



DEWA

Database for the Evaluation of Waste Analyses

- Manual -

Project: **SWA-Tool, Development of a Methodological Tool to Enhance the Precision & Comparability of Solid Waste Analysis Data**

Program: **5th Framework Program, EU**

Project Coordinator: **iC consulenten ZT GmbH, Austria**

Contractors:

iC consulenten ZT GmbH	Austria
City Council of Vienna, MA 48	Austria
Technical University Berlin	Germany
University of Northumbria	UK
Gruppo Impresa Finance srl	Italy
Fundacion Gaiker	Spain
ICIM	Romania
Oil and Gas Institute	Poland
Newcastle City Council	UK
ASM Brescia spa	Italy
City of Bilbao	Spain
COMPREST	Romania
City of Cracow	Poland

Contact: Technische Universität Berlin – ARGUS, Uwe Büll, Franklinstr. 28-29, D-10587 Berlin
Phone: +49 (30) 39 80 60 0, uwe.buell@argus-statistik.de;

Information available: www.wastesolutions.org
www.swa-tool.net

Table of Contents

	Page
1. Introduction	3
2. Manual	4
2.1 Installation of the data base	4
2.2 The start menu / main form	7
2.3 New investigation	8
2.4 Edit investigation	9
2.4.1 Stipulation of the sorting catalogue	10
2.4.2 Definition of strata	11
2.4.3 Allocation of sampling units to strata.....	12
2.4.4 Data entry of sorting protocols	13
2.5 Evaluation	15
2.6 View results.....	16
2.6.1 Export of data and results	19

Table of Figures

Figure 1	Files in the folder "DEWA_install"	4
Figure 2	Window to choose the installation folder.....	4
Figure 3	Window to change the installation folder.....	5
Figure 4	Message: Folder does not exist	5
Figure 5	Selecting a folder for start menu entry	6
Figure 6	Installation was successful.....	6
Figure 7:	Main form	7
Figure 8:	Investigation and campaign level – new analysis	8
Figure 9:	Investigation and campaign level – edit analysis	9
Figure 10:	Stipulate sorting categories	10
Figure 11:	Edit sorting catalogue	11
Figure 12:	Stratification level (Definition of strata)	12
Figure 13:	Sampling level (allocation of sampling units).....	13
Figure 14:	Sorting categories level – data entry form	14
Figure 15:	Evaluation form.....	15
Figure 16:	Evaluation – view total results	16
Figure 17:	Evaluation – view stratum results (here: suburbs).....	17
Figure 18:	Evaluation – view detailed data of single stratum.....	17
Figure 19:	Data sheet for a selected stratum.....	18
Figure 20:	Export of result tables.....	19
Figure 21:	Printing a data sheet.....	19

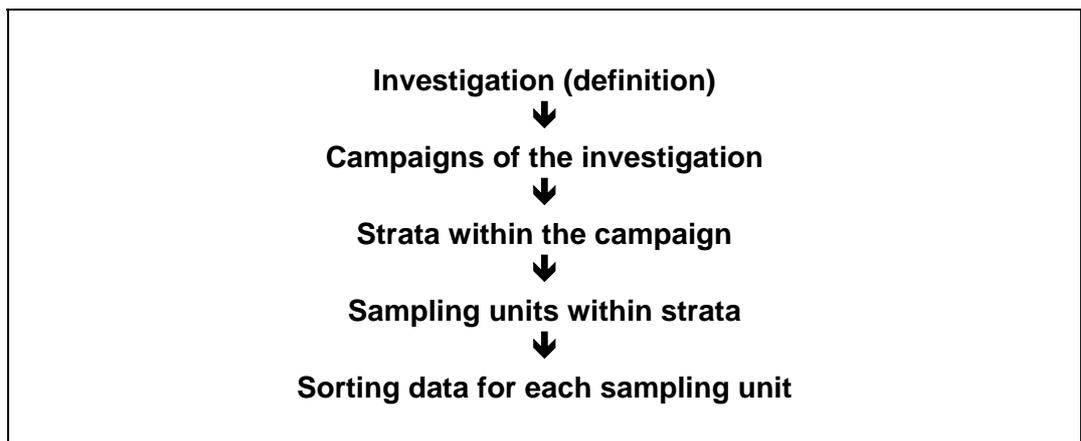
1. **INTRODUCTION**

The data base system DEWA – Database for the evaluation of waste analyses – has been set up within the 5th framework EU project ‘Development of a methodological tool to enhance the precision and comparability of solid waste analysis data – S.W.A.-Tool’.

The database system DEWA provides practical support for the evaluation of waste analyses, according to the proposed methodology of the S.W.A.-Tool for carrying out waste analyses.

Prerequisite for the use of DEWA is that the waste analysis to be evaluated has been conducted in compliance with the S.W.A.-Tool methodology. This means in particular that the waste sample has to consist of a set of randomly selected sampling units of similar size and that sorting results are available for each sampling unit.

The data entry into DEWA follows a strict hierarchy, going more into detail step by step. The main steps are



The data base system DEWA consists of four main parts:

- New investigation
- Edit investigation
- Start evaluation
- View results

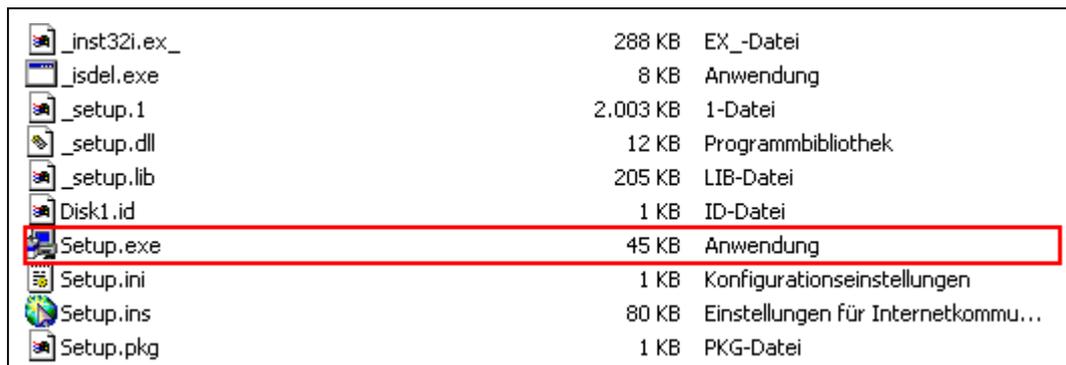
In the following the DEWA data base is described in greater detail. The manual comprises the necessary information to facilitate the practical use of the DEWA data base system.

2. MANUAL

2.1 **INSTALLATION OF THE DATA BASE**

This paragraph shows how to install the programme on your computer. For installing DEWA you have to be logged in as user with administrator rights. It is assumed here that you have received the programme on CD-ROM. On the CD-ROM there is a folder called "DEWA_install". Please copy the whole folder onto your hard disk.

This folder contains the following files:



inst32i.ex	288 KB	EX_-Datei
_isdcl.exe	8 KB	Anwendung
_setup.1	2,003 KB	1-Datei
_setup.dll	12 KB	Programm-bibliothek
_setup.lib	205 KB	LIB-Datei
Disk1.id	1 KB	ID-Datei
Setup.exe	45 KB	Anwendung
Setup.ini	1 KB	Konfigurationseinstellungen
Setup.ins	80 KB	Einstellungen für Internetkommu...
Setup.pkg	1 KB	PKG-Datei

Figure 1 Files in the folder "DEWA_install"

A double click on the file "Setup.exe" starts the installation process and the window shown in Figure 2 appears.

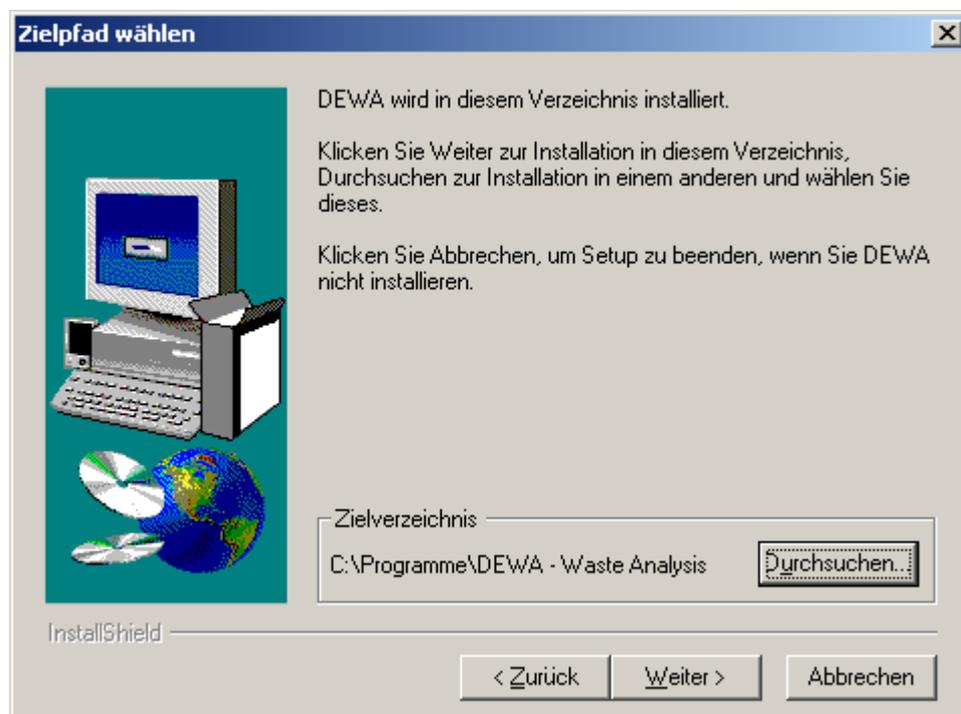


Figure 2 Window to choose the installation folder

In this window you can choose the folder DEWA shall be installed in.

With a click on the button “Abbrechen”, you can cancel the installation. This is also valid for all other windows described here.

In the frame labelled “Zielverzeichnis” you can see a default path, which is proposed by the programme. To accept this default path, click on the button “Weiter” (continue).

Otherwise click on the button “Durchsuchen” (search) to change the installation folder.

In this case the following window appears:



Figure 3 Window to change the installation folder

After selecting a folder, click “OK”. If the folder you entered is not yet existing, the window shown in Figure 4 appears.

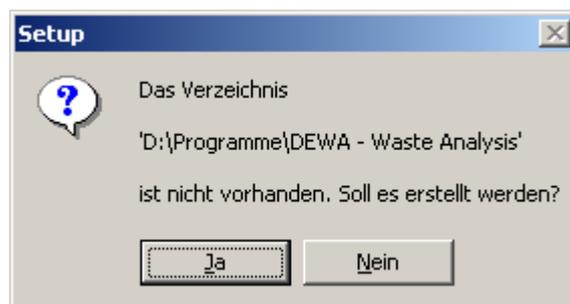


Figure 4 Message: Folder does not exist

This message means that the chosen folder does not exist and will now be created. Click on “Ja” (OK) to continue. Now again the window shown in Figure 2 appears. In the frame labelled “Zielverzeichnis” you can see the path you have chosen. If you click on “Weiter” (continue) the window shown in Figure 5 appears.

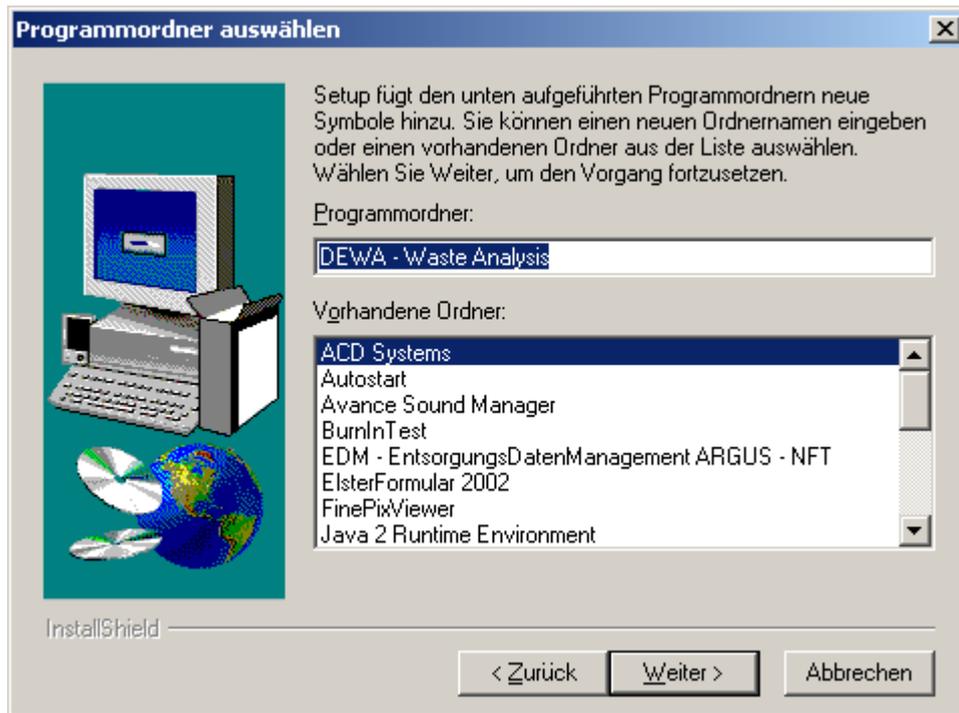


Figure 5 Selecting a folder for start menu entry

Here you can select a folder in which DEWA will appear in your start menu. If you accept the default value, a new folder will be created. Alternatively you can choose a folder in the lower window.

After clicking “Weiter” (continue) the actual installation takes place. When the installation has been completed successfully, the window shown in Figure 6 appears.



Figure 6 Installation was successful

Click on “Beenden” to finish the set-up process. Now you can start DEWA from the start menu.

2.2 THE START MENU / MAIN FORM

When starting the data base, the start menu **main form** appears automatically. This is the central form from which all data base domains are accessible by buttons.

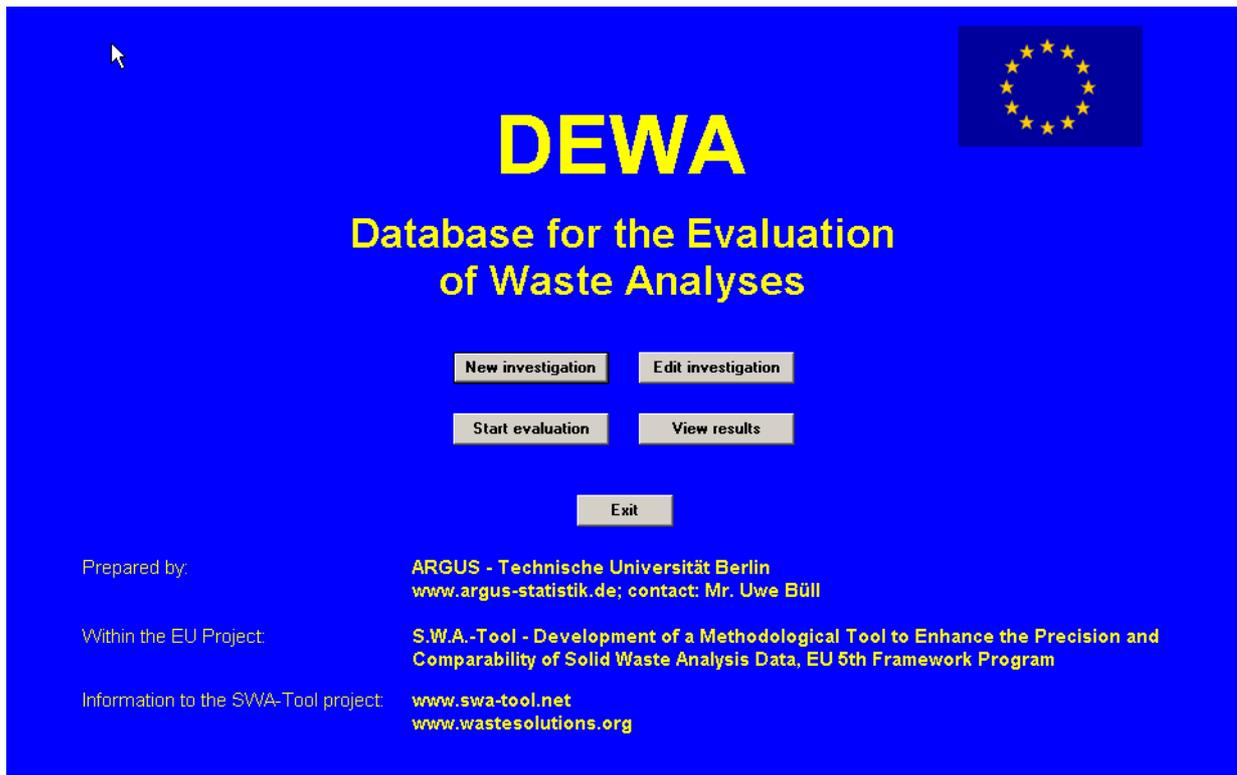


Figure 7: Main form

The part ‘**New investigation**’ shall be used when a new waste analysis is to be entered in the data base.

The part ‘**Edit investigation**’ allows changes, extensions and completions in already existing investigations.

The part ‘**Start evaluation**’ contains the statistical calculation and evaluation.

The part ‘**View results**’ contains tables, which show the results in a concise manner, and allows data export of the results.

By pressing the button ‘**Exit**’ the entire programme is closed.

2.3 NEW INVESTIGATION

Pressing the button **New investigation** leads you to the 'investigation and campaign level'. This is the initial stage of **data entry for a new waste analysis**.

Investigation and campaign level

Area under investigation: Annotations:

Type of waste:

Time of investigation:

Campaigns:

* Description	Start	End	Week no.

Number of campaigns: 0

Figure 8: Investigation and campaign level – new analysis

The next steps are:

Fill in the field 'Area under investigation'. Here you can fill in the name of a city or a region etc.

Fill in 'type of waste'. Here you can choose within a pre-selection between household waste, household/commercial waste and commercial waste using the combo box

Fill in 'time of investigation', e.g. 2004.

Press the button to define the new analysis and enter it into the data base.

Go to the domain 'Edit investigation'. For this, click on the button and you will return to the main form. Here, click on the button .

2.4 EDIT INVESTIGATION

This domain provides the opportunity to add or change information or data in already existing investigations.

The first step is to select one of the existing investigations in the 'search' field using the combo box .

(Remark: In this example we now continue with the chronological data entry for 'example city', defining the campaign name. Of course the 'edit investigation' mode allows to edit information directly in any part of the data base.)

Figure 9: Investigation and campaign level – edit analysis

The next step to continue the data entry is defining the name of the campaign.

Go to the table 'Campaigns' and select a season to describe the sorting campaign. The seasons can be selected using the combo box . Finally confirm the data entry by clicking the button .

If another campaign shall be added (e.g. summer), click on the symbol  and define the summer campaign using again the combo box .

Note:

All fields or columns which are essential for running the evaluation are marked with an asterisk *, for example *** Description**. These fields or columns are obligatory.

2.4.1 Stipulation of the sorting catalogue

For the next step 'Stipulation of the sorting catalogue' (waste categories), please press the button **Stipulate sorting catalogue...**. The button leads you to the following form:

Stipulate sorting categories

Categories (general)

Category code	Description	SWA-Tool	Selection	Remarks
0	<keine Angaben>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
01	Organic	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
01.1	Biodegradable Kitchen/Canteen Waste	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
01.2	Biodegradable Garden/Park Waste	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
01.3	Other Biodegradable Waste	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
02	Wood	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

No. of categories: 48

Edit catalogue...

Categories (specific to investigation)

Category code	Description	SWA-Tool	Remarks
		<input checked="" type="checkbox"/>	

No. of categories: 0

Adopt categories... **Close...**

Figure 10: Stipulate sorting categories

The upper table 'Categories (general)' contains the entire sorting catalogue of the S.W.A.-Tool methodology. In the column 'Selection' the desired categories can be selected for the current investigation simply by clicking in the corresponding field. The column already contains a pre-selection consisting of the main categories of the S.W.A.-Tool sorting catalogue. This main categories have a two digit code (e.g. 01 Organic). They are obligatory and cannot be deleted.

For adding S.W.A.-Tool sub-categories to the catalogue, please click on the corresponding field in the column 'Selection'. When you have finished the selection of sorting categories, press the button **Adopt categories...**. The selected catalogue appears in the lower table 'Categories (specific to investigation)'. Now the selected catalogue is linked with the current waste analysis and ready for data entry. Click on the button **Close** to return to the page 'Investigation and campaign level'.

Alternative: In case you want to add waste categories that are not included in the S.W.A.-Tool sorting catalogue, e.g. more detailed glass categories, click on the button **Edit catalogue...**. On the appearing form, please click on the button **Add** and the following form will be opened:

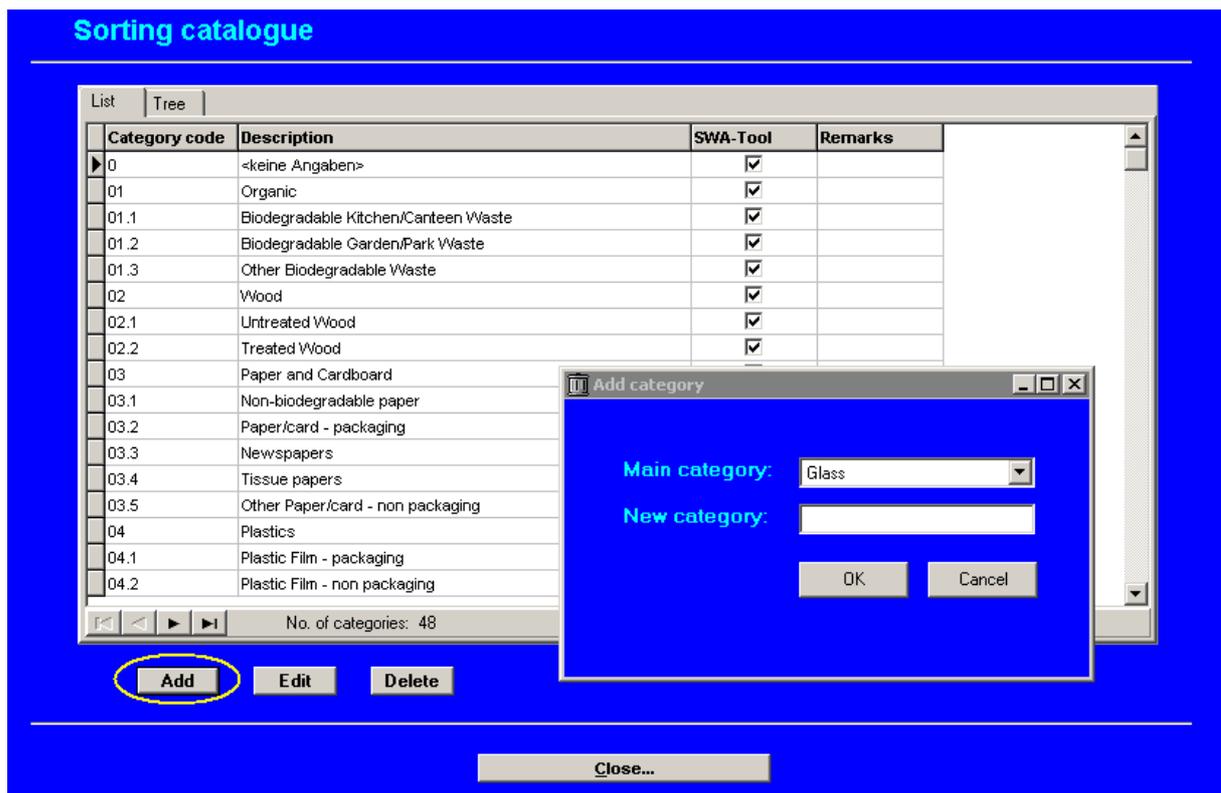


Figure 11: Edit sorting catalogue

Define a new waste category, close the window and you will return to the form 'Stipulate sorting categories'. Press the button **Adopt categories...**. The selected catalogue appears in the lower table 'Categories (specific to investigation)'. Now the selected catalogue is linked with the current waste analysis and ready for data entry. Click on the button **Close** to return to the page 'Investigation and campaign level'.

2.4.2 Definition of strata

If more than one campaign is available, select the desired campaign on the form 'Investigation and campaign level'. Then click on the button **Campaign...**. The click will take you to the form 'Stratification level'. Here it is possible to define different strata (e.g. different residential structures within the area under investigation). Please note that it is obligatory to fill in the columns '* Description' and '* Proportion'. Figure 12 gives an example.

Fill in the applied strata and the corresponding proportions using the button **+** and confirm your data entry with the button **✓**.

Stratification level

Area under investigation: **example city**
 Type of waste: **Household waste**
 Time of investigation: **2004**
 Campaign: **Spring** Start: **15.03.2004** End: **19.03.2004**

* Description	* Proportion (%)	Stratification criteria
▶ Suburbs	25	Detached, semidetached and terraced houses (with gardens)
Inner city	55	Inner city area, without gardening□□
Multy storey	20	high rising buildings, without gardening

Number of strata: 3

Stratum... Close

Figure 12: Stratification level (Definition of strata)

The example above shows three different strata (here: residential structures), which have been investigated separately. Please note that the column ‘* Proportion’ must be filled in, too. The percentages of the strata stipulate the contribution of each single stratum result to the total result. The percentages must sum up to 100%.

Note:

If you do not have strata in your investigation, define one stratum anyhow (e.g. total) and link it with a proportion of 100%.

2.4.3 Allocation of sampling units to strata

After stipulating the different strata, the different sampling units have to be allocated to the corresponding strata. For this purpose, click on any stratum you like to continue with (example above: suburbs) and click on the button **Stratum...**. The click leads you to the form ‘**Sampling level**’ according to the pre-selected stratum (here: suburbs). The screenshot of this form is shown overleaf.

Sampling level

Area under investigation: **example city** Time of investigation: **2004**
 Type of waste: **Household waste** Campaign: **Spring**
 Stratum: **Suburbs**

* No. of samplin	* Name of samplin	Date	Recorder	Gross weight	Empty weight	Net weight	Remarks
1	sub1	16.03.2004	paul	0	0		
2	sub2	17.03.2004	paul	0	0		
3	sub3	16.03.2004	paul	0	0		
4	sub4	15.03.2004	paul	0	0		

Number of samples: 4

Buttons: Sampling unit... Close

Figure 13: Sampling level (allocation of sampling units)

In the example above, there are four sampling units existing in the stratum 'suburbs'. Each sampling unit is clearly defined by its consecutive number and its name.

' *No. of sampling unit' and ' *Name of sampling unit' are obligatory columns. The remaining columns are optional for additional information.

Add the sampling units using the button **+** and confirm your data entry with the button **✓**.

For the allocation of sample units to the remaining strata (here: 'inner city' and 'multi storey') you have to repeat the above described procedure: Go back to the '**Stratification level**' by pressing the button **Close**. Select another stratum, e.g. 'inner city' and click on the button **Stratum...**. Then define the sampling units for the stratum 'inner city' as described in the example above. Repeat this procedure until all available sampling units are allocated to their corresponding stratum.

2.4.4 Data entry of sorting protocols

After allocation of the sampling units to the corresponding strata, you are now ready to enter the detailed sorting results (sorting protocols) for each sampling unit. This has to be done separately for each stratum.

Carry out the following steps:

Go back to the form '**Stratification level**' and select a stratum, e.g. suburbs. Then click on the button **Stratum...** and you will be on the '**Sampling level**'.

Click on the button **Sampling unit...** and the form 'sorting categories level' will appear. Press the button **Paste selected categories...** to link the selected waste categories with the data entry form. Then the form 'sorting categories level' opens:

Category code	Category name	* Gross weight [kg]	Empty weight [kg]	Net weight [kg]
01	Organic	0	0	0
02	Wood	0	0	0
03	Paper and Cardboard	0	0	0
04	Plastics	0	0	0
05.1	Glass Container Packaging Clear	0	0	0
05.2	Glass Container Packaging Brown	0	0	0
05.3	Glass Container Packaging Other	0	0	0
05.4	Miscellaneous Non Packaging Glass	0	0	0
06	Textiles	0	0	0
07	Metals	0	0	0
08	Hazardous Household Waste	0	0	0
09	Complex Products	0	0	0
10	Inert	0	0	0
11	Other Categories	0	0	0
12	Fines	0	0	0

Number of sorting categories: 15

Figure 14: Sorting categories level – data entry form

Figure 14 shows the empty data entry sheet for sampling unit 'sub1', belonging to the stratum 'suburbs'.

Fill in the sorting results in the columns '*Gross weight' and 'Empty weight'. In case the empty weight is not available (because net weights for the categories have already been calculated), fill in the data in the column '*Gross weight'. The column 'Net weight' will be calculated automatically in any case.

Note: Do not fill in any values in the column 'Net weight'.

Once data entry for sample 'sub1' is complete, press the button **Close**. You are now on the 'Sampling level' again. Select the next sampling unit, e.g. sub2, and press the button **Sampling unit...**. Press the button **Paste selected categories...** to link again the selected waste categories with the data entry form, then start data entry for sample 'sub2'.

Repeat this procedure for each sampling unit.

When all sampling units of one stratum are entered into the data base, go to the next stratum. The different strata are to be selected at the 'Stratification level', different sample units are to be selected at the 'Sampling level'.

2.5 EVALUATION

Once the data entry is complete, the evaluation can be started.

Go to the main menu (see Figure 7:Main form) and click on the button **Start evaluation**.

In the appearing form select the desired investigation using the combo box in the field 'Search investigation'. Afterwards select the desired campaign using the combo box in the field 'Search campaign'.

Press the button **Check plausibility...**.

After the (successful) plausibility check press the button **Start evaluation...** and, after a short period of time, you will see the following form.

Search investigation: example city Household waste 2004 Search campaign: Spring

deleting previous results...
OK

calculating net weights...
OK

evaluating strata...
OK

evaluating campaign...
OK

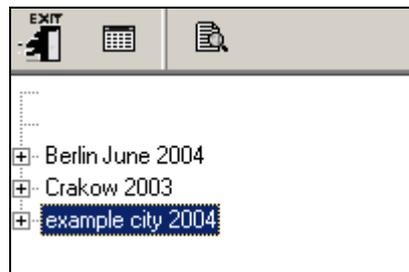
The evaluation was successful.
To view the results, close this form and click on button "View results".

Check plausibility... Start evaluation...
Delete results Close...

Figure 15: Evaluation form

2.6 VIEW RESULTS

To view the results, press the button **Close** to return to the **main form**. Here, press the button **View results**. On the upper left of the screen you will find the names of all available investigations that are administered in the data base.



Double click the desired investigation (here: example city 2004) and the campaign appears (here: Spring...). Click on 'Spring...' and the results for the spring campaign will be shown (see Figure 16).

Sampling unit	Total net wei	Weighted av	Conf. interv. [%]	Conf. interv. [kg]
11	668,00	62,53	4,29	2,68

Category	Description	Min [kg]	Max [kg]	Weighted av [kg]	Conf. interv.	Conf. interv.	Percentage	Total net weight [kg]
01	Organic	1,00	10,00	6,06	40,18	2,43	9,69	64,00
02	Wood	2,00	6,00	3,45	27,87	0,96	5,52	37,00
03	Paper and Cardboard	1,00	6,00	4,91	14,15	0,70	7,86	47,00
04	Plastics	0,00	8,00	3,73	58,06	2,17	5,97	43,00
05	Glass	10,00	28,00	19,52	16,63	3,24	31,21	188,00
05.1	Glass Container Packaging	1,00	8,00	5,08	32,85	1,67	8,12	46,00
05.2	Glass Container Packaging	2,00	9,00	6,08	21,44	1,30	9,73	58,00
05.3	Glass Container Packaging	2,00	8,00	4,87	36,44	1,77	7,78	49,00
05.4	Miscellaneous Non Packag	1,00	5,00	3,49	37,39	1,30	5,58	35,00
06	Textiles	1,00	5,00	2,60	47,78	1,24	4,15	30,00
07	Metals	1,00	7,00	4,05	36,46	1,48	6,48	39,00
08	Hazardous Household Was	1,00	5,00	1,95	39,24	0,77	3,12	22,00
09	Complex Products	1,00	8,00	3,18	24,84	0,79	5,08	46,00
10	Inert	2,00	6,00	4,27	16,37	0,70	6,82	45,00
11	Other Categories	1,00	9,00	3,36	30,89	1,04	5,37	45,00
12	Fines	1,00	9,00	5,45	20,67	1,13	8,72	62,00

Figure 16: Evaluation – view total results

If you double click on 'Spring' the available strata are shown. Select one of the strata (click) and the following form appears.

The screenshot shows the 'Results' tab with 'Details' selected. The left sidebar shows a tree view with 'Suburbs' selected. The main area displays two tables:

Information on extrapolation (Stratum)

Sampling unit	Total net weight	Mean [kg]	Min [kg]	Max [kg]	Stand. dev.	Var. coeff. [%]	Var. coeff. m	Conf. interv. [%]	Conf. interv. [kg]
4	218,00	54,50	50,00	61,00	4,80	8,80	4,40	12,21	6,66

Information on categories

Category	Description	Mean [kg]	Min [kg]	Max [kg]	Stand. dev.	Var. coeff. [%]	Var. coeff. m	Conf. interv. [%]	Conf. interv. [kg]	Percentage	Total net weight
01	Organic	6,50	4,00	10,00	2,52	38,72	19,36	53,74	3,49	11,93	26,00
02	Wood	2,75	2,00	4,00	0,96	34,82	17,41	48,32	1,33	5,05	11,00
03	Paper and Cardboa	3,25	1,00	5,00	2,06	63,43	31,72	88,04	2,86	5,96	13,00
04	Plastics	5,00	2,00	8,00	2,45	48,99	24,49	68,00	3,40	9,17	20,00
05	Glass	13,00	10,00	15,00	2,45	18,84	9,42	26,15	3,40	23,85	52,00
05.1	Glass Container Pa	2,25	1,00	3,00	0,96	42,55	21,28	59,06	1,33	4,13	9,00
05.2	Glass Container Pa	5,00	2,00	6,00	2,00	40,00	20,00	55,52	2,78	9,17	20,00
05.3	Glass Container Pa	3,00	2,00	4,00	0,82	27,22	13,61	37,78	1,13	5,50	12,00
05.4	Miscellaneous Non	2,75	1,00	4,00	1,50	54,55	27,27	75,71	2,08	5,05	11,00
06	Textiles	3,25	1,00	5,00	1,71	52,55	26,27	72,94	2,37	5,96	13,00
07	Metals	2,00	2,00	2,00	0,00	0,00	0,00	0,00	0,00	3,67	8,00
08	Hazardous Househ	1,00	1,00	1,00	0,00	0,00	0,00	0,00	0,00	1,83	4,00
09	Complex Products	4,25	2,00	5,00	1,50	35,29	17,65	48,99	2,08	7,80	17,00
10	Inert	3,00	2,00	5,00	1,41	47,14	23,57	65,43	1,96	5,50	12,00
11	Other Categories	3,50	1,00	6,00	2,38	68,01	34,01	94,40	3,30	6,42	14,00
12	Fines	7,00	5,00	9,00	1,83	26,08	13,04	36,20	2,53	12,84	28,00

Figure 17: Evaluation – view stratum results (here: suburbs)

If you click on **Details**, the single values (raw data) of the sampling units are shown.

The screenshot shows the 'Results' tab with 'Details' selected. The left sidebar shows 'Suburbs' selected. The main area displays a table:

Cross-classified table of the sampling units

Category	sub1	sub2	sub3	sub4
01 Organic	10	6	6	4
02 Wood	3	4	2	2
03 Paper and	2	1	5	5
04 Plastics	5	5	2	8
05 Glass	15	10	12	15
05.1 Glass Cor	3	1	3	2
05.2 Glass Cor	6	2	6	6
05.3 Glass Cor	4	3	2	3
05.4 Miscellan	2	4	1	4
06 Textiles	3	5	4	1
07 Metals	2	2	2	2
08 Hazardous	1	1	1	1
09 Complex Pr	5	2	5	5
10 Inert	2	5	2	3
11 Other Cate	2	1	5	6
12 Fines	5	8	6	9

Figure 18: Evaluation – view detailed data of single stratum

A click on the symbol  opens the data sheet for the selected stratum or for the total result. The following figure shows the results for the stratum 'suburbs' during the spring campaign in example city.

example city Household waste 2004; Campaign: Spring; Stratum: Suburbs											
Percent: 25 %		Sampling units: 4		Stratification criteria: Detached, semidetached and terraced houses (with gardens)							
Category	Min	Max	Mean	Stand. dev.	VC (%)	VCM (%)	Conf. int. (%)	Conf. int. (kg)	Sum (%)	Sum (kg)	
01 Organic	4,00	10,00	6,50	2,52	38,72	19,36	53	3,49	11,9	26,00	
02 Wood	2,00	4,00	2,75	0,96	34,82	17,41	48,32	1,33	5,05	11,00	
03 Paper and Cardboard	1,00	5,00	3,25	2,06	63,43	31,72	88,04	2,86	5,96	13,00	
04 Plastics	2,00	8,00	5,00	2,45	48,99	24,49	68,00	3,40	9,17	20,00	
05 Glass	10,00	15,00	13,00	2,45	18,84	9,42	26,15	3,40	23,85	52,00	
05.1 Glass Container Packaging Clear	1,00	3,00	2,25	0,96	42,55	21,28	59,06	1,33	4,13	9,00	
05.2 Glass Container Packaging Brown	2,00	6,00	5,00	2,00	40,00	20,00	55,52	2,78	9,17	20,00	
05.3 Glass Container Packaging Other	2,00	4,00	3,00	0,82	27,22	13,61	37,78	1,13	5,50	12,00	
05.4 Miscellaneous Non Packaging Glass	1,00	4,00	2,75	1,50	54,55	27,27	75,71	2,08	5,05	11,00	
06 Textiles	1,00	5,00	3,25	1,71	52,55	26,27	72,94	2,37	5,96	13,00	
07 Metals	2,00	2,00	2,00	0,00	0,00	0,00	0,00	0,00	3,67	8,00	
08 Hazardous Household Waste	1,00	1,00	1,00	0,00	0,00	0,00	0,00	0,00	1,83	4,00	
09 Complex Products	2,00	5,00	4,25	1,50	35,29	17,65	48,99	2,08	7,80	17,00	
10 Inert	2,00	5,00	3,00	1,41	47,14	23,57	65,43	1,96	5,50	12,00	
11 Other Categories	1,00	6,00	3,50	2,36	68,01	34,01	94,40	3,30	6,42	14,00	
12 Fines	5,00	9,00	7,00	1,83	26,08	13,04	36,20	2,53	12,84	26,00	
Total	50,00	61,00	54,50	4,80	8,80	4,40	12,21	6,66	100,00	218,00	

Figure 19: Data sheet for a selected stratum

Press the button  to return to the main menu form.

Note:

All calculated and specified confidence intervals are related to a **95% confidence level**, according to the S.W.A.-Tool methodology

2.6.1 Export of data and results

It is possible to export the result tables and the detail tables to another application (e.g. MS Word, MS Excel etc.).

Select the desired table with the button marked in Figure 20 or alternatively with the mouse. Press the shortcut Ctrl C (copy) and paste it (Ctrl V) in the file of your choice.

Information on extrapolation (Campaign)

Sampling unit	Total net weight	Weighted av.	Conf. interv.	Conf. interv.
11	668,00	62,53	4,29	2,68

Information on categories

Category	Description	Min [kg]	Max [kg]	Weighted av.	Conf. interv.	Conf. interv.	Percentage	Total net weight
01	Organic	1,00	10,00	6,06	40,18	2,43	9,69	64,00
02	Wood	2,00	6,00	3,45	27,87	0,96	5,52	37,00
03	Paper and Cardboard	1,00	6,00	4,91	14,15	0,70	7,86	47,00
04	Plastics	0,00	8,00	3,73	58,06	2,17	5,97	43,00
05	Glass	10,00	28,00	19,52	16,63	3,24	31,21	188,00
05.1	Glass Container Packaging	1,00	8,00	5,08	32,85	1,67	8,12	46,00
05.2	Glass Container Packaging	2,00	9,00	6,08	21,44	1,30	9,73	58,00
05.3	Glass Container Packaging	2,00	8,00	4,87	36,44	1,77	7,78	49,00
05.4	Miscellaneous Non	1,00	5,00	3,49	37,39	1,30	5,58	35,00
06	Textiles	1,00	5,00	2,60	47,78	1,24	4,15	30,00
07	Metals	1,00	7,00	4,05	36,46	1,48	6,48	39,00
08	Hazardous Household	1,00	5,00	1,95	39,24	0,77	3,12	22,00
09	Complex Products	1,00	8,00	3,18	24,84	0,79	5,08	46,00
10	Inert	2,00	6,00	4,27	16,37	0,70	6,82	45,00
11	Other Categories	1,00	9,00	3,36	30,89	1,04	5,37	45,00
12	Fines	1,00	9,00	5,45	20,67	1,13	8,72	62,00

Figure 20: Export of result tables

In addition it is possible to print the data sheets. Open the desired data sheet form with the button , and then click on the printer button. After printing you may close the form with the button **Schließen**.

example city Household waste 2004; Campaign: Spring; Stratum: Inner city

Percent: 55 % Sampling units: 3 Stratification criteria: Inner city area, without gardening

Category	Min	Max	Mean	Stand. dev.	VC (%)	VCM (%)	Conf. int. (%)	Conf. i
01 Organic	4,00	10,00	6,30	3,21	50,76	29,30	93	:
02 Wood	3,00	5,00	3,67	1,15	31,49	18,18	57,85	:

Figure 21: Printing a data sheet