solution (requires full version of Risk Processor and Risk Processor Corporate).

To get an overview of the quantified risks, the following activities need to be performed:

1. Define the frequency of the risk matrix
2. Create an effect matrix
3. Enter the risks in Risk Processor and export (per department)
4. Import and process the risks
5. Show the risks.

The information is stored in different worksheets in the application. The worksheets of the application are presented in paragraph 3.3.

3.2 Risk Processor Corporate integrated with Risk Processor versions

Risk Processor Corporate is designed to demonstrate an integrated risk register for more than one department, business unit, division and so one (hereafter called department). This means that for proper functioning of Risk Processor Corporate, always at least one Risk Processor (full version, so not the Risk Processor Light version) should be used (Figure 3).

¹ AssetResolutions has a customer specific tool available: <http://www.assetresolutions.nl/en/products/portfolioplanner>

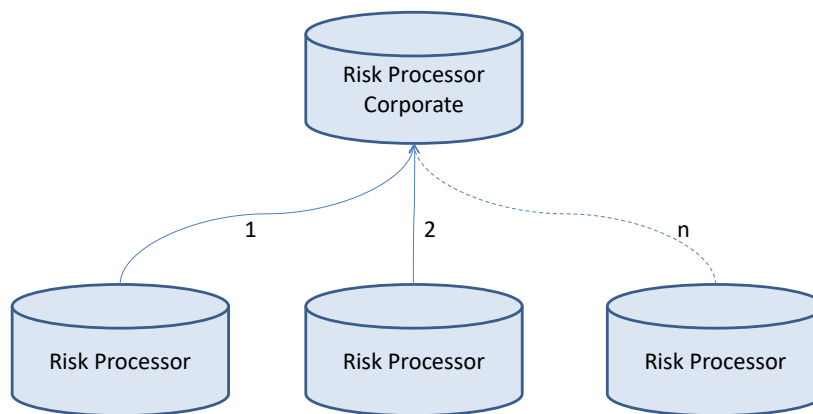


Figure 3 Link Risk Processor with Risk Processor Corporate

Risk Processor Corporate shows the same risks as the Risk Processor of the department. Risk Processor Corporate can show different risks of different departments in one risk matrix when at least two Risk Processor versions are installed (one for each department). Both versions of Risk Processor contain a risk register of her own department.

The source data of the risks is managed by the department in its own Risk Processor. From there, a full export is created as described in the Risk Processor manual. These exports are then imported into the Risk Processor Corporate. This import process is explained in paragraph 5.2.

3.3 Screens and worksheets

Risk Processor Corporate consists of several sheets. Depending on the mode of Risk Processor Corporate, the sheets are not always visible. When working in the Corporate mode, then only the Corporate sheets are visible (starting with a C). When working at 'departmental level', then only the sheets Risk Register, Dashboard and Effect Matrix are visible. The data on the sheets of the department is filled after import of this data from a Risk Processor. The sheets are listed below including a brief explanation and a reference with more detail:

Mode	Sheet	Explanation	Reference to paragraph with more details
Corporate	C_Riskregister	On this sheet the imported risks of all departments can be seen. Data is available here after processing the imported risk register (paragraph 5.2). Note: No data is imported here.	8.3
	C_Effectmatrix	This is the effect matrix on a corporate level. This effect matrix is applied on the sheet 'C_Dashboard'.	4.2
	C_Schale	Here the fields are defined for all	4.7

Mode	Sheet	Explanation	Reference to paragraph with more details
		departments, abbreviation and proportion by area.	
	C_Datalists	Here the departments are stored for which data can be imported.	4.6
	C_User definition	In the program for a number of fields labels can be shown which deviate from the chosen language. On this sheet these labels can be changed.	Paragraph 5.5
	C_Dashboard	After import of the risks of the department(s) in the mode 'Department' total risk matrix can be viewed. On this sheet risk information from all departments can be seen. A backup of the entire risk register can also be made on this tab. Via the button 'Import Risk Register', you enter the department mode (see first column of this table).	3.6
Department	Riskregister	Here the data is stored which is imported from a department. If desired, on this sheet data can be filtered, removed or changed so that the risks are not shown or shown differently in the corporate risk register. After an import of data from one department, the previous contents (if any) will be removed by the application.	8.4
	Effectmatrix	This is the effect matrix of the department itself. This effect matrix is used on the sheet 'Dashboard'.	8.4
	Scale	Here the fields are defined for all departments, abbreviation and proportion by area.	8.4
	Dashboard	On this sheet the risks of the imported departments are shown in her own risk matrix. Also it can be zoomed in into details of the risks per department.	8.4

In both modes the license is also shown. The tabs mentioned above are explained below.

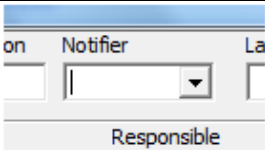
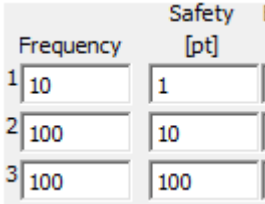
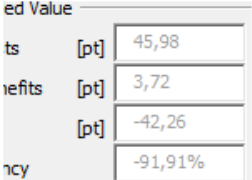
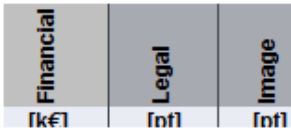
The sheets are further explained in this manual. For a number of sheets it is explained where they are used in the process.

Departments should only assess risks according to the agreed business values. If one business value is lacking, then of course one should be added, but the scaling of this value should be determined by the corporate risk manager. Otherwise, the corporate state of risk has uncontrolled results.

Do not change the order of the tabs and do not change the names of the tabs either. The application then may not work properly.

3.4 Colour conventions

The colour conventions of the different fields match the default Windows convention:

Kind of field	Example	Explanation						
White Empty field without text		In such a field data can be added. After adding the field it looks like as can be seen in the next line.						
White Text has colour black	 <p>or</p> <table border="1" data-bbox="555 1290 871 1480"> <thead> <tr> <th>Environment [pt]</th> <th>Financial [k€]</th> <th>Legal [pt]</th> </tr> </thead> <tbody> <tr> <td>25000</td> <td>25000</td> <td>25000</td> </tr> </tbody> </table>	Environment [pt]	Financial [k€]	Legal [pt]	25000	25000	25000	Contents can be changed or be deleted. Field was initially white (as above).
Environment [pt]	Financial [k€]	Legal [pt]						
25000	25000	25000						
White Text has grey colour		Field cannot be changed. In some cases the contents is automatically calculated on basis of input from other fields.						
Grey with black text		Contents of these fields cannot be changed.						

3.5 Protection of worksheets

The data on the worksheets is by default protected. There is no password protection, so the user makes changes at own risk. If a change is required, this can be done via Excel functionality.

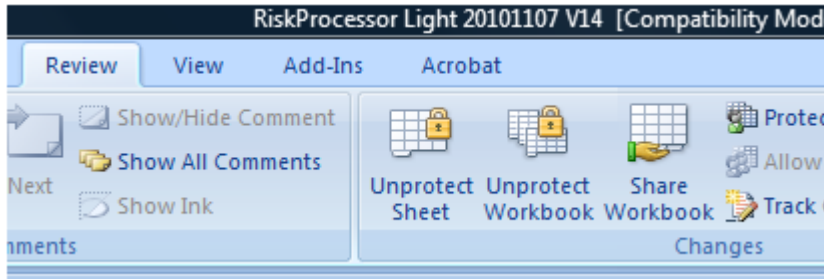


Figure 4 Possibility to unlock the protection

For Excel Office 7 in Figure 4 it can be done via the worksheet 'Review' with the button 'Unprotect sheet'. On the worksheet 'C_Dashboard' for example the contents of the figure below can be seen. For a number of Business Values it cannot be read what the value is (#####).

Expected value per business value (in unit)					
2.774.864,32	33.033.581,00	24.168,00	#####	#####	1.234,80

Figure 5 Worksheet Dashboard; value in some cells is #####

When the protection is disabled, the column which contains ##### can be made wider with Excel functionality. After certain functions are applied or the application is saved, closed and restarted, the protection will be enabled again.

Note that making changes is at own risk.

3.6 Worksheet C_Dashboard

On the worksheet 'Dashboard' the following information can be seen (Figure 6).

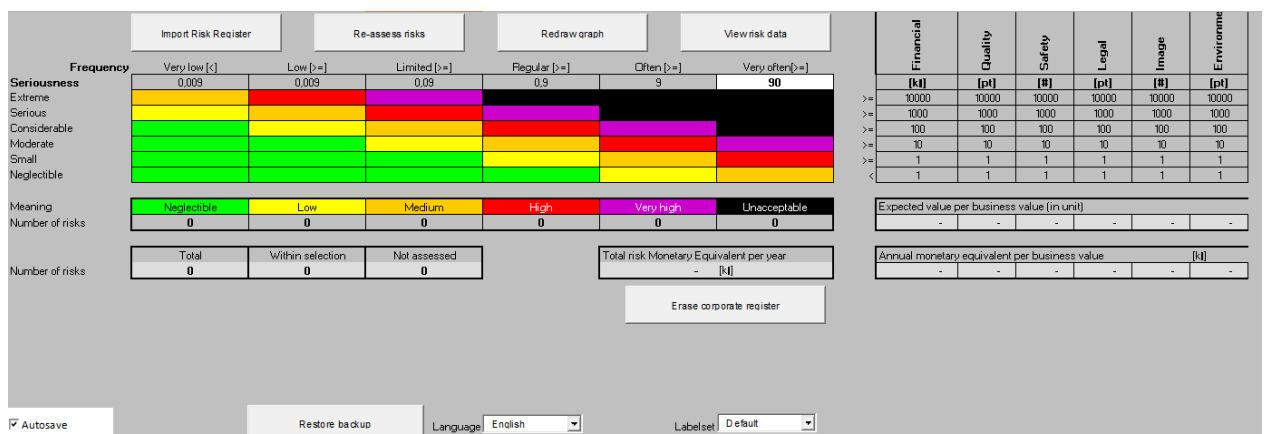


Figure 6 Content sheet C_Dashboard

The convention of the risks in the matrix is as follows:

<rank>: <name of the risk> <ID in the corporate risk register> [<department>_ <ID of risk in the department >]

Paragraph 6.1 provides more details.

This worksheet contains a risk matrix with a number of settings which can be changed. Also grey buttons are present and selections can be made. The settings which can be changed are described in paragraphs 7.5, 8.2 and 4.5.

In the first column the levels of the severity of a risk are shown. In row 1 the levels of the risk matrix are stated.

The meaning of the colors of the risk levels are shown in the cells R10C2 until R10C7 (Figure 7).

Below in same figure (in row 11) the number of risks per level is shown. This is calculated automatically. The calculation is dependent on selections on the worksheet 'C_Riskregister'. The names of the risk levels can be changed via the selection of the labelset. This is discussed in paragraph 4.4.

Meaning	Neglectible	Low	Medium	High	Very high	Unacceptable
Number of risks	2	3	6	5	4	3

Figure 7 Meaning per risk level and number of risks per risk level

Below the row as shown above the contents of Figure 8 is present.

	Total	Within selection	Not assessed
Number of risks	24	24	1

Figure 8 Total number of risks, number of risks not evaluated and not assessed risks

The total number is the number risks which are imported into Risk Processor Corporate.

The number of risks within the selection is the number of risks which is taken into account on the worksheet 'C_Riskregister'. So the risks outside of the selection are not printed in the matrix.

The number of risks which are not evaluated, is the number of risks for which the risk level is not yet determined by the user. For these risks the category (between unacceptable and negligible) is not determined, so the position of the risk in the matrix cannot be printed on the screen. This means that a likelihood and/or an effect is lacking.

Below cell R10C9 the expected value per business value per year is shown (Figure 9). This is calculated automatically and is dependent on the selection on the worksheet 'C_effectmatrix'.

Expected value per business value (in unit)					
2.774.864,32	33.033.581,00	24.168,00	32.166,30	1.770,00	1.234,80
Annual monetary equivalent per business value [pt]					
2.774.864,32	33.033.581,00	24.168,00	32.166,30	1.770,00	1.234,80

Figure 9 Expected value per business value and monetary equivalent per business value per year

Below the Expected value per business value the total monetary equivalent of all business values per year are shown. This is done per business value in the dimension which is selected in the cells R2C9 (belongs to business value R1C9) until R2C33 (belongs to business value R1C33).

For the monetary equivalent the risks are always calculated in the most left dimension (R2C9). It is therefore advised to make the left dimension financial.

The sum of the monetary value is shown in cell R13C9 (Figure 10).

Total risk Monetary Equivalent per year
35.867.784,42 euro

Figure 10 Sum of the monetary value

In the application risk can be presented across all areas, or by region. This is shown in Figure 11. When an area is selected this also affects the 'View risks' function.

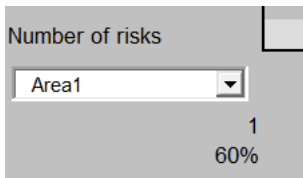


Figure 11 Selection of view per area or total

The grey buttons on the 'Dashboard' worksheet contain the following text:

1. 1..10
2. Z->A
3. ID
4. Import risk register
5. Re-assess risks
6. Redraw graph
7. View risk data
8. Erase Corporate register
9. Import data
10. Export data.

These are discussed below in separate paragraphs.

4 Configuration of the application

Before risks can be entered into the application, a number of preparatory steps need to be performed on Corporate level on the sheets starting with C_:

- Define the frequency of the effect matrix (paragraph 4.1)
- Fill the effect (paragraph 4.2)
- Select the required language (paragraph 4.3)
- Create user specific labels if needed, so that the labels in the application differ from the selected language (paragraph 4.4)
- Select the desired labels (paragraph 4.5)
- Define departments (paragraph 4.6)
- Define scaling of an area (or part of assets) (paragraph 4.7).

4.1 Add frequencies

The frequency band must be entered in order to plot risks in the risk matrix. This frequency band is entered on the worksheet 'C_Dashboard'. The dashboard can be locked. Then first unlock the worksheet as described in paragraph 3.5.

The frequency can be changed by changing the value in the cell of row 2, column 7 (Figure 12).



Figure 12 In the white cell the frequency can be changed

The contents of the cell must be a numeric value. The value to be entered is the upper limit. The dimension is the number of times a year. Ensure that upper value matches the frequencies of the risks in the risk register. That is because all the risks which have a frequency above the upper value in the white cell, will be taken together in the same frequency band. This also applies to risks in the lowest category.

When the value in the cell is changed, the levels of the cells left to it on row 2 will automatically be changed by dividing these per cell by 10. The value in cell R2C2 does not change, since this is the 'less than' (<) value, while the value of the cell R2C3 is greater than or equal to that value.

When the value is changed, the cell will get a red colour. This is an indication that a change is made, which is not yet processed in the risk matrix. This can be done with the button 'Reassess risks'.

The application uses a logarithmic scale for the frequencies, wherein the lower and upper limit of a band are a factor of 10 from each other.

Unlocking the worksheet and make edits such as adding or removing columns can lead to unexpected results.

The names of the business values and maximum values are derived from other cells as is described in paragraph 4.2.

4.2 Define effect matrix

This worksheet is applied in showing the risks via the worksheet 'C_Dashboard'.

On the worksheet 'C_Effectmatrix' the contents of the white cells can be changed (Figure 13):

Change matrix	Financial	Quality	Safety	Legal	Image	Environment
Unit	[k]	[p]	[t]	[p]	[t]	[p]
Top value	25000	25000	25000	25000	25000	25000
Extreme	Extreme	Extreme	Extreme	Extreme	Extreme	Extreme
Serious	Serious	Serious	Serious	Serious	Serious	Serious
Considerable	Considerable	Considerable	Considerable	Considerable	Considerable	Considerable
Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate
Small	Small	Small	Small	Small	Small	Small
Neglectible	Neglectible	Neglectible	Neglectible	Neglectible	Neglectible	Neglectible

Figure 13 White cells can be changed on worksheet C_Effectmatrix

On this worksheet per effect of the risk matrix (column 1) per Business value (column 2 until 3) the following can be changed:

- name of the business value (cells R1C2 until R1C33). If a business value in Risk Processor is defined for a department, then it MUST be defined in Risk Processor Corporate on this tab. Risk Processor Corporate will check on it during import (see later in this manual)
- dimensions per business value in row 3 (starting right next to Unit)
- the 'Top value'. This is the highest value of the effect per business value which is used in the the risk matrix on the sheet 'C_Dashboard' in column 9 row 3 for the first business value (row 3 column 2 on the worksheet 'C_Effectmatrix'). This is applicable for all business values: all maximum values are copied to the worksheet 'C_Dashboard'. The lower values are automatically calculated. If no maximum value is filled in, then by default the value 10000 is taken on the tab 'C_Effectmatrix', without adding a KPI
- examples of effects per business value (below these are mentioned business values).

Make sure that the business values from Risk Processor can be found here. If a mismatch message occurs as shown in Figure 14 it must be ensured that the business value name is added on this tab.

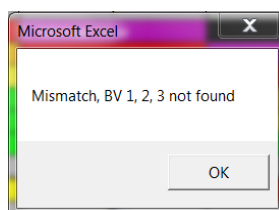


Figure 14 Mismatch message

If during the import (see paragraph 5.2) the message above appears, it means that business values number 1, 2 and 3 in the example are not found. These are the numbers from the department of Risk Processor, so not in Risk Processor Corporate. Business value 1 is in row 1, column 2 of the Risk Processor which runs at the department. Business value 2 is in row 1, column 2 and so on. In the case above, it is necessary to ensure that the missing names of the business values of the department with the corresponding effect levels are added in Risk Processor Corporate.

If a name of a business value is too long, it can appear that this name is not fully shown on other screens.

If a change is made in a white cell of the effect matrix, then this one is also automatically changed in the functionality for entering new risks (display value of risk per business value and sort function). Also, the name is used in showing risks in the risk matrix. Already inserted risks are not adjusted. If the effect matrix is changed causing a risk ends up in a different category (eg from 'Medium' to 'High'), this must be either

- Manually adjusted manually via risk entry
- Or via the tab 'C_Riskregister'. Also a change in Risk Processor must be made.

The same is applicable if Business Values are mixed.

If changes or additions are made to the business values, dimensions or levels, then press the button as can be seen in Figure 15. Only then will the changes will have effect.

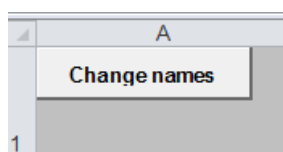


Figure 15 Button needs to be pressed to copy changes on C_Dashboard

When names and effects are added, then the button 'Re-assess risks' on the sheet 'C_Dashboard' should be pressed as well.

When a business value is no longer needed, it can be removed. Make sure that the business values should be copied from the right to the left, including the contents of the effects belonging to the business values. So if the value in column C in Figure 13 is no longer needed, then the contents of column D and further columns should be copied to the left. Make sure that the business value is not applied in the risks anymore. If this is not the case, the program will not work.

4.3 Set language

The application has a multilingual display of labels and choices of selection menus. The selection of the language displayed in the program can be made through the left menu, below on the Dashboard worksheet (Figure 16; English in this example).

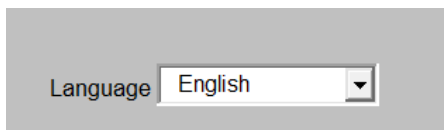


Figure 16 Selection of language

When the selection right of 'Language' is set on English (Figure 16), all texts will be in English.

Note that the selection of the 'Language' and 'Labelset' only affect the various texts used in the program itself. It does not affect the data in the application in Risk Processor or Risk Processor Corporate. When on corporate level the English language is used and in a department Dutch including the data, then on corporate level Dutch data will appear. In some cases Risk Processor Corporate uses standard Windows text as described in this manual. With the selections in Figure 16 the standard Windows text remains unchanged.

4.4 User specific labels

The program can make use of a number of user specific labels. This means that some labels which are used by the application can get a specific name which are chosen by the user. These can be changed on the worksheet 'C_User Definition' (Figure 17).

Location	Default	Custom
RiskData	ID	ID
RiskData	Name	Person
RiskData	Status	Status
RiskData	First notification	First notification
RiskData	Notifier	Notifier
RiskData	Last change	Last change
RiskData	Change in	Change in

Figure 17 Example of user specific labels

The column 'Location' shows on which worksheet or screen the label is used.

The labels in the column 'Custom' with a white background are adjustable. If in this example the language 'English' (sheet C_Dashboard) would be chosen in combination with a 'custom' label on the dashboard as well (see paragraph 4.5), then instead of 'Name' the text 'Person' will be shown in the application.

If a field in the column 'Custom' is empty, then for that field the application uses the default language value.

4.5 Change Label set

When the user specific labels are defined according to paragraph 4.4, the selection of the label set can be made on the sheet 'C_Dashboard'.

When user specific labels are required, then selection 'Custom' must be made (Figure 18).

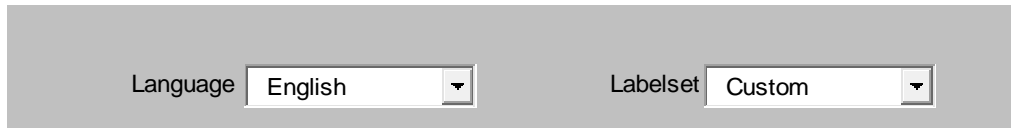


Figure 18 Selection of language and user specific labels

When the label set is changed, the language should be changed once as well. Otherwise the tool will keep the previous setting.

The selection of the 'Language' and the label set only affects the various texts used in the program itself. It does not affect the data in the application. In some cases the application uses standard Windows text as described in this manual. With the selections of Figure 18 the standard Windows text remains unchanged.

When Risk Processor is integrated with Risk Processor Corporate and custom labels are selected, then these are copied to the worksheet 'Dashboard' of Risk Processor Corporate. If in Corporate on the sheet 'Dashboard' default labels are required, then this selection must be made in Risk Processor.

4.6 Datalists: determine departments

On this tab departments are defined; these can also be competency groups or different types of infrastructure². These can be determined independently of a geographical area (see next paragraph).

The contents of the white cells can be changed.

Abbreviation	Department
AsM	AssetManagement
ERM	Enterprise Risk Management
Fin	Finance
HR	Human Resources
Ops	Operations

Figure 19 Data lists. Data in white fields can be changed

The departments shown here are added during an import only if they do not yet occur on this tab, in case these are part of the file to be imported from Risk Processor (see paragraph 5.2). Through this sheet departments can also be manually added or removed. Note: only delete a record if the department is not part of a risks in the the relative department. Otherwise, Risk Processor Corporate does not work!

There should be no blanks between different values of departments. The maximum number of departments is 150.

² Think of high-voltage / medium and low voltage / gas, roads and traffic / green and play / drainage, water quality / water quantity and the like

When a value of a department in a list box is missing, it can be added after the last value in the white field. Under the gray cell 'Department' directly under the last name ('Ops' in Figure 19) a new name can be entered in the example.

Do not change the structure of a data list by adding for example columns or by deleting the contents of the grey cells (Figure 19). Also the grey rows cannot be deleted since then the application will not work.

4.7 Scaling

Within the risk register can be worked with several areas. Here the weighting factor of risks can be entered for each area (for example, because in one area more assets exist than in another area). The scaling can for example be applied to make a distinction between areas, but also a breakdown into different asset classes is possible.

The idea behind it is the following. When a small region is evaluated with the same matrix as the whole, than many risks will be invisible in the matrix. With the scale factor, weight can be given to the risk for the region, while the sum deals with all regions on the overall matrix. The only way to achieve this is that the impact is the same in every region and let only the frequencies differ by region. The definition is done on the 'C_Scale' sheet.

Tab	Tab Value	Area	Name	Tab ID	Share
Tab1	0	Total	Total	Sum	100%
Tab2	1	Region1	Area1	A1	40%
Tab3	2	Region2	Area2	A2	30%
Tab4	3	Region3	Area3	A3	10%
Tab5	4	Region4	Area4	A4	20%
Tab6	5	Region5			
Tab7	6	Region6			
Tab8	7	Region7			
Tab9	8	Region8			
Tab10	9	Region9			

Figure 20 Content sheet 'Scale'

De values below 'Name' (column D), Tab ID (column E) and Share (column F = scale factor) need to be entered. Note that the values for the various fields match together, the application does not monitor, for example, whether the total is equal to 100% (cell F2).

The maximum number of fields is 25. Note: when Risk Processor Corporate is used, the field names in the individual field names in the several Risk Processors must be the same. The first area may in this case, for example, Risk Processor for province 1 not be municipality A and Risk Processor for province 2 cannot be called municipality B.

Are the scales defined, a selection can be made as described in paragraph 3.6 on the sheet 'C_Dashboard'.

5 Import risks

In this chapter the overall operation, importing a risk register, viewing risks and processing risks in the Corporate Risk Register are described.

5.1 General operation Risk Processor Corporate

The flow schedule for the general operation is shown below (Figure 21).

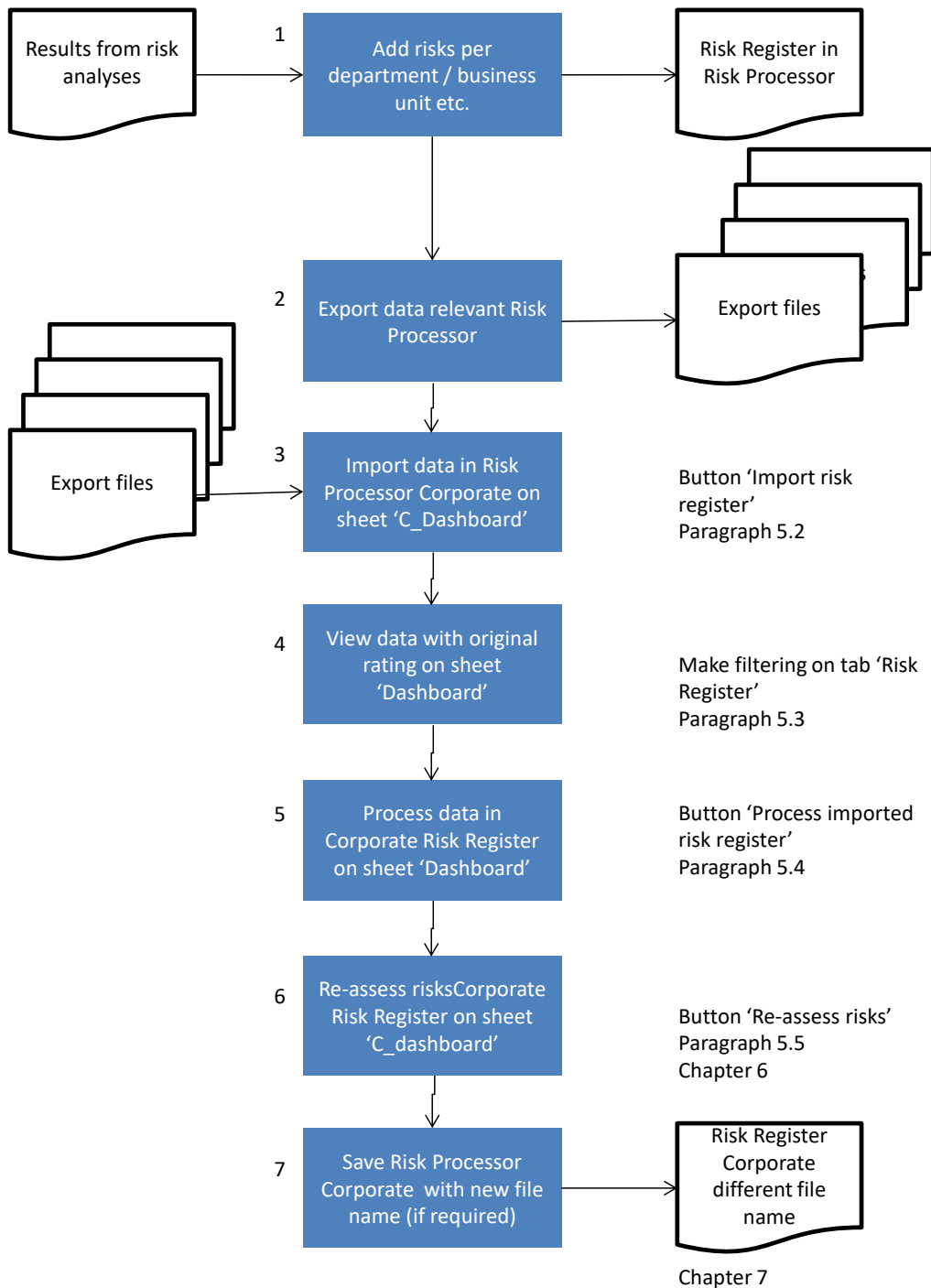


Figure 21 Flow schedule Risk Processor Corporate

Per step of the flow chart an explanation will be given.

1. Adding risks is done via the Risk Processor used by the departments (see the Risk Processor manual³). The source data of the department risks is the Risk Processor of the department.
2. The department makes an export in Risk Processor. See the manual of Risk Processor for the way of work, which can be downloaded through <http://www.assetresolutions.nl/en/downloads>.
3. Start Risk Processor Corporate. Open the sheet C_Dashboard. Import the data from the relevant risk register by clicking the button 'Import Risk Register'. This is done for each export file which needs to be displayed in the Corporate risk register. During import, all previous data for the department is overwritten in Risk Processor Corporate. When the button 'Import Risk Register' is pressed, Risk Processor Corporate will toggle automatically to the department mode. In that mode the data must be imported.
4. On the sheet 'Dashboard' it can be viewed whether the risks in the risk matrix correspond to the original risk assessment in Risk Processor of the department. If that is not the case, then the values of frequency or effects could not be accurate, or the scaling (share) can differ with the Risk Processor version of the relative department. If necessary, click the sheet 'Risk Register' and make a filtering with standard Excel functionality (for instance, filter on the status of risks).
5. By pressing the button 'Process imported risk register' the data is added to the Corporate Risk Register.
6. Reevaluate the risks with the button 'Re-assess risks'. This must be done because otherwise the old assessment of the risk remains displayed.
7. Save the corporate risk register under a different name if desired. This could be needed because with a new import previous data is overwritten.
8. Go back to step 2 if another file must be imported, which needs to be viewed in the Corporate risk register.

In the next paragraphs these steps are further discussed.

5.2 Import risk register

When on the sheet 'C_Dashboard' the button 'Import Risk Register' is clicked (see Figure 22), then the import of data from the department is carried out.

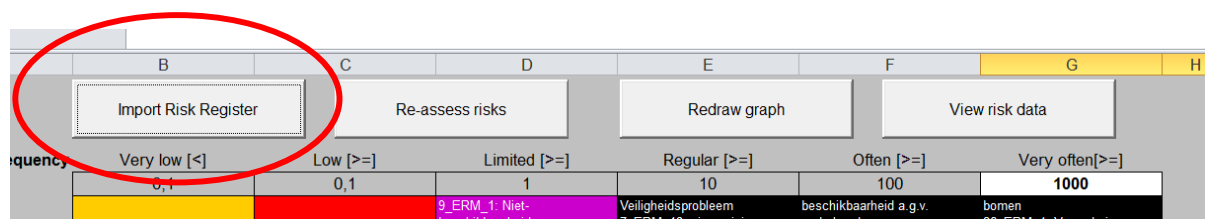


Figure 22 Import risk register from department from sheet C_Dashboard

When the risk register of the department (sheet 'Riskregister') is not empty, a message appears indicating it. The question is asked whether the risk register of the department should be cleared. It is advised to select 'Yes', because otherwise old department data could be mixed with the new to be imported data in Corporate. When the departmental data is cleared after selecting 'Yes', it will only be deleted on the sheet 'Riskregister' of the department. The already imported data on the sheet 'C_Riskregister' will not be deleted.

When the sheet 'Riskregister' does not contain departmental data, the screen of Figure 23 appears (dependent on Windows version). If the sheet 'Riskregister' contains data, a question appears whether the data should be deleted. It is advised to delete the data to prevent importing wrong data.

³ Downloadable via <http://www.assetresolutions.nl/en/downloads>

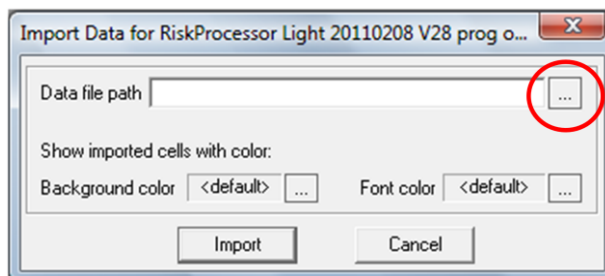


Figure 23 Screen which appears when the button 'Import Risk Register' is clicked

Click in the figure above on the button right to 'Data file path' (red circle). A screen with default Windows selection functionality appears. See Figure 24 for an example of the screen in Windows Vista (could differ in other Windows-versions).

Note: do not use the buttons 'background color' and 'font color', because all fields which apply the values will change, including the risk register. These are default Windows buttons which cannot be changed.

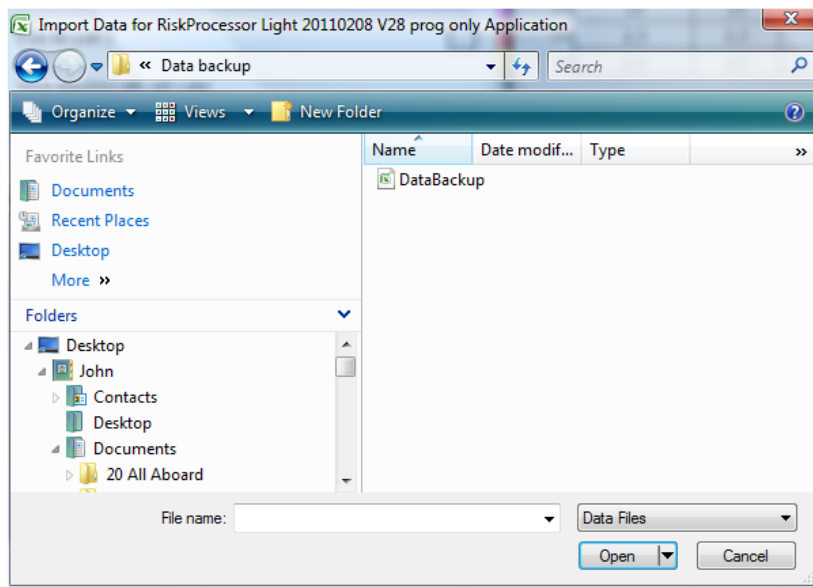


Figure 24 Example of selection screen in Windows Vista

Click on the relevant file with the text 'DataBackup.dat' in it and then click on 'Open' (in Vista in the figure above). Figure 25 appears.

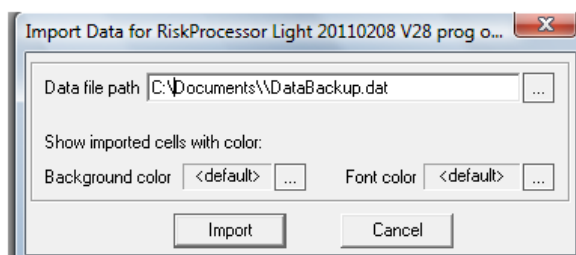


Figure 25 Selected file

In the figure above click on the button 'Import'. In case you do not want to import, press the cancel button (cancel in Figure 25). The import will not be carried out. You will then return to the department sheet 'Dashboard'.

If an import is in progress, Risk Processor Corporate will show a menu in which the department would be selected to which the risks to be imported belong (see Figure 26). The content is retrieved from the sheet 'C_Datalists'. Also in the field 'Department' a new abbreviation can be added. The application will then ask for a long description.



Figure 26 Choose department to which risks to be imported belong

Click in Figure 26 on the button 'Import Risk Register'. In the field 'Department', the department should be selected to which the imported risks are associated with. This does not have to be the same as an area (sheet 'Scale' and 'C_Scale'). If no department is selected, a message will appear. This message will be discussed later in this paragraph (Figure 28 Message which appears if no department is selected). Below other possible choices are shown in Figure 27. It is also possible to add a new abbreviation in the field 'Department'. The application will then ask for a long description.

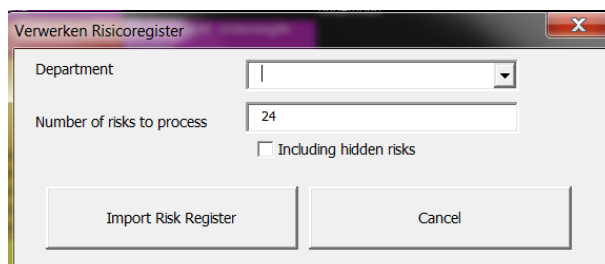


Figure 27 Other information on menu during import

In the field 'Number risks to process' in Figure 27, the number of risks can be entered to be imported. For the amount the sort is used, not the IDs of the risk register. Note: By default, the number of risks to be taken into account during import is dependent on filters on the sheet 'Risk Register'.

When a check is put for 'Including hidden risks', then the filtering in the risk register on the sheet 'Risk Register' is switched off during import (note that if a filter is active on the sheet 'Risk Register', this remains intact). If no filtering is active, this function has no effect. For example, if on the sheet 'Risk Register' a selection of the top ten risks with status completed is made and only these need to be imported, then the hidden risks need to be skipped (so leave checkbox empty). The number of risks to be imported is then equal to the number of visible risks. If you include hidden risks then the result may be not as expected.

With the button 'Import Risk Register' the imported risks assigned to the department.

With the button 'Cancel' the operation can be aborted. The action is aborted without consequence. So all previously imported risk (the backup file has been read from a Risk Processor) to the Corporate risk

register, including the corporate ID, department, original level, import date (processing date), the indices of Business Values and the line of the risk register is not undone with the 'Cancel' action.

Once the import is successful, the application brings you back to the sheet 'Dashboard' of the department. This sheet and its functions are described in paragraph 5.3.

If no department in Figure 26 is chosen and the button 'Import Risk Register' is pressed, then the message appears which is shown in figure 3.13.

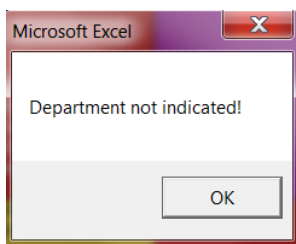


Figure 28 Message which appears if no department is selected

In the case of Figure 27 you will be sent back to the sheet 'Dashboard'. Now click on the button 'Import risk register' of Figure 27 and choose a department.

When data is imported from a department that is not listed, then the message in Figure 29 is shown.

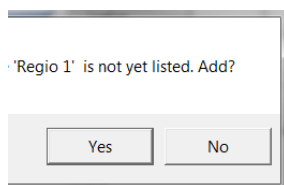


Figure 29 Message which appears if department to be imported is not valid in Risk Processor Corporate

Select 'Yes' in the figure above to add the name. You will get the option to add an abbreviation for the new department as well as a long description. If 'No' is selected, the department is not added, but then Risk Processor Corporate will not work because the department is not known. So always select Yes.

After selecting 'Yes', the contents of this input field is automatically copied to the sheet 'C_Datalists'. Risk Processor Corporate is case sensitive. So for example the Business Unit 'Northern Region' and 'northern region' are both stored.

When the file is successfully imported, Figure 30 is shown (dependent on language version of Windows).

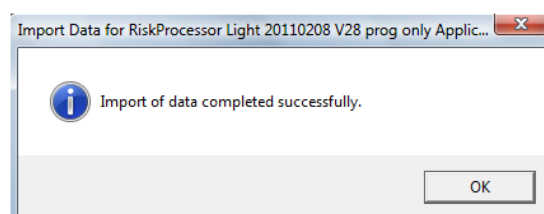


Figure 30 Successful import of backup data is carried out

On the sheet 'Dashboard', the imported data can be viewed in its original assessment. It is the assessment which the department has done. In the sheet 'Risk Register' risks may be deleted or modified (see paragraph 5.6).

With the button 'Process risk register' the imported risks will be incorporated into the corporate risk register. After processing, the application will switch to the sheet 'C_Dashboard'. During processing 10 fields will be added: Corporate ID, department, original level, date of processing and the indices of the business values (thus the columns which contain the imported business values on the corporate risk matrix). For every business value of the imported risks is checked which corporate business value matches with it and the number of that business value is stored (in columns 5-13 of the corporate register, the indexbv).

If not all corporate business values are found, then there is a mismatch (Figure 31).

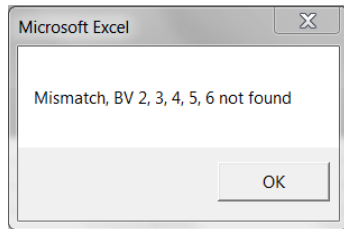


Figure 31 Message which appears if imported business values lack in Risk Processor Corporate

If the message of the figure above appears, the missing business values of the department must be added to the sheet 'C_Effectmatrix'. See paragraph 4.2. If a business value from the department is not valid on corporate level, then another option is to delete the relative business value on the worksheet 'Effectmatrix' of Risk Processor and then carry out an export in Risk Processor. We refer to the Risk Processor manual. The exported dataset of Risk Processor can then be imported in Risk Processor Corporate.

Note: if the file to be imported contains an empty line, the import quits. This can appear is risks are deleted in Risk Processor on the worksheet 'Risk Register' manually. This should not be done. See the Risk Processor manual.

5.3 View imported risks on department dashboard

The sheet Dashboard shows the risk data which is imported from the department. This sheet is opened from the Corporate Risk Register (tab C_Dashboard) via the button 'Import Risk Register'. The screen of the department dashboard is shown in Figure 32.

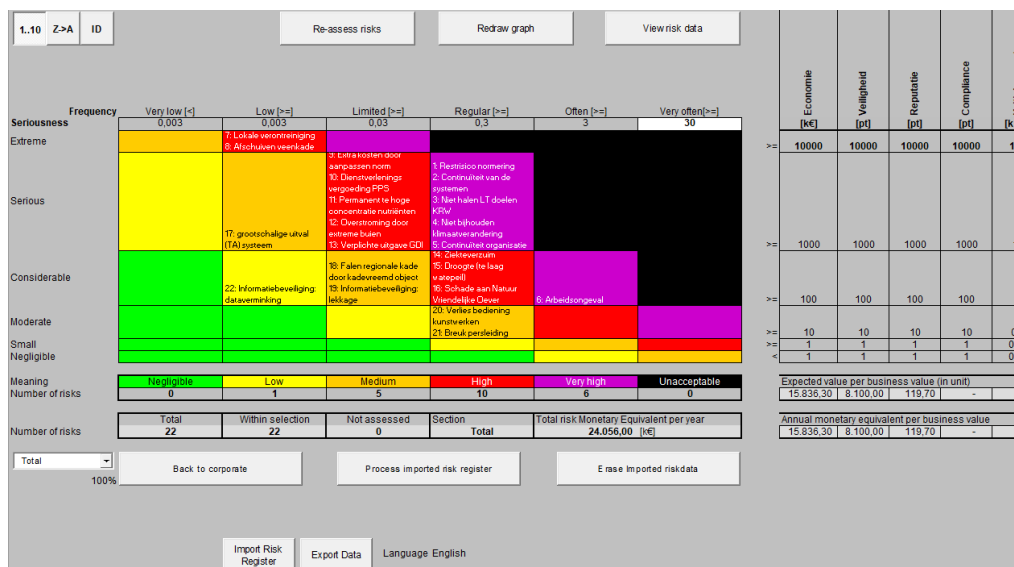


Figure 32 Dashboard with risk data of department

A large number of fields and buttons are similar to those in the Corporate Risk tab, and those of Risk Processor. The deviations are briefly described.

With the button 'View risk data' (Figure 33), the imported departmental risks can be viewed.

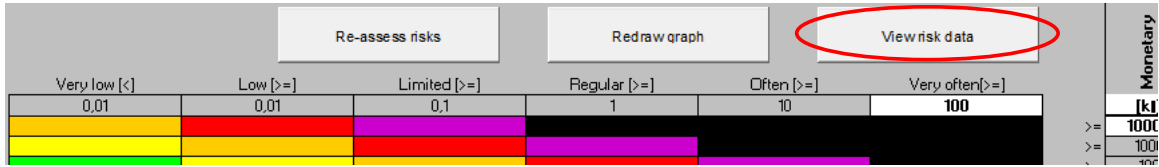


Figure 33 Button with which risks of department can be shown

This screen is identical to the screen as described on the Corporate dashboard. The only difference is that the Corporate header data with the fields CorporateID, Department, Original risk level and Processing will not be shown.

On this sheet it can be validated whether the import of departmental data was successfully.

On the worksheet 'Dashboard' the contents of the white cell can be changed (Figure 34) as described before:

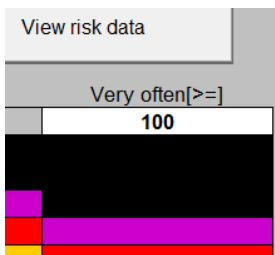


Figure 34 Data in white cell on this worksheet can be changed

Do not change the structure of the dashboard by adding or removing columns and rows. In Risk Processor Corporate thus no business values must be added or removed on this sheet. The same applies to the levels of seriousness.

The selected language is shown in Figure 35. The setting can be changed on the sheet 'C_Dashboard'.

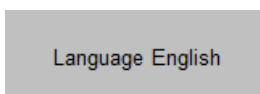


Figure 35 Selected language

If fields differ from the language setting on the 'C_Dashboard' sheet, then in Risk Processor a custom label set by the department is selected (user definition, custom labels).

With the button 'Back to corporate' (Figure 36) you can return to the corporate risk matrix.

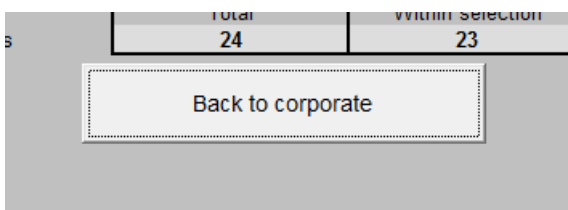


Figure 36 Via this button you can return to the corporate risk matrix

The corporate risk matrix is shown on the sheet 'C_dashboard' and is described in paragraph 3.6.

5.4 Process imported risks in Corporate risk matrix

With the button 'Process imported risk register' (see figure below), the imported data from the department is copied to the corporate risk register.

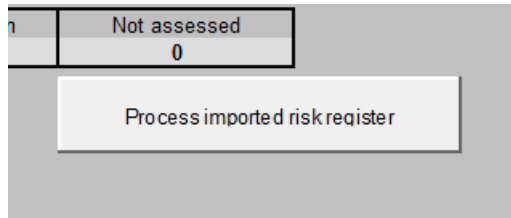


Figure 37 Process imported risk register data to Corporate risk register

The way of work for importing data is described in paragraph 5.2.

If it is needed to delete imported risk data, then the button 'Erase imported risk data' should be pressed (Figure 38).

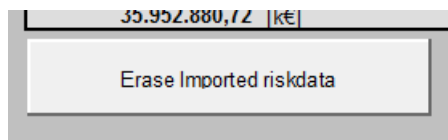


Figure 38 Button with which imported departmental data can be deleted

In that case the newly imported data will not be incorporated into the Corporate risk register. When the button 'Delete Imported risk data' is pressed, this only works for data on the sheet 'Risk Register'. The previously imported data, which is already available on the sheet 'C_dashboard', will not be deleted.

Via the button 'Import risk register' (Figure 39) at the bottom of the screen the departmental risk data can be imported. The way of work is identical as described before.



Figure 39 Import risk data from department

5.5 View risk data on Corporate dashboard

Press the button 'Re-assess risks' (Figure 40) on the sheet 'C_Dashboard', so the risks are placed on the correct location in the matrix. This can be required when the severity or frequency are changed, so the risks can be on the wrong place in the risk matrix.

	C	D	E	F	G
	Re-assess risks		Redraw graph		View risk data
	Low [\geq]	Limited [\geq]	Regular [\geq]	Often [\geq]	Very often [\geq]
	0,01	0,1	1	10	100

Figure 40 Re-assess risks

On the sheet 'Dashboard' press the button 'View risk data' button to details of the risks (Figure 41).

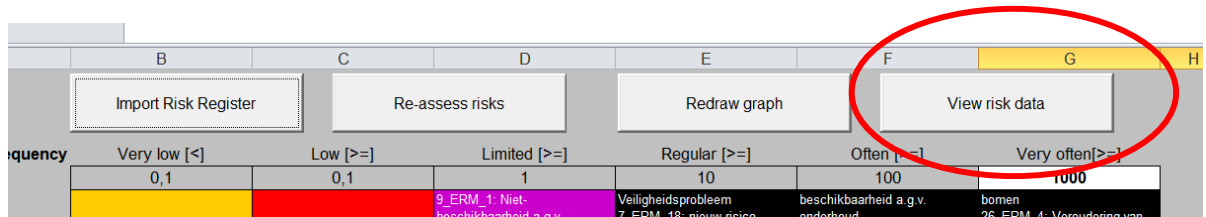


Figure 41 Press button to view risk data

The screen below appears (Figure 42).

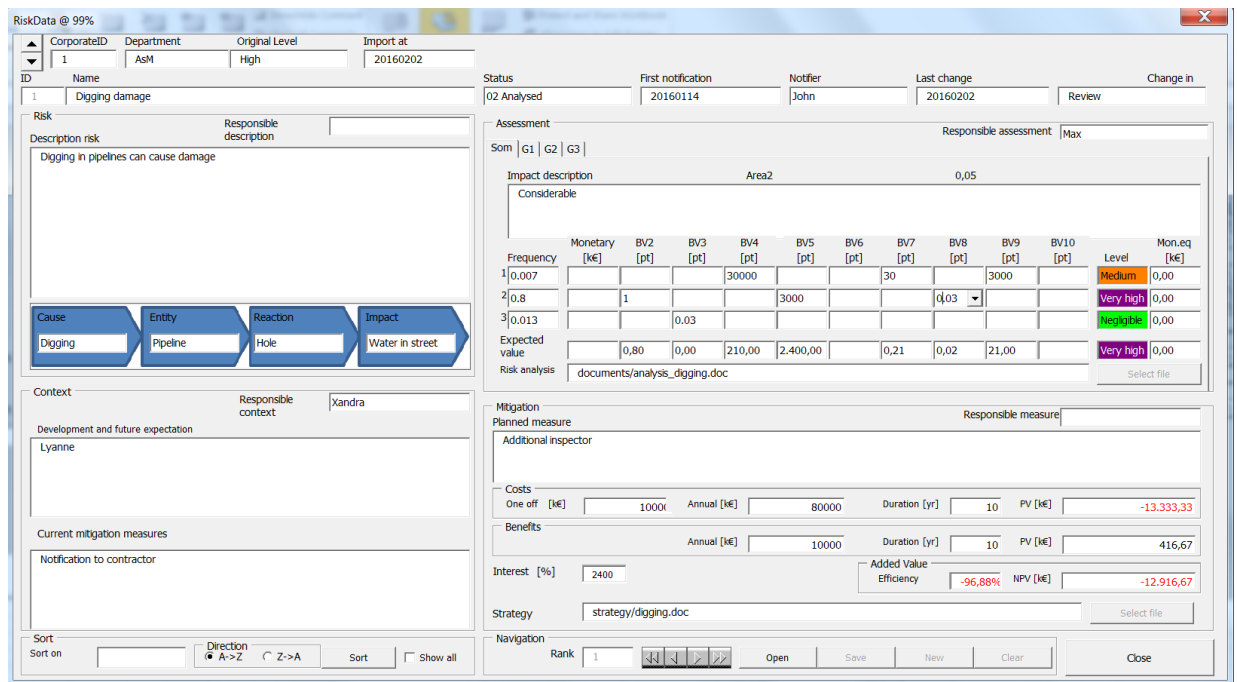



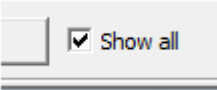
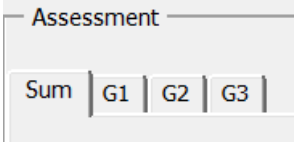

Figure 42 Screen for viewing risks

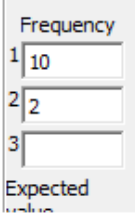
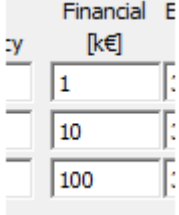


In this screen a number of fields is available. The data which can be selected and shown on the screen is dependent on the selection on the worksheet 'C_riskregister' (see paragraph 4.7: Scaling). This will be described in the table below for the relevant fields.

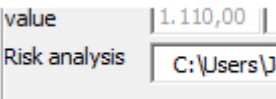
Description of the fields:

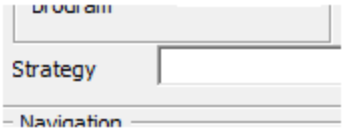




Part	Field name	Description
Corporate	RiskData @ 117%	Name of tab and zoom level (in this case 117%).
		Zoom (up arrow) or Zoom (down arrow). If this button is pressed several time, the screen may not fit more on your monitor.

Part	Field name	Description
	CorporateID	Unique sequence number of risk at corporate level.
	Department	Department from which the risk is imported.
	Original level	Risk level as assessed by the department on its own risk matrix.
	Import at	Date on which the import is executed.
Header	ID	Unique number of the risk of the department.
	Name	Here a name of the risk can be shown.
	Status	The status of the risk is shown.
	First notification	Date when the risk is first entered into the system by the department.
	Notifier	The name of the person who mentioned the risk first.
	Last change	Date when the last change in Risk Processor took place.
	Change in	The part in this screen in which the last change took place.
Risk	Responsible description	Person responsible for describing the risk.
	Description risk	A broad description of the risk can be added.
	Cause	A value list in which the cause can be selected.
	Entity	Select where the risk can appear.
	Reaction	Shows what the effects of the risks are in case the risk appears.
	Impact	Shows the most important element which the risk has effect.
Context	Responsible context	Person responsible for describing the context.
	Development and future expectation	A description how the risk looks like in the future.
	Current mitigation measures	Which mitigating measures already exist to reduce the risk within acceptable limits.
Sort	Sort on	Selection field in which the order of the risks can be selected via the navigation function. The navigation function is described later in this table.

Part	Field name	Description
		<p>Some sort possibilities start with EV (= economic value). The descriptions behind 'EV' are the business values as described in paragraph 4.5.</p> <p>Note: the sort function takes the sort function of worksheet 'C_Riskregister' into account. So less risks can be shown than there are present in the risk register.</p> <p>The lines are moved within the selected fields. This means that the ranks are in order, but not connected. The same applied if 'show all' is selected.</p>
	Direction A → Z	Ordering of the risks from A to Z or from low to high. When a field is selected with an empty value, then this value is shown last with an ordering from A → Z
	Direction Z → A	Ordering the risks from Z to A or from high to low.
	Sort	With this button the sort function is activated, after the selections 'Sort on' and 'A → Z' or 'Z → A' are made.
	Show all 	<p>In case not all risks are in the selection, because on the worksheet 'C_riskregister' a selection is made, then this selection can be made undone. In that case a mark should be placed here (left from Show all).</p> <p>On the worksheet 'C_riskregister' the relative selection of that worksheet is not made undone.</p>
Assessment	Responsible assessment	Person responsible for the evaluation of the risk.
	heet 'Sum' and sheets others right next to it  	<p>In case of than one area is specified, the tabs receive the name of the specified field as described in paragraph 4.6.</p> <p>If only one area is specified, then automatically opens that sheet, where both impact and frequency must be completed.</p> <p>Note that the calculated sum is dependent on the choice of the area that was selected on the 'C_Dashboard' tab (see paragraph 6.4). For example, if region 1 is selected on the dashboard, then the sum demonstrates the value of region 1. This is to ensure that the image of the risk will be placed correctly in the matrix (which uses the values of the total). Left it can be seen that on the</p>

Part	Field name	Description
		dashboard 'Area1' is selected which has a scale factor of 40% (sheet 'Scale').
	Impact description	Result of the assessment of the impact can be captured here.
	Frequency 	3 lines in which the number of times per year the risk appears can be shown. Also non numerical values are shown, but non numerical values are not taken into account for calculation. Figures with a dot are not recognized as a figure. This has to be a comma for the decimal sign and a dot for the thousands. This goes also for the next columns, starting with Financial (see below).
	Financial 	<p>Column in which the effect of occurrence of a risk for the lines 1, 2 and 3 is shown (value).</p> <p>Another possibility is to select the impact via the value list. See Figure 43 for an example.</p> <p>Note: in your Risk Processor Corporate the business value name can differ from the text which is shown in the picture left.</p> <p>For the columns next to it goes the same. Only business values are shown which have a name.</p> <p>The value of the dimension in the left column is used for the monetary equivalent.</p>
	Level 	<p>Here per risk (line 1, 2, 3 and the total in line 4) the risk level is calculated automatically on Corporate level in this screen, or on departmental level in the screen for the department (on level of department from sheet 'Dashboard'). The highest level is shown which is applicable for the business value.</p> <p>See Figure 43 for an example of a calculation.</p> <p>The colors of the risks match with the colors from the risk matrix.</p>
	Monetary Equivalent 	<p>The monetary equivalent is calculated automatically on basis of the highest values in the matrix.</p> <p>If for a business value, other than Financial (e.g. Safety), a dimension is filled out (e.g. 'kilo'), then this value is taken into account in the monetary equivalent. So if the highest value is 25,000 kilo</p>

Part	Field name	Description
		safety and also 25,000 k€, then a kilo safety is worth one kilo of Euros. If the value is changed, the monetary equivalent changes as well. Because the values above are the same (25,000), it looks like the values are summed up, but that is not the case.
	Risk analysis 	Here a link can be shown with a document in which more details of the risk assessment are recorded. The file itself is not saved in Risk Processor Corporate.
Planned measures	Responsible measure	Person responsible for determining and scheduling the risk mitigating measures.
	Planned measure	Description of the planned mitigation measures.
	Costs: One off	One off investment needed for the selected mitigation measure.
	Costs: Annual	Annual costs needed for the chosen mitigation measure.
	Costs: During	Throughput time needed to implement the mitigation measure.
	Costs: PV	Present value of the costs (one off and annual) required to implement the chosen mitigation measure.
	Benefits: Annual	Total financial risk reduction per year for the chosen mitigation measure.
	Benefits: During	Period for which the chosen mitigation measure is applicable.
	Benefits: PV	Present value of the added values during the period for which the mitigation measure works.
	Interest	Interest rate which will need to be taken into account for the investments and added values. Figures with a dot are not recognized as a figure. This has to be a comma for the decimal sign and a dot for the thousands.
Added value: Efficiency	Efficiency of the chosen mitigation measure. The efficiency is the present value divided by the present costs.	

Part	Field name	Description
	Added value: NPV	Total Net Present Value of the chosen mitigation measure. A net present value greater than 0 is a positive investment.
	Strategy 	Here a link can be shown with a document in which more details of the risk assessment are recorded. Note that only the name is linked. The file itself is not saved in Risk Processor Corporate.
Navigation	Rank	Here the numerical value is shown in which the risk is in the range. This range can change per risk if the order (described earlier) is changed. For the navigation the same is applicable as for the ordering. It is dependent on a possible selection on the worksheet 'C_riskregister'.
		Navigate to the first risk in the list. This is dependent of the chosen order. This goes also for the next three buttons described hereafter.
		Go one risk back in the order.
		Go one risk forward in the order.
		Go to the last risk in the list.
	Open	Open a risk. When this button is pressed, a screen appears in which the number of the risk can be inserted. The ID (unique number of the risk) is shown, as well as the description of the risk.
	Save	Save of created changes is not possible in Risk Processor Corporate.
	New	Add a new risk is not possible in Risk Processor Corporate.
	Clear	Delete this risk and remove it from the risk register is not possible in Risk Processor Corporate.
Close	Leave this screen.	

Example 1 shows likelihoods and effects for a risk (Figure 43 Calculation financial value of the risk):

Frequency	Financial [k€]	Environme [pt]	Safety [k€]	Legal [pt]	Image [pt]	Quality [pt]	Level	Mon.eq [k€]
1 10	10						High	100,00
2 0,01	10000						Medium	100,00
3 0,1	100						Medium	10,00
Expected value	210,00						High	210,00
Risk analysis								

Figure 43 Calculation financial value of the risk

In Figure 43 is shown that for this risk on average:

- 10x per year a financial damage of 10,000 Euro appears. This means that the risk level is 'High' (shown below level) and that monetary equivalent is 100k Euro (shown below Mon. Eq)
- 0,01x per year a financial damage of 10,000,000 Euro appears. This means that the risk level is 'Medium' and that the monetary equivalent is 100k Euro. Despite the monetary equivalent is equal to the previous line, the risk level here is lower. This is caused by the chosen limits of the risk matrix as described in the Risk Processor manual
- 0,1 x per year a financial damage exists of 100,000 Euro. This means that the risk level is 'Medium' and the monetary equivalent is 10k Euro.
- In the row 'Expected value' it is shown that the average annual costs for this risk are 210,000 Euro. This results in the risk level 'High'. The total monetary equivalent in this example is also 210,000 Euro, because the risk here goes only for the business value Financial. If there is also influence on other business values, then the sum of the values is calculated below Mon. Eq.

6 Reporting risks

This chapter describes how risks can be reported. This includes showing information of risks, redrawing the graph and the revaluation of risks. Also the risk matrix, filtering in the risk register and selection of the department are dealt with.

6.1 Show information of risks

For the risks can be determined which information is shown on the dashboard. By default the convention is as follows: <rank>: <name of the risk> <ID in the corporate risk register> [<department>_<ID of risk in the department >], see Figure 44.

9: Permanent te hoge concentratie nutriënten (10 [ERM_10])	3: (3)
10: Verplichte uitgave GDI (9 [ERM_9])	4: kli [E
	5: [E

Figure 44 Showing information of risks

Op the Dashboard sheet the text between [and] lacks. Explanation:

Part of the convention	Comments
Rank	Sequence of the risks based on the risk level, the impact and then the monetary equivalent (all from high to low). If there is more than one risk with the same risk level, then the risk with the highest impact is shown first. If the impacts are also the same, then the risk with the highest

	monetary equivalent is shown first.
Name of the risk	Description of the risk from the risk register.
ID	Unique number of the risk from the risk register.
Department	Name of the department which defined the risk.
ID risk department	Unique number of the risk from departmental risk register.

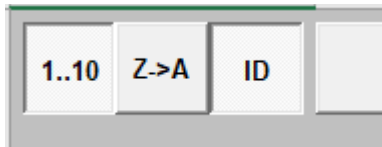


Figure 45 Buttons for changing display risks on dashboard and sequence

With the button 1..10 (Figure 45) the display of the ranking on the dashboard can be switched on or off. This is enabled in Figure 45 and the view is thus shown.

With the button ID the unique number on the dashboard can be switched on or off. This is also enabled here. After pressing the buttons, the 'Redraw graph' button (see next paragraph) must be pressed before the function works. Figure 46 shows the display when the functions are switched off.

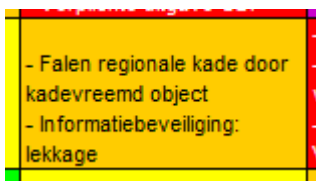


Figure 46 View risks on dashboard with rank and ID switched off

The Z-> A button gives the standard sorting with the numbers before it. The effect is only visible when the rank is switched on (button 1-10).

6.2 Redraw graph and manual filtering

With the button 'Redraw graph' the location of the risks in the graph is determined (Figure 47). This function is both available on the worksheet 'C_Dashboard' as on 'Dashboard'.

C	D	E	F	G
Re-assess risks		Redraw graph	View risk data	
Low [≥]	Limited [≥]	Regular [≥]	Often [≥]	Very often [≥]
0,01	0,1	1	10	100

Figure 47 Redraw graph

The button is used when a filter is applied in the worksheet 'Risk Register', for example when only risks with an impact on safety are selected. An example is given below.

Suppose the worksheet 'C_Risk Register' includes the following content (Figure 48).

ID	Name	Status
1	Risk 1	Status 1
2	Risk 2	Status 1
3	Risk 3	Status 1
4	Risk 4	Status 3
5	Risk 5	Status 3
6	Risk 6	Status 2
7	Risk 7	Status 3
8	Risk 8	Status 1
9	Risk 9	Status 1
10	Risk 10	Status 1
11	Risk 11	Status 2

Figure 48 Example for a part of the contents of the worksheet 'C_Risk register'

It contains 11 risks in total. If it is for example required to only show risks with the status 'Status 1' in the risk matrix, then in the column 'Status' a filter should be placed (Figure 49; functionality is dependent on Windows version).

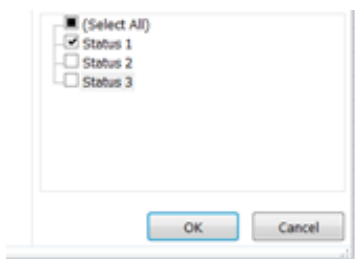


Figure 49 Selection risks with 'Status 1'

Is the filter set, then switch back to the dashboard worksheet. Click on the button 'Redraw graph'. On the worksheet 'Dashboard' the following is then presented:

- Total number of risks: 11
- Within selection: 6
- Not assessed: that depends on the number of risks for which no likelihood and / or effect is defined. The minimum number is now 0, the maximum number of 6.

In the risk matrix now only risks are shown which are selected with the filter.

It is also possible to filter on more than one column on the worksheet 'C_Risk Register'.

The result in the risk matrix is dependent on whether in the risk screen (through the button 'View risk data'); the option 'Show All' is checked. Is that button checked then all risks from the risk register are shown in the risk matrix on Corporate level or for the department, independently from the selection on the relative worksheet.

A selection on this worksheet also affects the monetary values per business value. Is a selection of application, then only the monetary values are calculated within the selection (both per business value as for the total). Again, when via the button 'View risk data' the option 'Show All' is checked, all risks are taken into consideration, regardless of the selection on a Risk Register worksheet.

Finally, a selection affects the number of risks for each level, as can be seen in figures Figure 32 and Figure 42.

6.3 Re-assess risks

When the data on the severity in the white cells are adjusted in the effect matrix or frequency on the dashboard, then the risks are shown in the wrong place in the risk matrix. When the button 'Re-assess risks' is pressed (Figure 50), the level of the risks is recalculated.

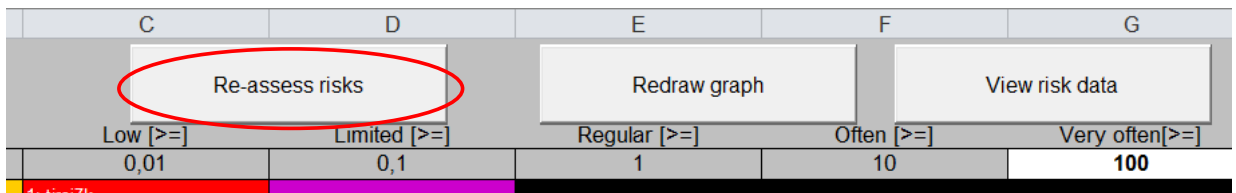


Figure 50 Re-assess risks

6.4 Select Scaling

When areas are defined in the 'Scaling' sheet (paragraph 4.7), then on a 'Dashboard' sheet it can be chosen whether the total risk exposure needs to be shown or whether a specific area should be displayed. Therefore make a choice in the field below (Figure 51).

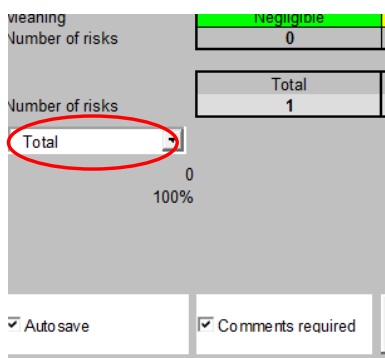


Figure 51 Select scaling: total

In Figure 51 it can be seen that the total is selected. This means that the total risk for all areas is shown. Below is the area the number is displayed (0 means total) and below that is the weight factor of the total (100%). Scale factors influence the risk matrix. An effect with a scale factor of 100% which scores 'serious', will receive the value 'extreme' (see the effect matrix in paragraph 4.2) at a scale of 10%.

If a selection of an area is made, then the area number and the weight factor (Figure 52) can be seen below that selection field. Also the position of a risk in the matrix can change, because the weight factor of the effect changes as well (the scaling works the impact of a risk. The frequency for each area is filled out in accordance with Figure 12).

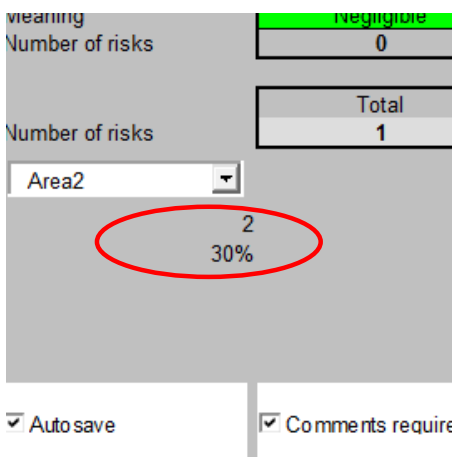


Figure 52 Area number and weight factor of the area

7 Secure data

In this chapter securing data is discussed. This includes saving the application and the creation of a backup:

- Save data (paragraph 7.1)
- Create a copy (paragraph 7.2)
- Export data (paragraph 7.3)
- Copy data to Excel (paragraph 7.4)
- Create an automated backup (paragraph 7.5).

Make sure you always have a backup of the application. This is the responsibility of the customer / user, including the safe storage for e.g. fire and theft.

7.1 Save data

On every screen the standard Windows buttons are visible. To save the results of the file press on the disk (Figure 53).

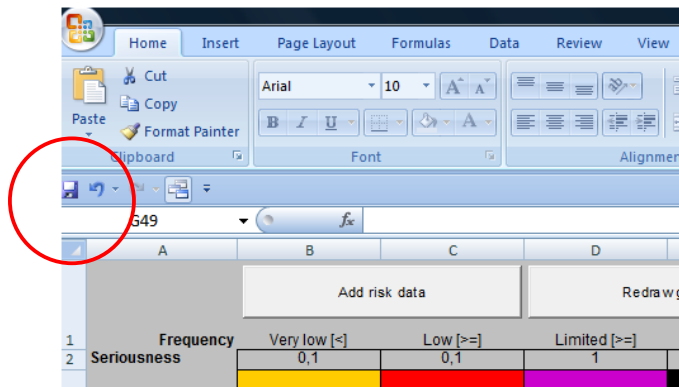


Figure 53 Default windows buttons (dependent on the Windows version)

You can choose your own file name. It is advised to make a backup with a different file name in case of major changes.

7.2 Create a spare copy

Creating a spare copy is a way to make a backup of the application. This is possible by copying the entire risk register (the executable of the application) periodically to for example another disk. This can be done as follows:

- copy the file and give it another name in the same directory
- copy this file in another directory, location. See also paragraph in 2.1 with respect to installation on a corporate network.

7.3 Export data

To export data, usage can be made of the export functionality. This works as follows:

- Entire Corporate Risk Register including contents of all departments via the sheet 'C-Dashboard'
- Risk register of the department which was just imported via the sheet 'Dashboard'.

Exporting the data works as follows:

- Make sure filters are switched 'off' in sheets before exporting data
- Go to the worksheet 'C_Dashboard' for the entire risk register or to 'Dashboard' for the data of the latest imported department
- Click on the Export button (Figure 54)
- In the same directory in which the application is stored, an export file is created. Example: 'RiskProcessor_4.1 export 20140303_134719.xlsx'.

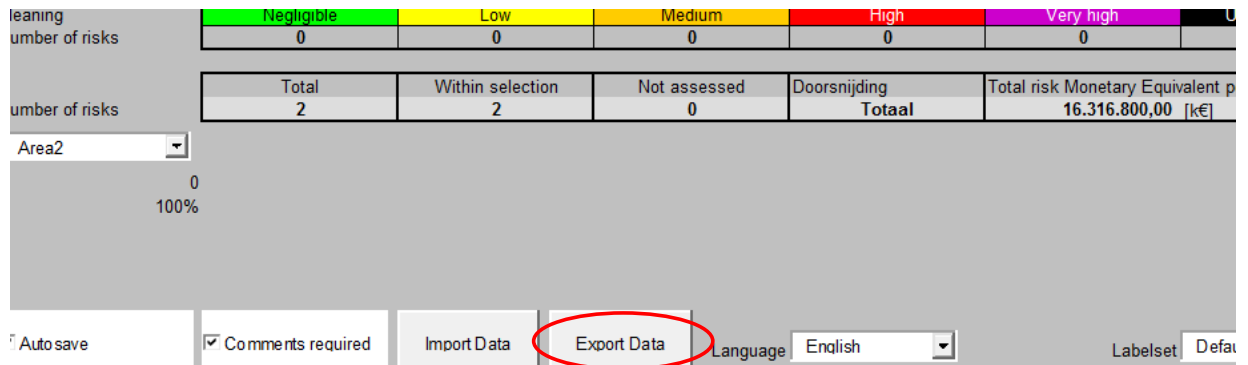


Figure 54 Export function for data

When the data is exported as described here, it is always possible to make an import of the data. In most cases this is possible to do this automatically without making adaptations to the data (this can be required when the data model is changed in a new Risk Processor or Risk Processor version).

When the export method is selected as described in this paragraph, data from the different worksheets will be copied in a single file: the risk register, the effect matrix, area definition, the data lists, the user specific fields, the data lists and the risk register itself. These are all altered fields which the user has entered since the first use of the application.

Via the previously described 'Import data function' the exported data can be imported again.

7.4 Copy data to Excel

Another way to secure the data is to copy the data to Excel. An automated recovery action will then not be possible. If a crash has occurred, then the data needs to be copied manually to the appropriate worksheets with the correct rows and columns. This requires the protection of the worksheets switched off, see paragraph 3.4. When this approach is selected, the following worksheets should be copied:

- 'C_Risk Register'. This is essential because the risk data is stored in this tab
- 'C_Effectmatrix'. This may be necessary if the matrix is not available on another location
- C_Scaling (Area definition)
- 'C_User Definition'. The application works without the data on this tab, but the userspecific fields are then no longer available.
- The data lists (tab 'Datalists'). This is useful but not strictly necessary. If a risk is saved and one or more elements from the data list are new, the application will ask whether the data for the data list should be added

It is recommended to copy the worksheets completely. Then it is always traceable from which columns to the data originates. This can be useful when upgrades of the application have taken place.

7.5 Autosave

It is possible to automatically create backups. Disabling (Figure 55) and enabling the function (Figure 56) is shown below.

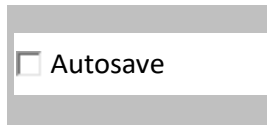


Figure 55 Autosave function disabled

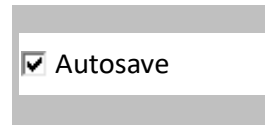


Figure 56 Autosave function enabled

If the function is switched on, all changes in data will be stored automatically in the Risk Processor Corporate file. Make sure you make a back-up of this file!

8 Advanced control of the risk register

In this chapter the manual update procedure for data is described. For all kind of changes it is applicable that the structure of a worksheet should not be changed for example by adding columns or delete the contents of the grey cells. The order of the worksheets or their names should not be changed either. If it happens, then the application could malfunction. Always keep an accurate backup as described in chapter 7.

Before a manual change is made, it must be ensured that the protection on a worksheet is removed as is stated in paragraph 3.4. After closing the application or a specific operation is performed in the application, the worksheet will be secured again.

8.1 Erase Corporate risk register

Make sure you have a backup before this function is applied. With the button on the worksheet 'C_Dashboard' of Figure 57 the content of the Corporate risk register can be deleted.

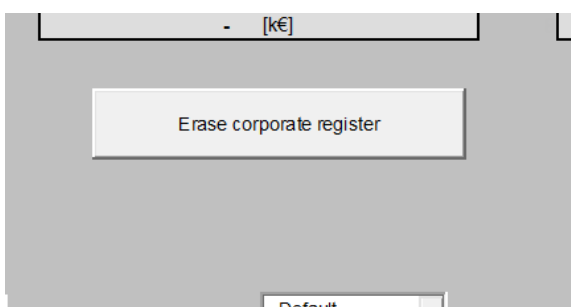


Figure 57 Clear Corporate risk register

After pressing the button, after confirmation, all corporate data is deleted from the sheet 'C_Risk Register'.

8.2 Sheet 'C_Riskregister'

The data on this worksheet is automatically filled via the functionality on the worksheet 'Dashboard' by pressing the button 'Process imported risk register'. See paragraph 5.2 for a description of the import. Note: Risk Processor within the department is the source for making changes to the data.

It can be possible to make changes on the worksheet C_Riskregister if:

1. Risk Processor Corporate needs to be made empty because a new corporate risk report needs to be produced. Advice: use the function as described in paragraph 8.1 to delete the entire content
2. the number of risks is larger than the amount that Excel allows. In practice this would not occur.

When a risk needs to be deleted, this can be done by deleting the row via default Excel functionality. However it is advised to do this via the functionality.

Do not change the structure of the risk register by adding for example columns or by deleting these. Also the row of Figure 58 cannot be deleted since then the application will not work.

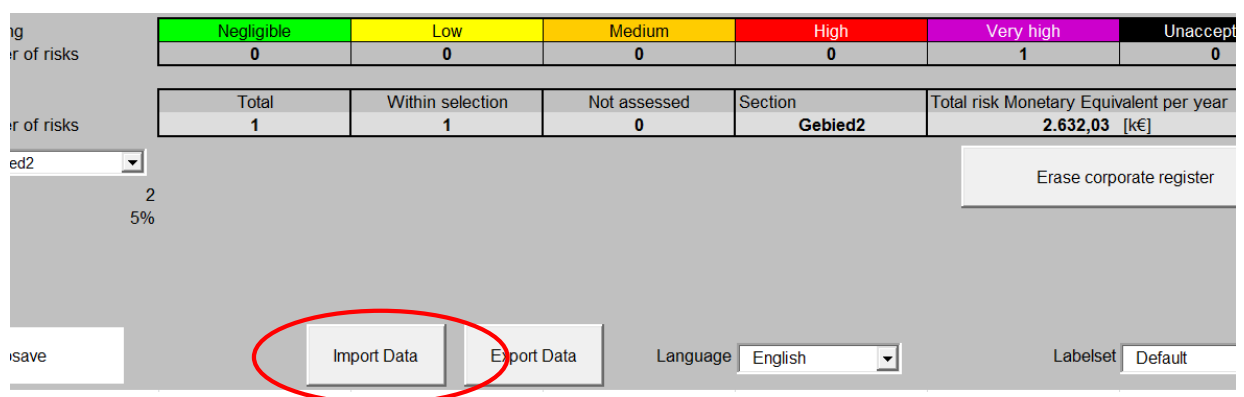


Figure 58 Row which must not be deleted

8.3 Load risk data: import backup

With the button shown in Figure 59 an import can be made of data that was previously exported. This button are located on the 'C_Dashboard' (for importing a backup which was made from the tab 'C_Dashboard') and on the 'Dashboard' (for importing data from a department).

Through 'Import data' previously exported data can be imported again. Note that existing data in the system will be overwritten.



	Negligible	Low	Medium	High	Very high	Unaccept
Number of risks	0	0	0	0	1	0
Number of risks	Total	Within selection	Not assessed	Section	Total risk Monetary Equivalent per year	
	1	1	0	Gebied2	2.632,03 [k€]	

ed2

2
5%

save

Import Data

Export Data

Language English

Labelset Default

Erase corporate register

Figure 59 Button with which the import of backup data starts

The message as shown in Figure 60 appears.

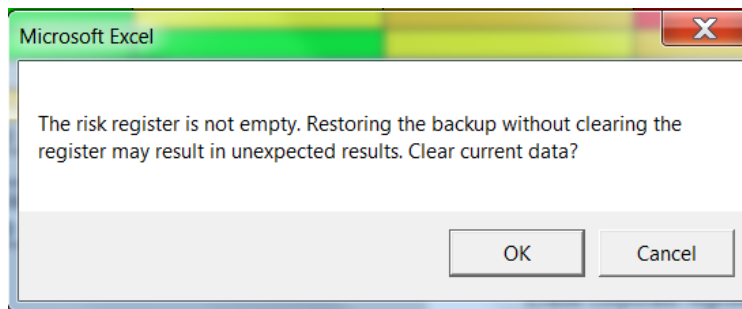


Figure 60 Message after Import data

Press 'OK' to proceed and 'Cancel' if the import should not continue. After pressing 'OK' the next screen pops up.

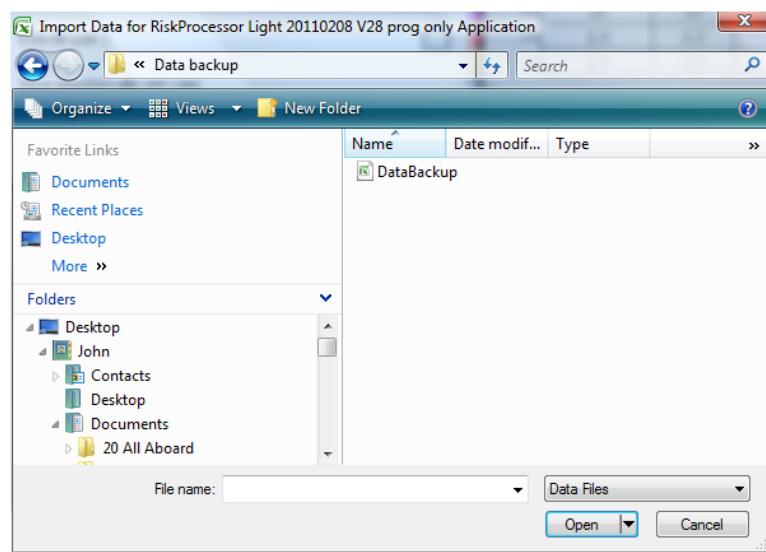


Figure 61 Example of selection screen after 'OK' is pressed

Click on the relevant file with the text 'DataBackup.dat' in it and then click on 'Open' (in Vista in Figure 61). Figure 62 appears. Note: do not use the buttons 'background color' and 'font color', because all fields which apply the values will change, including the risk register. These are default Windows buttons which cannot be changed.

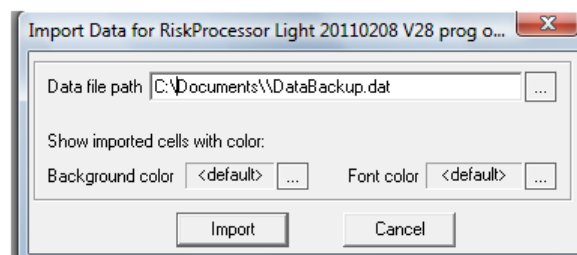


Figure 62 Selected file

In Figure 62 click on the button 'Import'. When the file is successfully imported, Figure 63 is shown (dependent on language version of Windows).

In case you do not want to import, press the cancel button (cancel in Figure 62). The import will not be carried out.

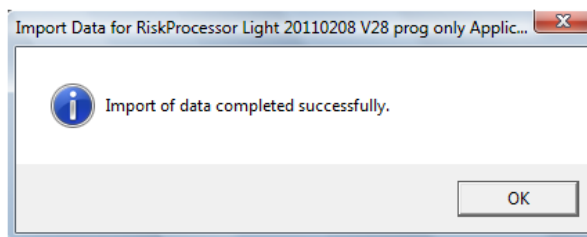


Figure 63 Successful import of backup data is carried out

8.4 Worksheets Risk register, effect matrix and scale

The data on these sheets are for the department and are applied on the 'Dashboard' worksheet. The data on these worksheets is automatically added via the import functionality on the worksheet 'Dashboard'. See paragraph 5.2 for a description of the import. Note: Risk Processor within the department is the source file where changes should be made.

Do not change the structure of the risk register by adding for example columns, deleting these or change the sequence of the columns. Also the heading row (see example in Figure 64) must not be deleted since then the application will not work.



Figure 64 Row which must not be deleted

9 Trouble shooting

Nr	Possible issue	Solution
1	Some virus scanners could limit certain functionalities of the application; note: as from RiskProcessor version 4.1 this is has not shown up anymore.	It can be required to disable certain functions of the virus scanner. AssetResolutions is not liable in case of damage if (parts of) the virus scanner are switched off.
2	A button on the dashboard sometimes gets bigger.	This is cause outside of our application. The solution is to shut down the application and restart the application again.
3	Text in the risk matrix is not clearly visible.	Show less risks in the risk matrix. This can be done to make selections on the sheet 'Risk Register' or 'C_Risk Register' (in Corporate version). Only selected data is shown in the risk matrix. See also paragraph 6.2.
4	When the application is saved, a compatibility	This could be caused by the screen settings on your PC. As far as we know this has no impact on the tool. If it has impact, please let us

Nr	Possible issue	Solution
	message can appear.	know.
5	Error after launch, while the application previously worked as normal and no changes were made.	<p>Can be caused by faulty Microsoft update.</p> <p>The solution is stated here: http://excelmatters.com/2014/12/10/office-update-breaks-activex-controls/ . It deals with deleting EXD files in the Localdata section,</p> <p><i>Close all Office applications.</i></p> <p><i>Do a search in Windows Explorer – make sure to include hidden and system files and folders – for *.exd files (note: that's not *.exe !!) and delete any you find.</i></p> <p><i>Make sure you get these:</i></p> <p><i>C:\users\username\AppData\Local\Temp\Excel8.0\MSForms.exd</i></p> <p><i>C:\users\username\AppData\Local\Temp\VBEMSFo rms.exd</i></p> <p>Usually this can be done by the end user, however on business PCs this function can be disabled. Please contact your helpdesk if this occurs.</p>
6	A button becomes larger every time this is pressed.	<p>This is a Microsoft bug that occurs in more Excel applications.</p> <p>Solution: change the language once on the dashboard. The size of the buttons will then be reset.</p>
7	The impact is entered per total and frequency per region. What is the idea behind it?	<p>If you assess a small region with the same matrix as the whole, many risks become invisible. With the scaling factor you can give the risk weight for the region, while for all the regions the sum goes according to the total matrix. The only way to achieve this is that the impact is the same everywhere and only the frequencies differ.</p>

10 Frequently asked questions

10.1 How can I use a smaller matrix (e.g. 4 x 4)?

An option is to agree in your organization which cells are used. The boundaries (cell G3 of the dashboard) and the maximum values of the effect matrix need to be adopted.

For presentation purposes, the results can be copied to a separate Excel document for further presentation.

10.2 How can I get insight into the risk level before and after mitigation?

Options are:

1. Risk Processor (not in Risk Processor Light) - Audit Trail screen:
 - a. Enter the risk in the risk register.
 - b. Give the risk a status for defining the control measure (e.g. status 'new').
 - c. Save the risk.
 - d. Add to the risk just added the mitigation measure and change the risk level.
 - e. Change the status related to the defined mitigation level
 - f. In the audit trail screen the risk can then be viewed including the risk level before and after the mitigation measure was defined
2. in Risk Processor and Risk Processor Light in the risk matrix:
 - a. Enter the risk in the risk register. Ensure that the risk can be identified (e.g. in the name)
 - b. Give it a status before defining the control measure (e.g. status 'introduced').
 - c. Save the risk.
 - d. Copy the just entered risk
 - e. Fill out the risk management measure and change the risk level into the level after mitigation.
 - f. Change the status of the risk
 - g. In the risk matrix screen then the risk level before and after mitigating the risk can be shown. Note that the risk number for the risk with the risk level before and after mitigation is not equal
 - h. On the worksheet 'Risk Register' optionally a filter on the status can be set, so for example only the risks after mitigation are shown in the risk matrix

10.3 How can I make reports?

If desired, the data from a worksheet (e.g. the risk register or audit trail) can be copied to another Excel document. Because the format of the risk register does not change, the formatting of the Excel document can be determined yourself.

In the risk register itself the layout can not be adjusted. The program could not work, or the layout is changed by the program itself after processing.

10.4 Where can I find general hints and tips?

Please visit our website at <http://www.assetresolutions.nl/en/products/questions-and-answers>