Documentation

TMAP-Guideline-Database

Version 1.2

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Reference list

[REF-1]	TMAP revision (TWG 06/2/6.1-1)
[REF 2]	TMAP Monitoring Handbook - Tidal Area - Seagrass (outline chapters, version 30.1.2008)
[Ref 3]	TMAP guideline elaboration (TMAG - MEETING 4 – 5 September 2007)
[Ref 4]	TMAP Monitoring Handbook - Salt Marshes (draft version 31.3.2008)

1 Summary

Within the TMAP revision [REF 1] parameter groups were defined for which monitoring guidelines should be developed. The content of these guidelines should be stored in a Microsoft Access database. Besides the database a Java application should be developed which generates Web pages for the guidelines based on the content of the database.

2 Technical description

2.1 Requirements

As part of the TMAP revision, 9 Targets with 18 parameter groups were defined for which monitoring guidelines should be developed [REF 1], see Tab. 1.

Tab. 1: TMAP guidelines: targets and parameter groups for the TMAP monitoring programme [REF 1]. The database should model the relationship as an m:n-relationship, since a parameter group can be related to more than one target, e. g. tidal areas - geomorphology or offshore areas - birds.

Nr	Target	Parametergroup
1	1. Eutrophication	Nutrients
2		Phytoplankton
3		Macroalgae
4		Macrozoobenthos
5	2. Pollutants	Pollutants
6	3. Beached birds	Beached birds
7	4. Salt marshes	Salt marshes
8	5. Tidal areas	Geomorphology
9		Seagrass
10		Mussel beds
11		Sabellaria reefs
12		Fish
13	6. Beaches and dunes	Beaches and dunes
14	7. Offshore area	Sublitoral habitats
15	8. Birds	Breeding birds
16		Breeding success
17		Migrating birds
18	9. Mammals	Mammals

The content of the guidelines should be stored in the database in order to enable the following queries:

What?

1. Which parameters are measured for a certain parameter group?

Where?

2. Where does a parameter group is monitored?

When?

3. When is a parameter monitored for a parameter group?

How?

4. How is a parameter monitored?
5. How is a parameter group monitored?

Why?

6. What are the relevant monitoring requirements for a parameter group?

Who?

7. Who does monitor a certain parameter/parameter group?

In addition, the parameters are related to the following entities:

- Targets
- Species
- Habitat types
- Ecological Quality Objectives

The database structure is based on prototype guidelines for seagrass and saltmarsh [REF 2, Ref 4].

Tab. 2: TMAP guidelines: structure of the guidelines with regard to the database structure.

Chapter	Title	Content and structure
1	Introduction	Free text
2	Objectives	Free text
3	Monitoring requirements	List of requirements
4	Definitions	Free text
5	Monitoring strategy	Free text and tabular summary of most important facts (See [Ref 4])
6	Methods	Free text
7	Parameter	List of parameter including the following attributes: • Unit • requirements • frequency • location • Method • Remark
8	Location	Free text (short and general description of the sampling sites)
9	Frequency and time	Free text
10	Assessment	Free text
11	Reporting	Free text
12	Quality assurance	Free text
13	Monitoring authorities	List of organisations responsible for monitoring

2.2 Additional terms of reference

1. Division of topic pollutants into 4 guidelines:
    a. Pollutants in biota - bird eggs (Common Tern, Oystercatcher)
    b. Pollutants in biota - blue mussel
    c. Pollutants in biota - fish (flounder, optional: eelpout)
    d. Pollutants in sediment
2. Assignment of habitat types and species to Habitats and Birds Directive areas
3. Relation between components:
    - Parameter and guideline
    - Parameter and habitat types
    - Parameter and species
    - Parameter and protection areas.
4. Compilation of a summary of all guidelines of chapter 5 'Monitoring Strategy' done by the Java program.

Additionally to the products guidelines database, java application and documentation a CSS-file with example formats has been delivered.

3 Database

3.1 Database structure

The database structure is depicted in Fig. 3.1. The structure models the following 14 components, in corresponding tables:

1. Guidelines (table Parameter_Group)
2. Parameter
3. Matrix
4. Species
5. Habitat types
6. Protection areas
7. Protection area type
8. Country
9. History
10. Requirement
11. Requirement type
12. Directive
13. Area
14. Target
15. Literature
16. Organisation
17. Method

All other tables are used to represent n:m-relationships existing between these components.

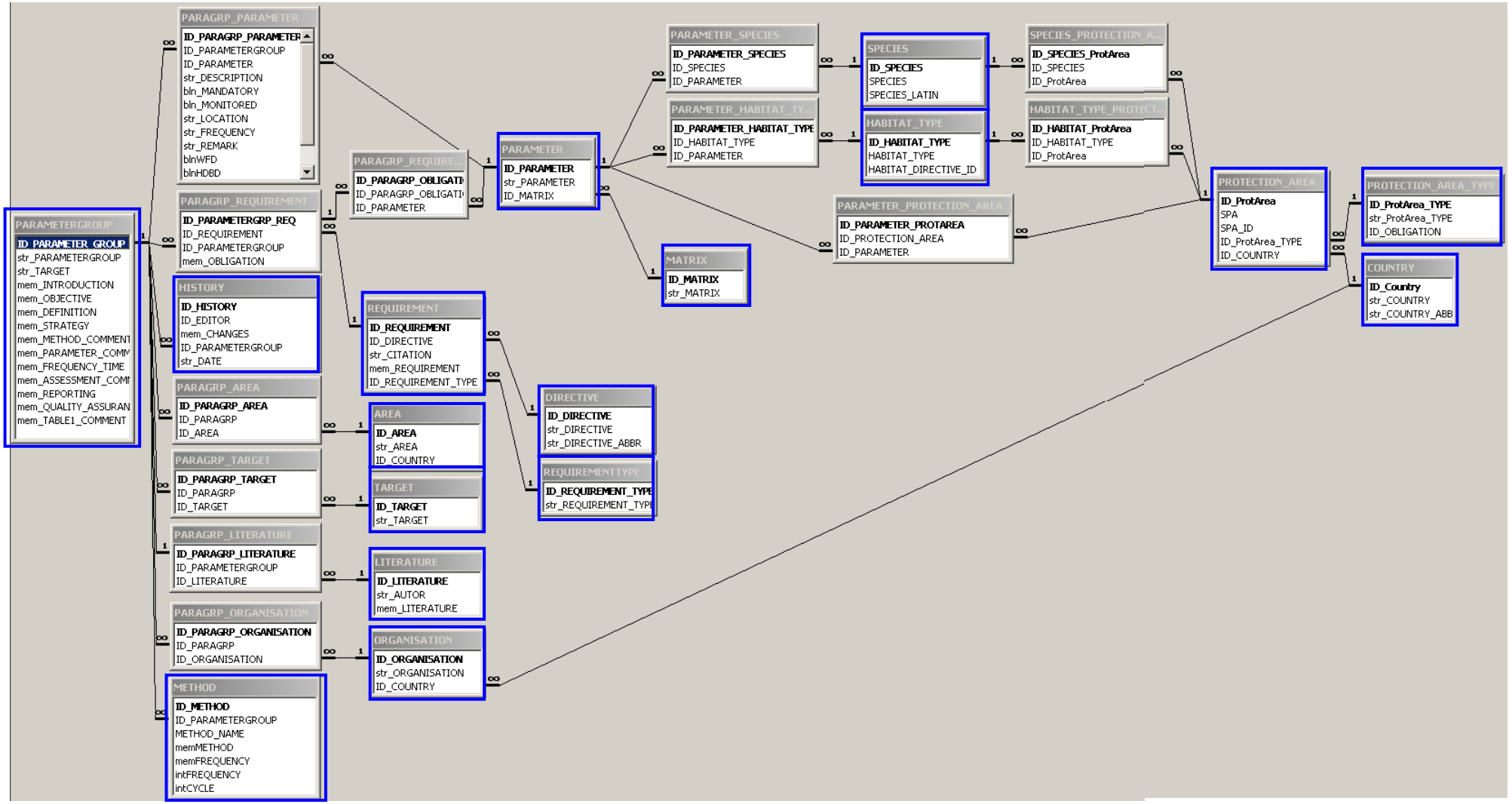
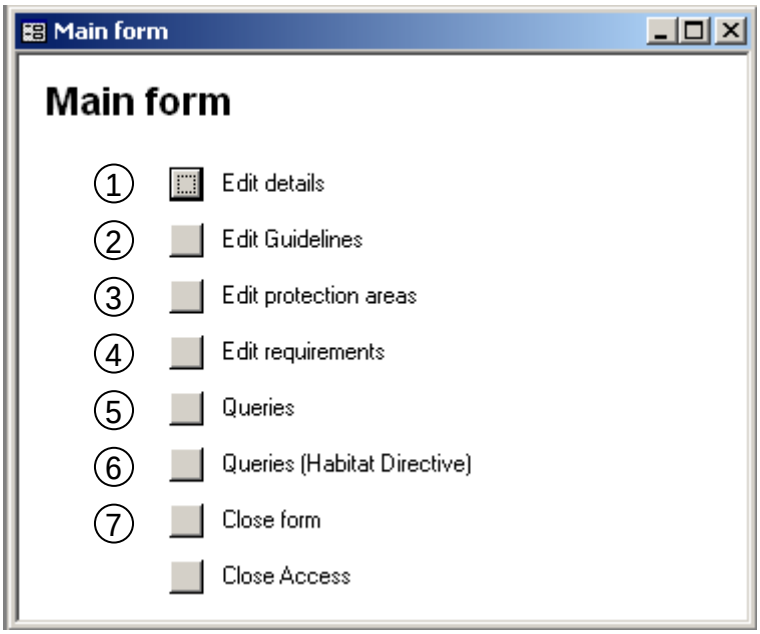


Fig. 3-1: Database structure of the TMAP guideline database. Tables representing modelled components are marked with a blue rectangle.

3.2 Input forms

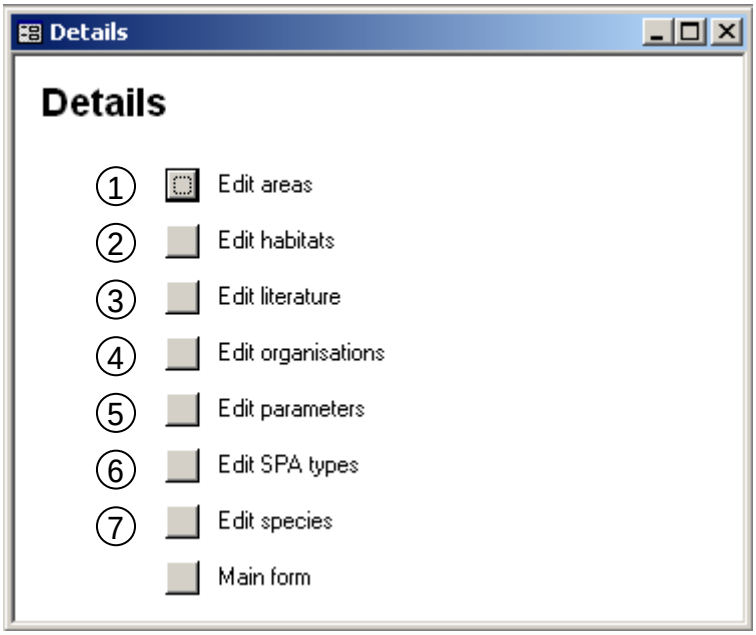
Input forms are used to fill in relevant data for the TMAP guidelines. From the 'Main form', which starts automatically at start-up of the TMAP guideline database, all sub-forms (1-3) for detailed data input and special data queries (4-5) can be selected. In addition, two buttons provide the functions to close the main form (6) or to exit MS Access (7):

3.2.1 Main form



The form 'Details' allows to select further forms, to input data into look-up tables, which are used as selectable input for editing the „Guideline“ form (see second button on the main form):

3.2.1.1. „Edit details“



The 'Detail' provides access to input forms to describe areas (1), habitats (2), literature (3), organisations (4), parameters (5), SPA types (6) and species (7). The content of the related tables can then be used as

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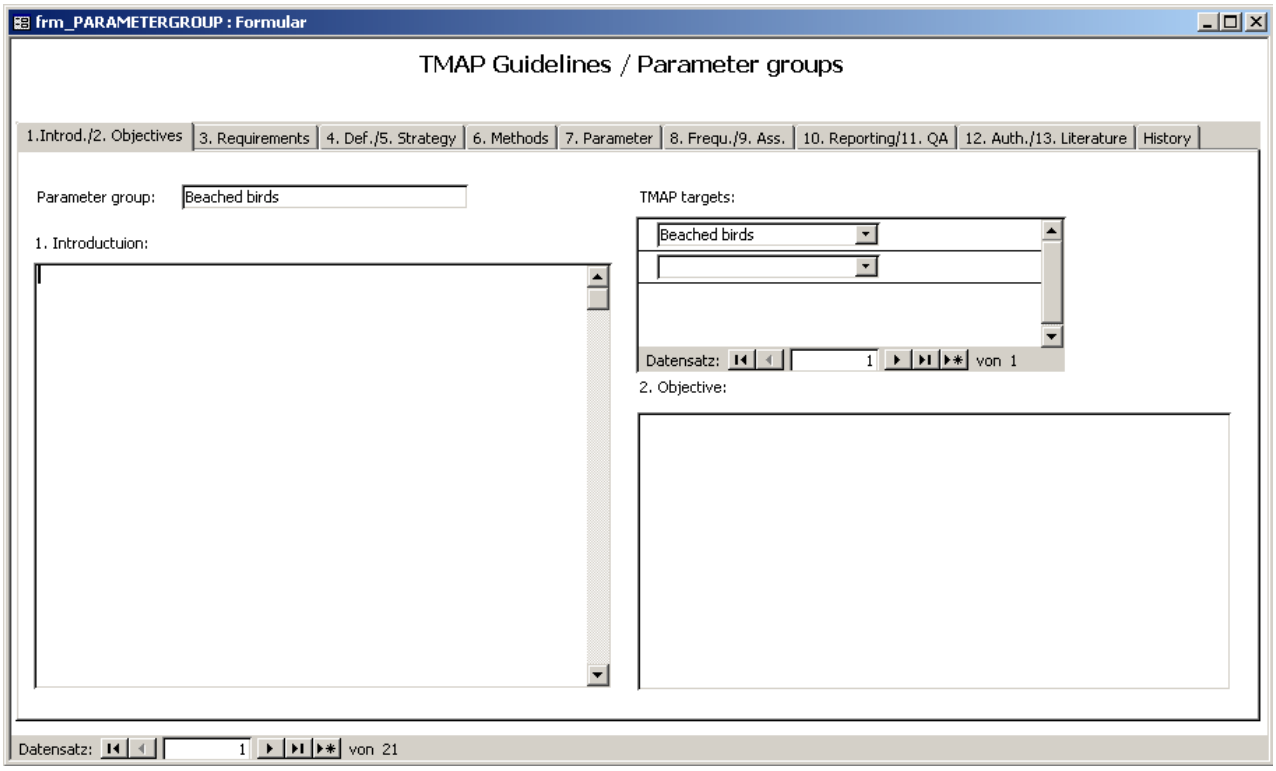
selectable items of pull down menus in further editing the guidelines via the „Edit guideline“ form. The button 'Main form' sends the user back to the 'Main form' by closing the form „Details“.

3.2.1.2.„Edit guidelines“



The form frm_PARAMETERGROUP - titled 'TMAP Guidelines / Parameter groups' – has to be used to describe the data for all 13 chapters of a guideline for a TMAP parameter group. The wanted TMAP parametergroup can be selected by using the forward or backward buttons in the navigation bar at the bottom of the form. The different chapters for a TMAP parameter group are indicated on the tabs of the form.

The Tab “History” allows documentation of changes in the database. Date, Author and a short description of the changes are recorded.

3.2.1.3.„Edit *protection areas*“

The form frm_ PROTECTION_AREA allows to describe protection areas (PAs), including habitat types and species.

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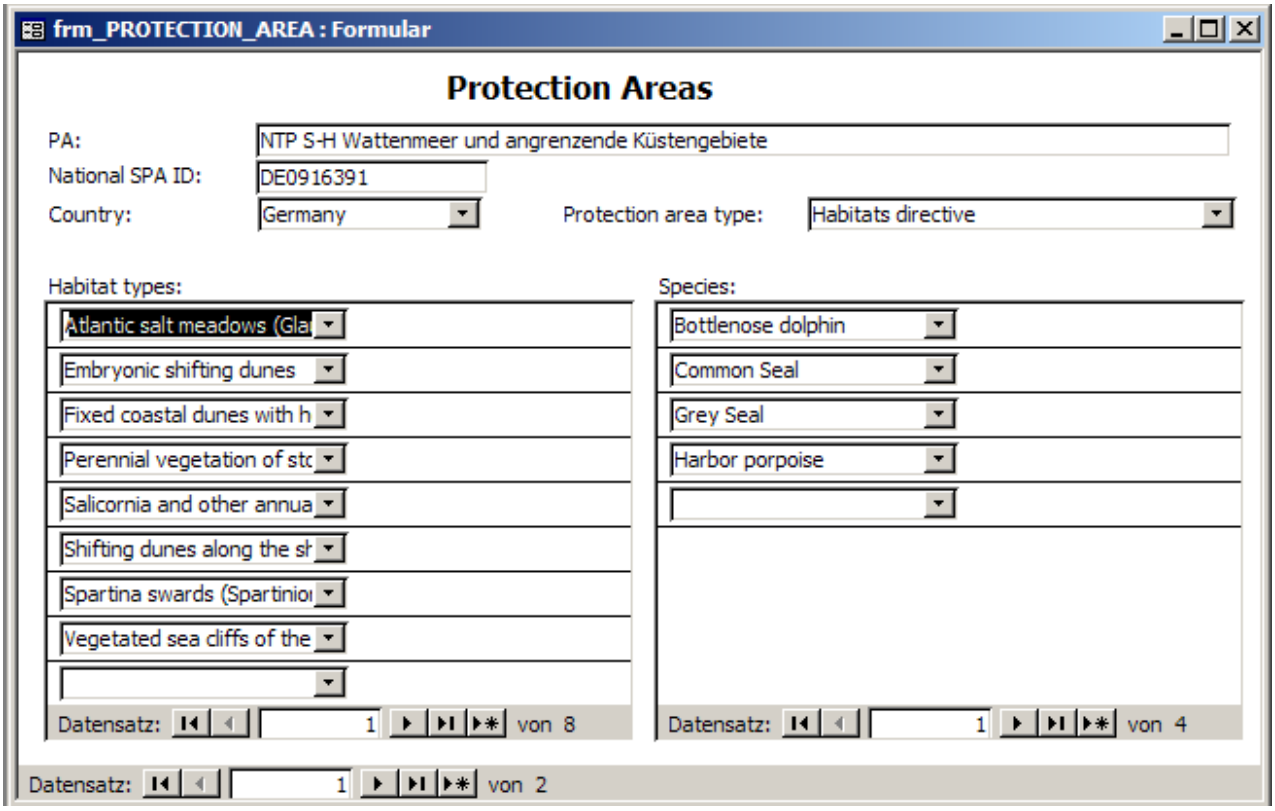

3.2.1.4.„Edit requirements“

The form frm_REQUIREMENT is used to describe the monitoring requirements defined by directives and conventions. The following attributes are requested:

- Type of requirement (Monitoring requirement, assessment method, Ecological quality objective, TMAP target)
- Name of directive or convention (e. g. Water framework directive or OSPAR)
- Relevant topic (e. g. „Common procedure“ or article)
- General remarks concerning the respective requirement

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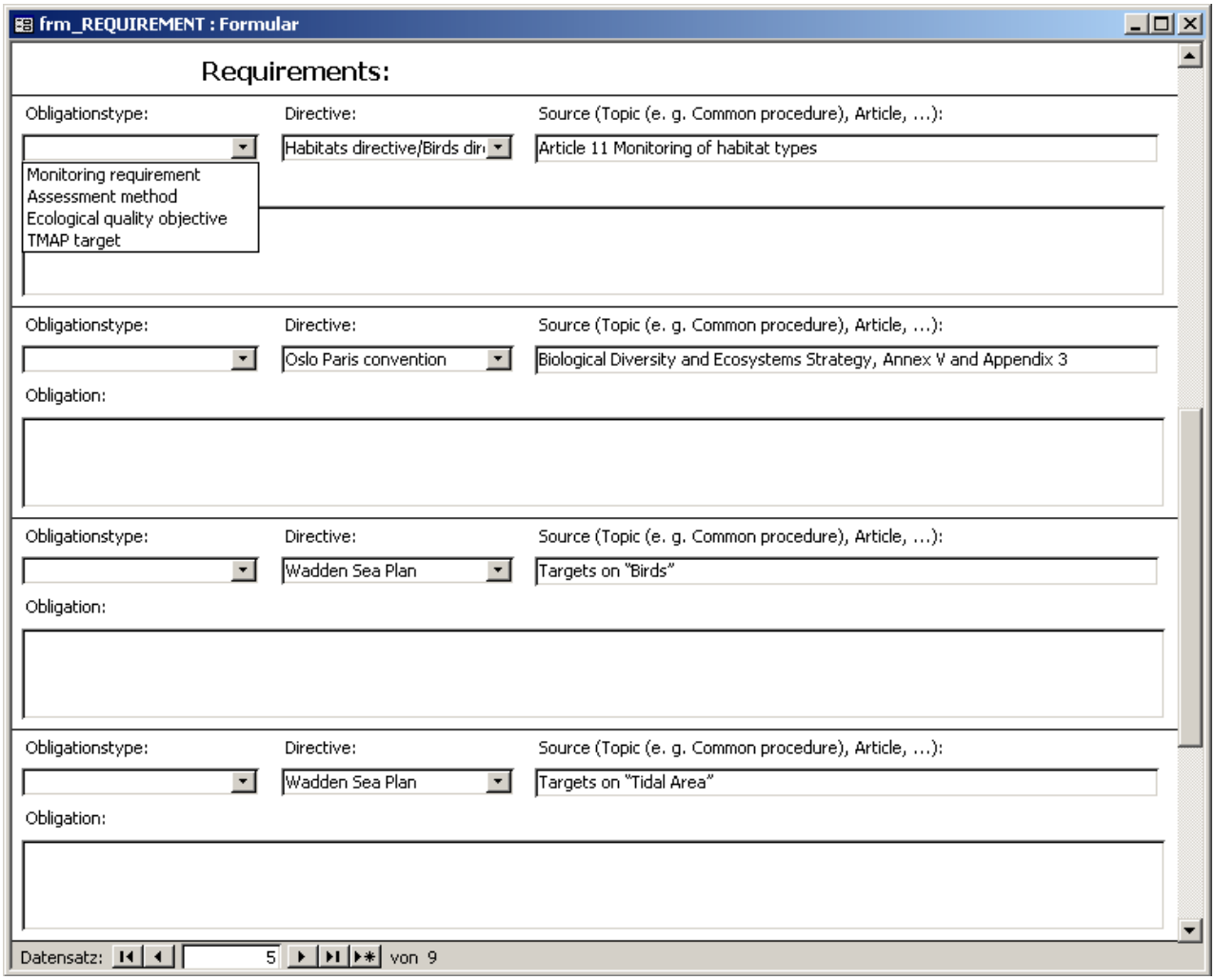
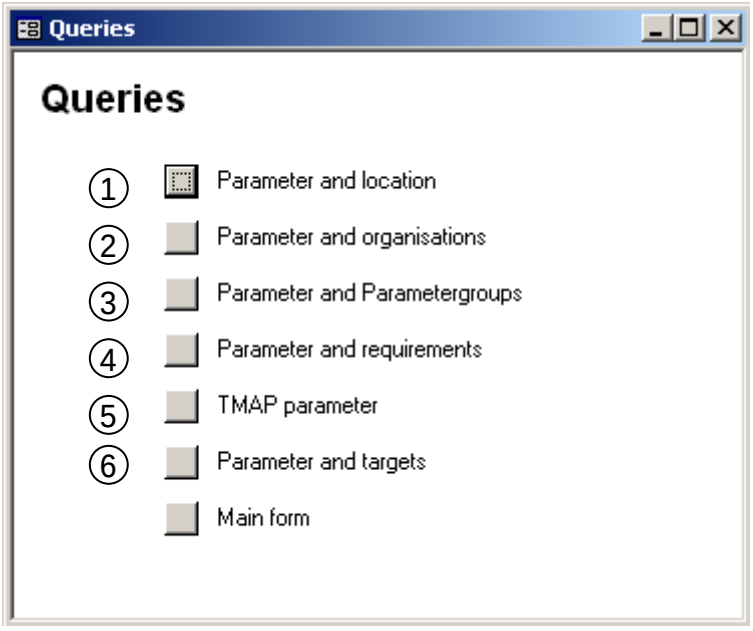


3.2.2 „Queries“:



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This form allows queries between parameter and related components:

1. location
2. organisations responsible for monitoring the parameter group
3. parameters
4. monitoring requirements
5. Targets

3.2.2.1. Parameter and location

8) Which TMAP Parameters are measured where (protection areas, coordinates, areas)?

The query *qry_parameter_location* lists all parameter and the locations where they are monitored. Results are ordered by parameter group. The query creates a three-column table with information on parameter group, parameter and where the parameter is measured, sorted by Parameter group and Parameter.

qry_parameter_location : Auswahlabfrage

Parametergroup	Parameter	Location
Beached birds	Oil analysis (TBBS)	Selected sites
Beached birds	Trilateral Beached Birds Survey (TBBS)	representative stretches per countries
Breeding birds	Number and distribution (breeding birds)	a. census areas,\nb. Complete surveys
Breeding success	Breeding success (birds)	2-4 sites per region
Migratory birds	Moulting birds (selected species)	
Migratory birds	Number and distribution of migratory bird:	According TMAP /JMMB guidelines
Migratory birds	Occurrence of selected typical species (t	Offshore Area
Pollutants in biota -	Brominated flame retardants (Bird eggs)	1-6 stations per region
Pollutants in biota -	Metals (Bird eggs)	1-6 stations per region
Pollutants in biota -	Organochlorines (Bird eggs)	1-6 stations per region
Pollutants in biota -	PCBs (Bird eggs)	1-6 stations per region
Salt marshes	Area (saltmarshes)	Entire area
Salt marshes	Drainage (saltmarshes)	Entire area
Salt marshes	Land use (saltmarshes)	Entire area
Salt marshes	Selected typical species (saltmarshes)	Selected areas
Salt marshes	Vegetation (saltmarshes)	Entire area

Datensatz: 1 von 24

3.2.2.2. Parameter and organization

The query *qry_parameter_organisation* lists all parameter and the organisation responsible for the monitoring with regard to the respective parameter group. It is assumed that all organisations are responsible for each parameter listed in a certain parameter group. A direct relation between parameter and organisation is not considered in the database.

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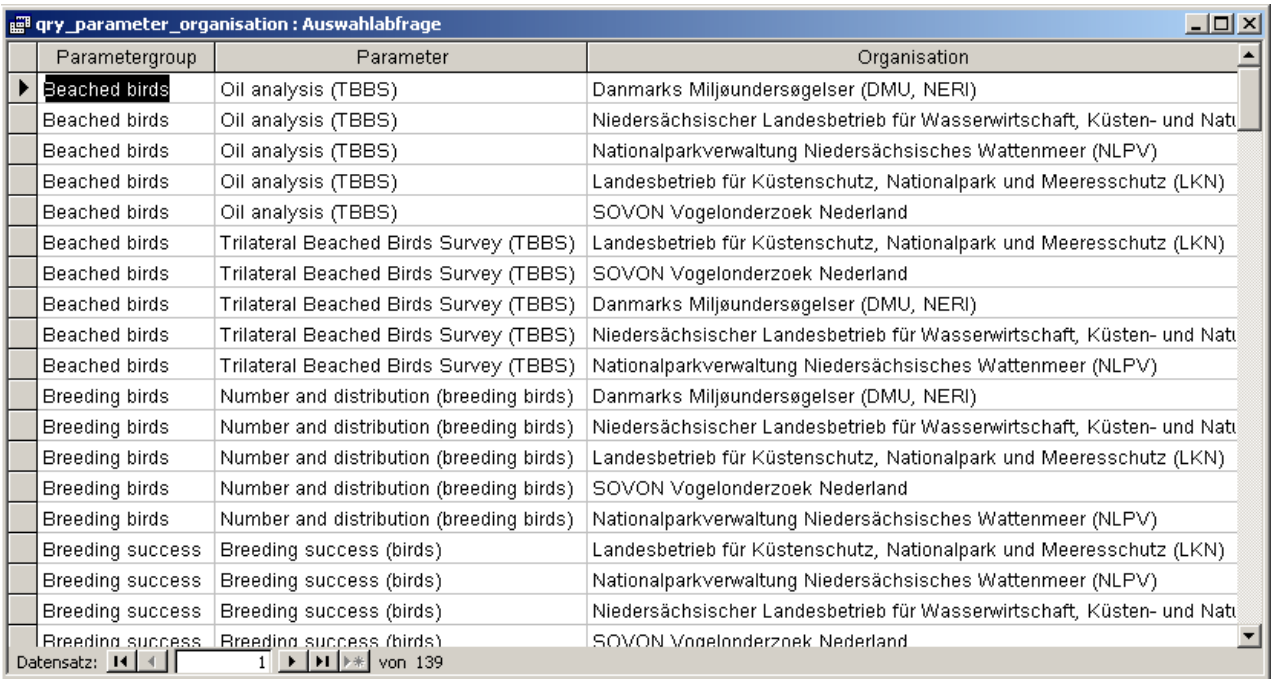

qry_parameter_organisation : Auswahlabfrage

Parametergroup	Parameter	Organisation
Beached birds	Oil analysis (TBBS)	Danmarks Miljøundersøgelser (DMU, NERI)
Beached birds	Oil analysis (TBBS)	Niedersächsischer Landesbetrieb für Wasserwirtschaft, Küsten- und Natu
Beached birds	Oil analysis (TBBS)	Nationalparkverwaltung Niedersächsisches Wattenmeer (NLPV)
Beached birds	Oil analysis (TBBS)	Landesbetrieb für Küstenschutz, Nationalpark und Meeresschutz (LKN)
Beached birds	Oil analysis (TBBS)	SOVON Vogelonderzoek Nederland
Beached birds	Trilateral Beached Birds Survey (TBBS)	Landesbetrieb für Küstenschutz, Nationalpark und Meeresschutz (LKN)
Beached birds	Trilateral Beached Birds Survey (TBBS)	SOVON Vogelonderzoek Nederland
Beached birds	Trilateral Beached Birds Survey (TBBS)	Danmarks Miljøundersøgelser (DMU, NERI)
Beached birds	Trilateral Beached Birds Survey (TBBS)	Niedersächsischer Landesbetrieb für Wasserwirtschaft, Küsten- und Natu
Beached birds	Trilateral Beached Birds Survey (TBBS)	Nationalparkverwaltung Niedersächsisches Wattenmeer (NLPV)
Breeding birds	Number and distribution (breeding birds)	Danmarks Miljøundersøgelser (DMU, NERI)
Breeding birds	Number and distribution (breeding birds)	Niedersächsischer Landesbetrieb für Wasserwirtschaft, Küsten- und Natu
Breeding birds	Number and distribution (breeding birds)	Landesbetrieb für Küstenschutz, Nationalpark und Meeresschutz (LKN)
Breeding birds	Number and distribution (breeding birds)	SOVON Vogelonderzoek Nederland
Breeding birds	Number and distribution (breeding birds)	Nationalparkverwaltung Niedersächsisches Wattenmeer (NLPV)
Breeding success	Breeding success (birds)	Landesbetrieb für Küstenschutz, Nationalpark und Meeresschutz (LKN)
Breeding success	Breeding success (birds)	Nationalparkverwaltung Niedersächsisches Wattenmeer (NLPV)
Breeding success	Breeding success (birds)	Niedersächsischer Landesbetrieb für Wasserwirtschaft, Küsten- und Natu
Breeding success	Breeding success (birds)	SOVON Vogelonderzoek Nederland

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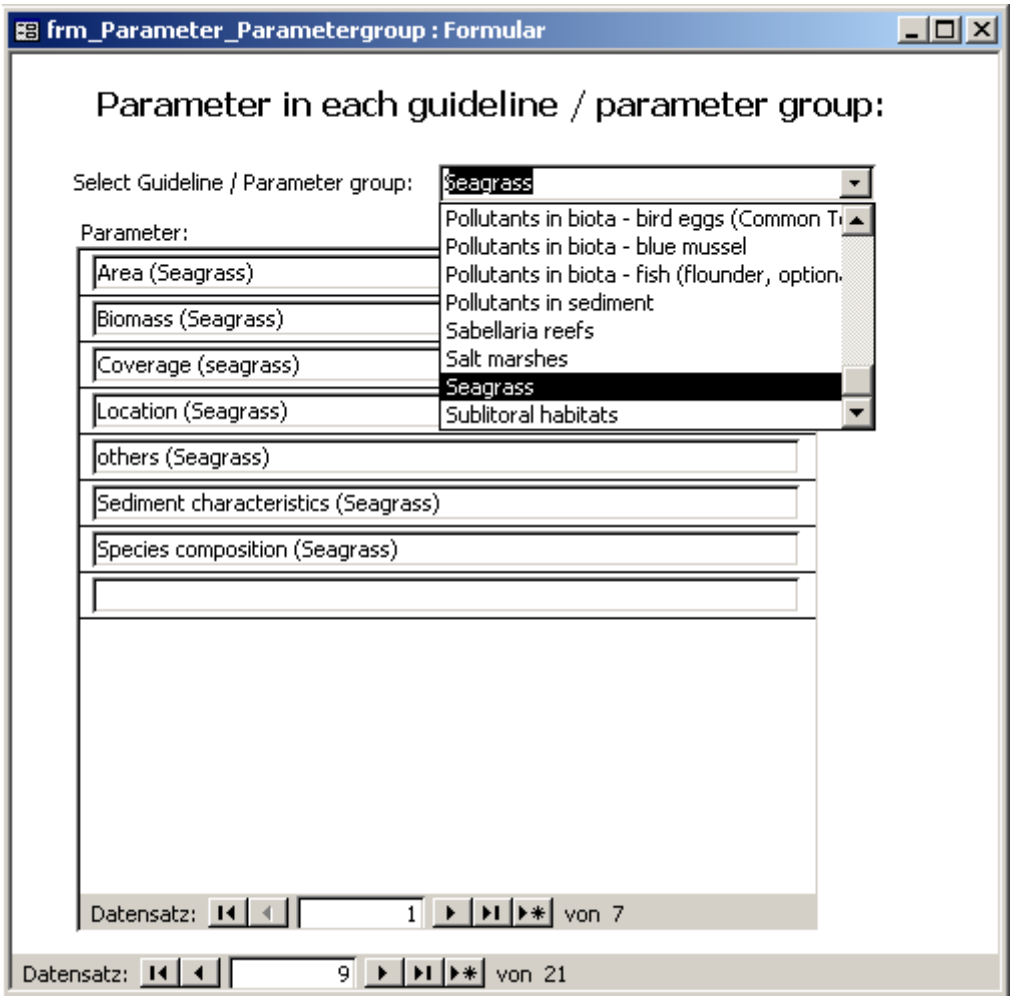
3.2.2.3. Parameter and parameter group

The form *frm_Parameter_Parametergroup* is used to query all parameters for a certain parameter group. Optionally the queries qry_parameter_location and qry_parameter_organisation lists all combinations of parameter and parameter group (see 5.2 and 5.3)



3.2.2.4. Parameter and monitoring requirement

In order to query the monitoring requirements as well as the related parameters, the query *qry_parameter_requirement_3* has to be used:

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qry_parameter_requirement_3 : Auswahlabfrage

Guideline	Requirement	Parameter
Beached birds	Oslo Paris convention (Biological Diversity and Ecosystems Strat	
Beached birds	Wadden Sea Plan (Targets on "Birds")	
Breeding birds	African-Eurasian Waterbird Agreement (AEWA)	
Breeding birds	Convention on Wetlands (Ramsar)	
Breeding birds	EC Birds Directive (BD)	
Breeding birds	EC Habitats Directive (HD)	
Breeding birds	Oslo Paris convention (Biological Diversity and Ecosystems Strat	
Breeding birds	Wadden Sea Plan (Targets on "Birds")	
Breeding birds	Water framework directive (Annex 5, chapter 1.2.4 and Article 4)	
Breeding success	African-Eurasian Waterbird Agreement (AEWA)	
Breeding success	Convention on Wetlands (Ramsar)	
Breeding success	EC Birds Directive (BD)	
Breeding success	EC Habitats Directive (HD)	
Breeding success	Oslo Paris convention (Biological Diversity and Ecosystems Strat	
Breeding success	Wadden Sea Plan (Targets on "Birds")	
Breeding success	Water framework directive (Annex 5, chapter 1.2.4 and Article 4)	

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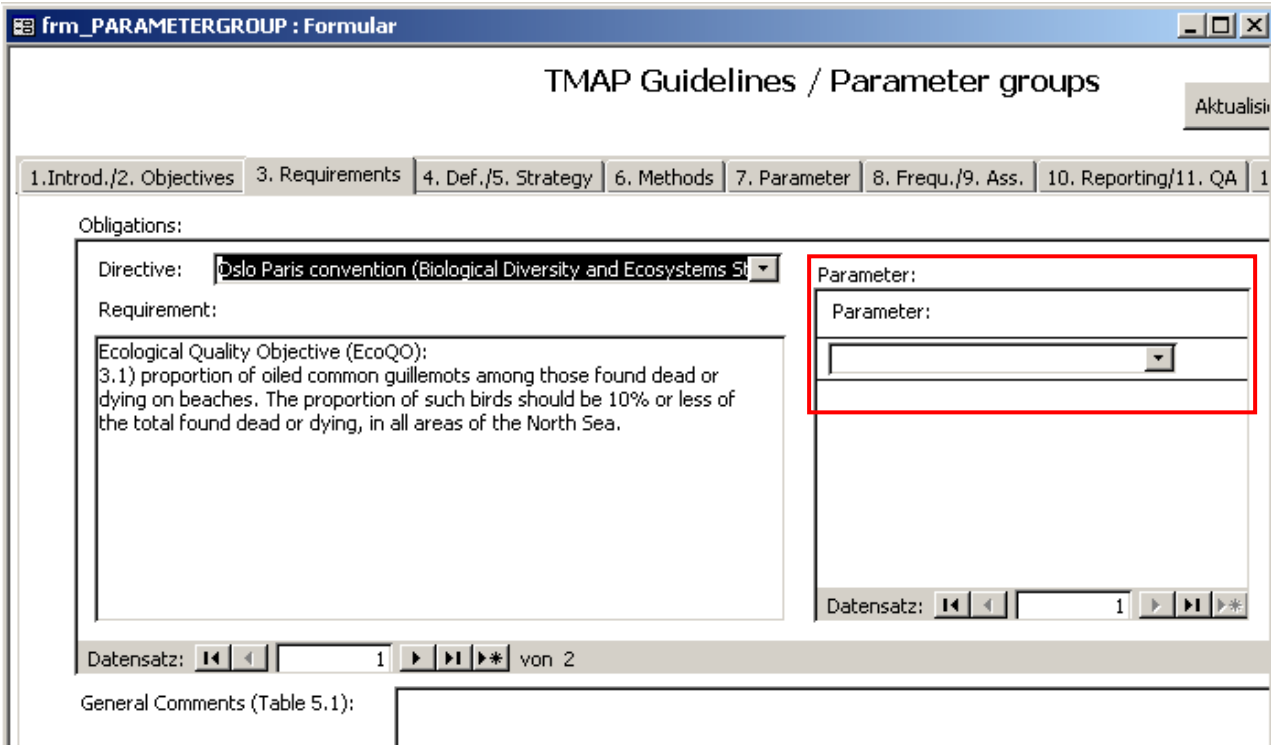
Not all parameter related to a guideline are required for all monitoring requirements related to the guideline. Therefore, for each requirement the respective parameter have to be selected on the tab "3. Requirement" in the "Guideline" form in addition to choosing all parameters related to the guideline in general on tab "7. Parameter":



3.2.2.5. TMAP parameter

The Query *qry_parameter_tmap_2* lists all parameter and the number of the respective monitoring requirements including TMAP (column *All requirements*) as well as excluding TMAP (column Requirements

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besides TMAP. Parameter which are only required by TMAP are marked with ""Yes"" and are listed at the top of the list:

qry_parameter_tmap_2 : Auswahlabfrage

_Parameter	Requirements besides TMAP	All requirements	TMAP only
Vegetation (saltmarshes)	1	1	No

Datensatz: 1 von 1

The result is based on the parameters listed on the tab „3. Requirements“ of the „Guideline“ form (See also chapter 5.4 *Parameter and monitoring requirement*).

3.2.2.6.Parameter and target

The query *qry_Parameter_target* lists all parameter by parameter group and target, indicating which Target comprises which parameter:

qry_Parameter_target : Auswahlabfrage

Parametergroup	Target	Parameter
Beached birds	Beached birds	Oil analysis (TBBS)
Beached birds	Beached birds	Trilateral Beached Birds Survey (TBBS)
Breeding birds	Birds	Number and distribution (breeding birds)
Breeding success	Birds	Breeding success (birds)
Migratory birds	Birds	Moulting birds (selected species)
Migratory birds	Birds	Number and distribution of migratory birds
Migratory birds	Birds	Occurrence of selected typical species (birds)
Pollutants in biota - bird eggs (Common Tei	Pollutants	Brominated flame retardants (Bird eggs)
Pollutants in biota - bird eggs (Common Tei	Pollutants	Metals (Bird eggs)
Pollutants in biota - bird eggs (Common Tei	Pollutants	Organochlorines (Bird eggs)
Pollutants in biota - bird eggs (Common Tei	Pollutants	PCBs (Bird eggs)
Salt marshes	Salt marshes	Area (saltmarshes)
Salt marshes	Salt marshes	Drainage (saltmarshes)
Salt marshes	Salt marshes	Land use (saltmarshes)
Salt marshes	Salt marshes	Selected typical species (saltmarshes)

Datensatz: 1 von 24

3.2.3 „Queries (Habitat directive)“:

Queries related to the Habitat Directive (HD) and the Birds Directive (BD) are accessible via the form "*Queries (Habitat directive)*":

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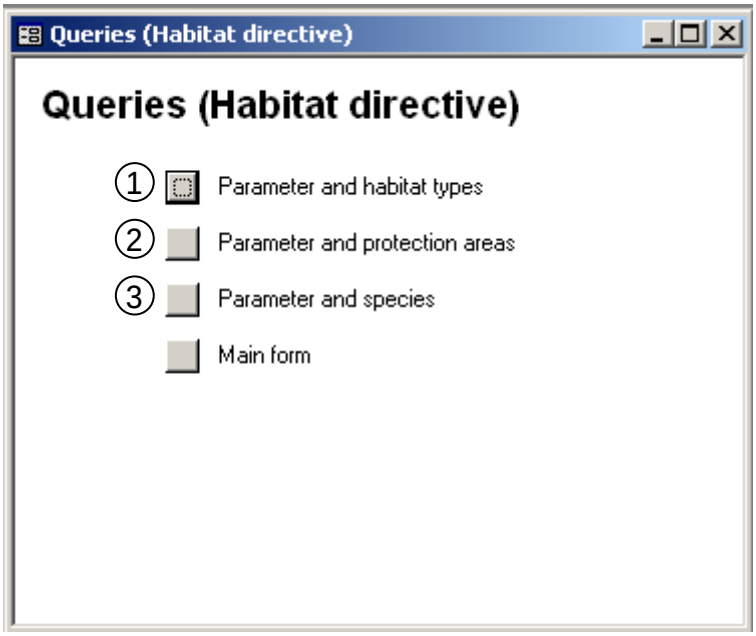
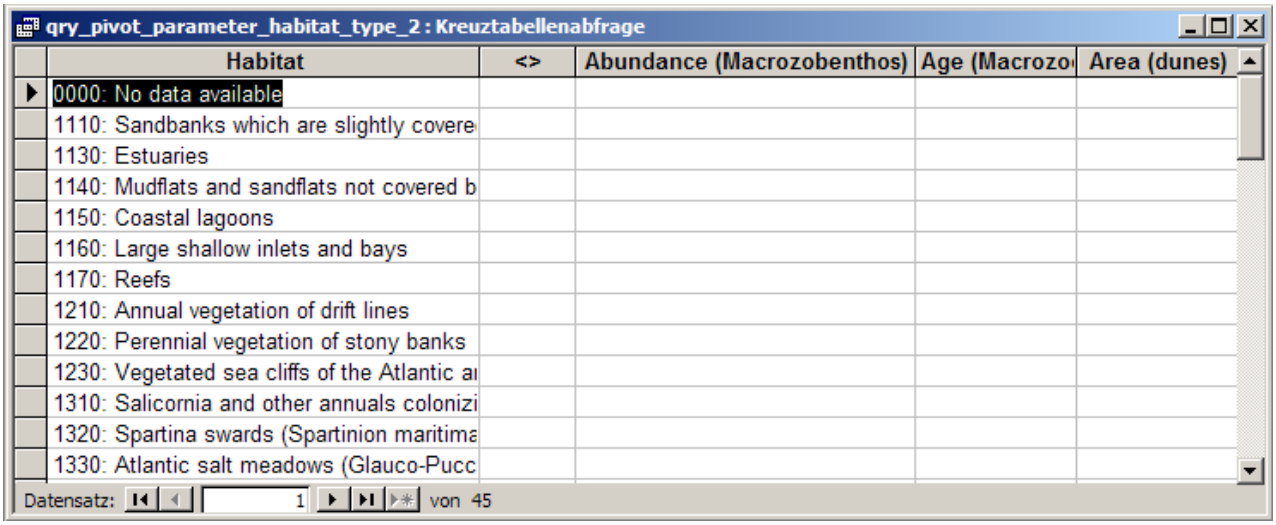


The queries list all parameter which are related to:

- habitat type (1)
- protection area (2) or
- species (3)

3.2.3.1. Habitat types

This option query opens the query *qry_pivot_parameter_habitat_type_2*. The query presents a pivot-table listing all habitat types and the related parameter:



These data are not included in the guidelines. All combinations of parameter and habitat types can be edited in the table *PARAMETER_HABITAT_TYPE*. All values can be chosen in a user-friendly way via comboboxes:

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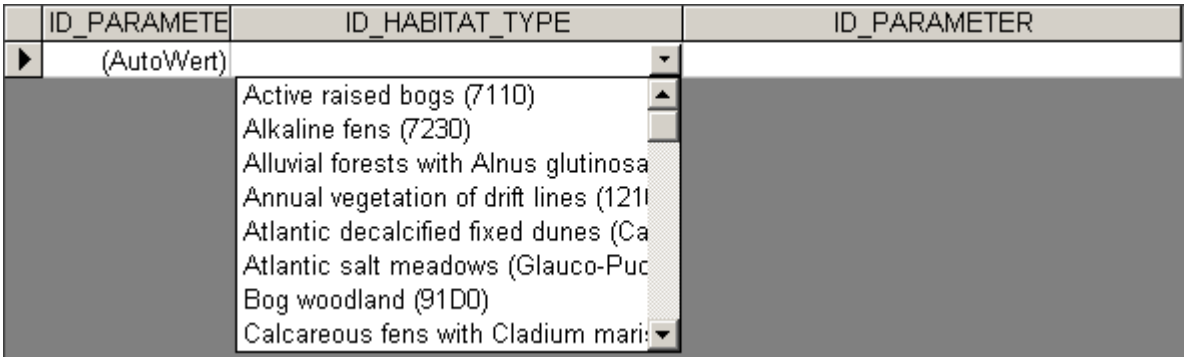
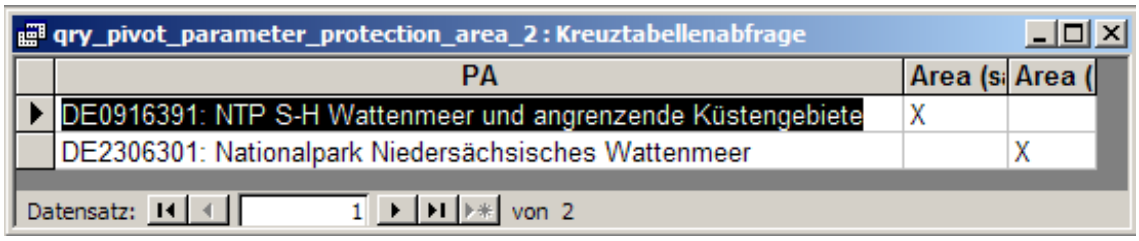


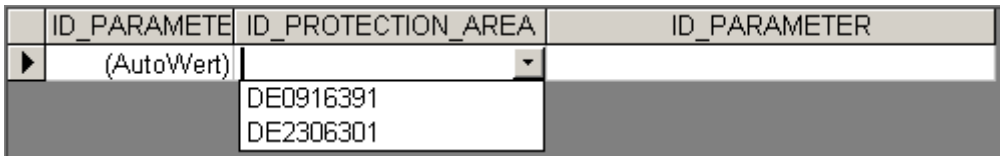
The table can be sorted by habitat type or parameter on demand by right-clicking on the field name and then click *Ascending*.

3.2.3.2. Protection areas

This option query opens the query *qry_pivot_parameter_protection area_2*. The query presents a pivot-table listing all protection areas and the related parameter:



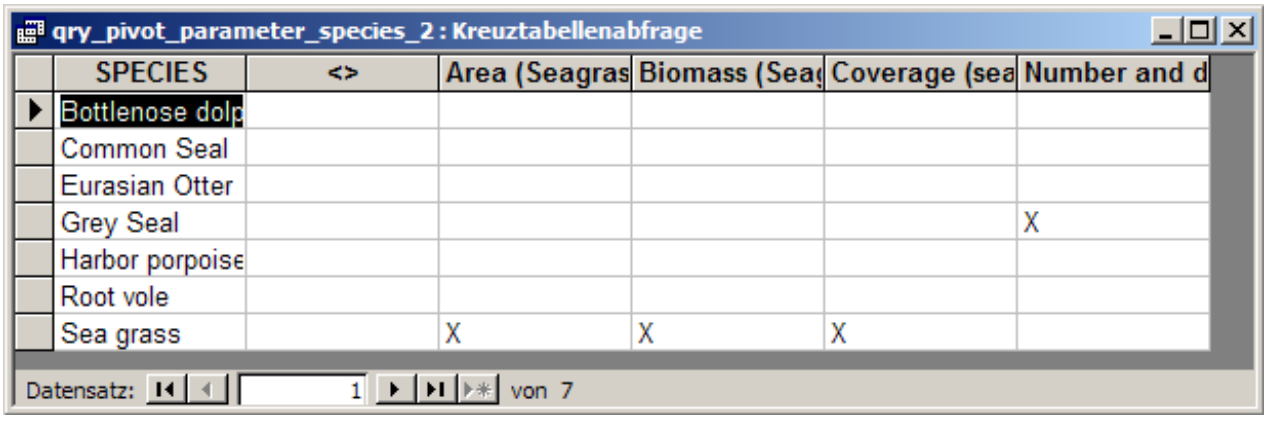
These data are not included in the guidelines. All combinations of parameter and protection areas can be edited in the table *PARAMETER_PROTECTION_AREA*. All values can be chosen in a user-friendly way via comboboxes:



The table can be sorted by protection area or parameter on demand by right-clicking on the field name and then click *Ascending*.

3.2.3.3. Species:

This option query opens the query *qry_pivot_parameter_species_2*. The query presents a pivot-table listing all species and the related parameter:



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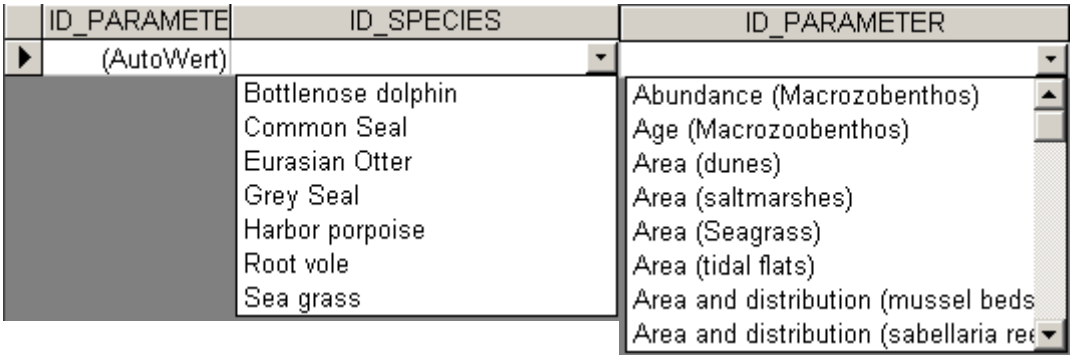
These data are not included in the guidelines. All combinations of parameter and species can be edited in the table *PARAMETER_SPECIES*. Values in each column can be chosen in a user-friendly way via comboboxes:



4 Java application for guideline Web pages

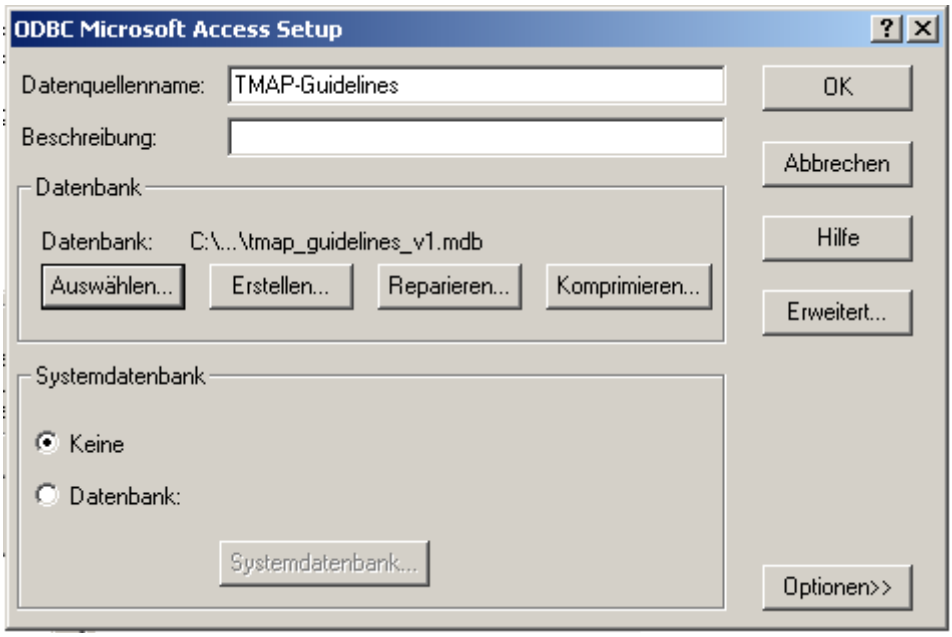
In order to provide the guidelines stored in the database as Web pages, a Java application has been developed.

4.1 Installation procedure

Installation of the Java application requires Java 1.6 Java Runtime Environment (JRE) 6 Update 6 or higher (no beta version)):

Download: http://java.sun.com/javase/downloads/index.jsp
Installation procedure: http://java.sun.com/javase/6/webnotes/install/index.html

The application uses an ODBC connection to connect to the TMAP-database. To define this connection, choose Start -> Settings -> Control panel -> Administration -> ODBC-data sources -> System DSN -> Add -> MS Access driver -> OK:



Please fill in the name „TMAP-Guidelines“ as data source name and choose the access database.

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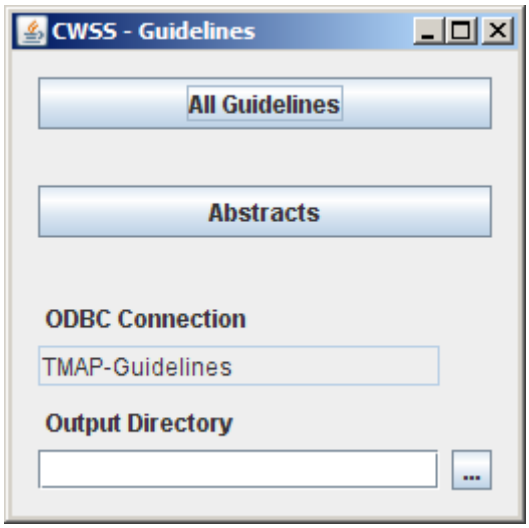
4.2 Usage

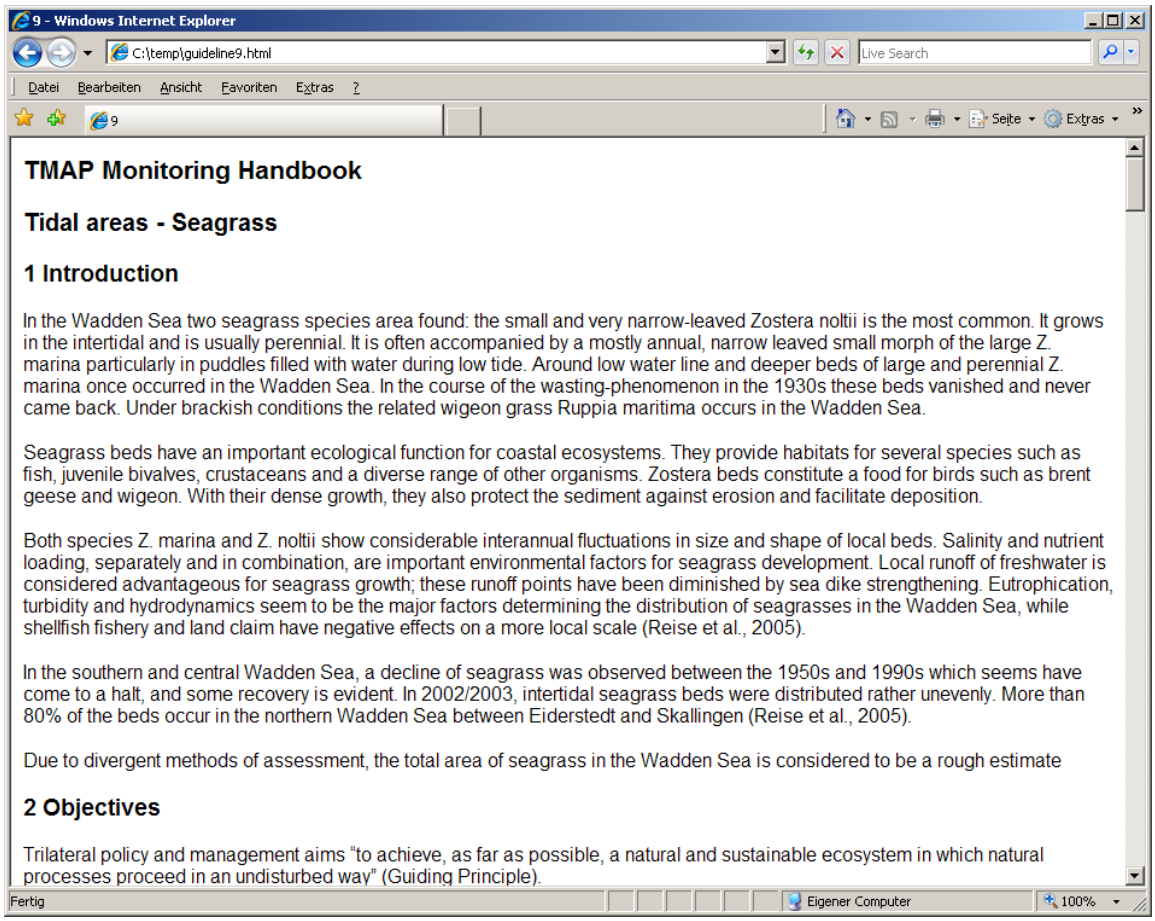
When starting the application *tmap-guidline.jar*, the following user interface appears at the screen, offering to options:

- all guidelines
- abstracts



4.2.1 All Guidelines

This option writes a Web page for each guideline to the output directory as depicted in the figure below:



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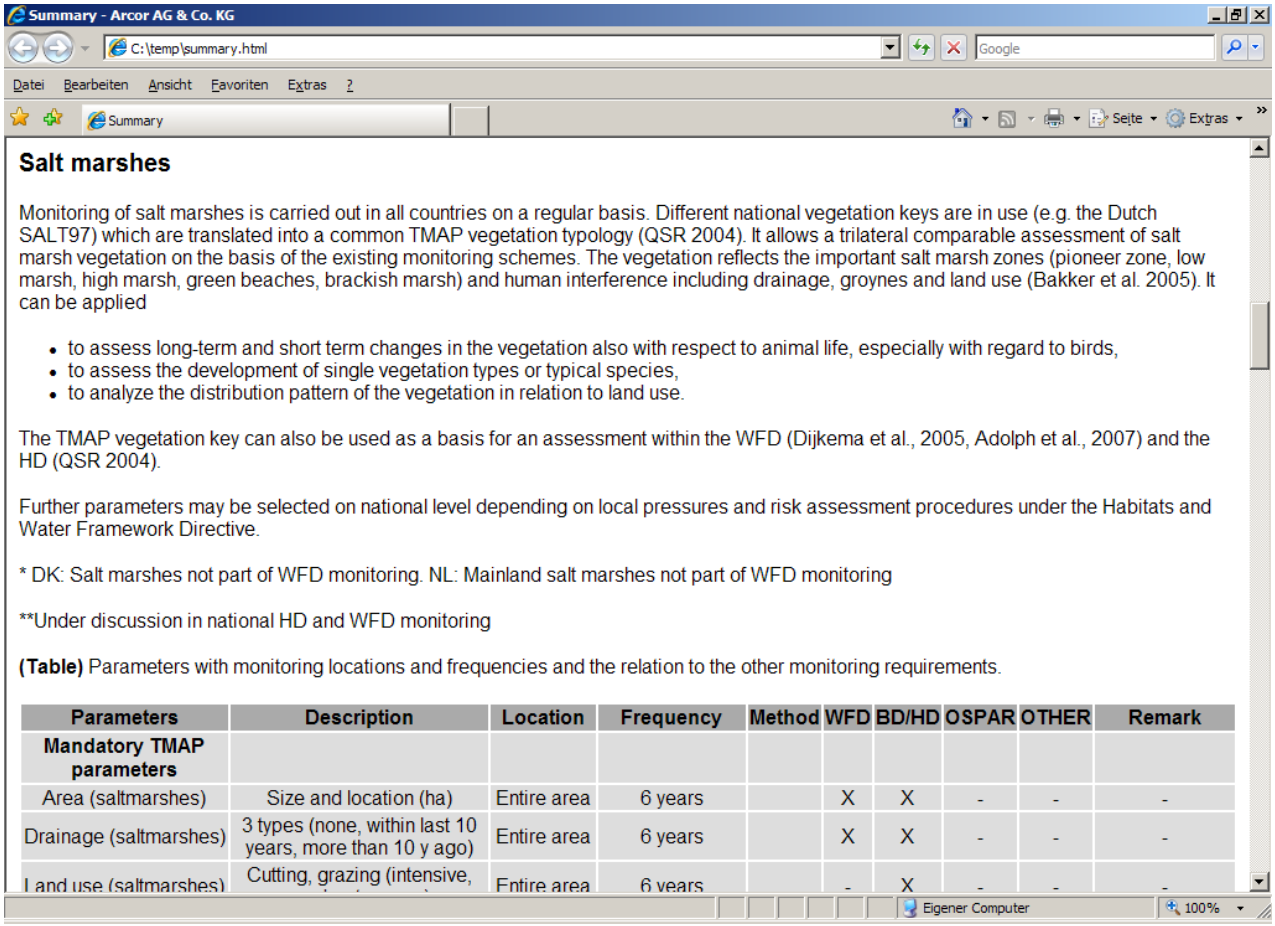
4.2.2 Abstracts

The button "Abstracts" writes a single Web page to the output directory including a summary for each guideline. The summary represents the content of chapter 5 of the guidelines:



Salt marshes

Monitoring of salt marshes is carried out in all countries on a regular basis. Different national vegetation keys are in use (e.g. the Dutch SALT97) which are translated into a common TMAP vegetation typology (QSR 2004). It allows a trilateral comparable assessment of salt marsh vegetation on the basis of the existing monitoring schemes. The vegetation reflects the important salt marsh zones (pioneer zone, low marsh, high marsh, green beaches, brackish marsh) and human interference including drainage, groynes and land use (Bakker et al. 2005). It can be applied

- to assess long-term and short term changes in the vegetation also with respect to animal life, especially with regard to birds,
- to assess the development of single vegetation types or typical species,
- to analyze the distribution pattern of the vegetation in relation to land use.

The TMAP vegetation key can also be used as a basis for an assessment within the WFD (Dijkema et al., 2005, Adolph et al., 2007) and the HD (QSR 2004).

Further parameters may be selected on national level depending on local pressures and risk assessment procedures under the Habitats and Water Framework Directive.

* DK: Salt marshes not part of WFD monitoring. NL: Mainland salt marshes not part of WFD monitoring

**Under discussion in national HD and WFD monitoring

(Table) Parameters with monitoring locations and frequencies and the relation to the other monitoring requirements.

Parameters	Description	Location	Frequency	Method	WFD	BD/HD	OSPAR	OTHER	Remark
Mandatory TMAP parameters									
Area (saltmarshes)	Size and location (ha)	Entire area	6 years		X	X	-	-	-
Drainage (saltmarshes)	3 types (none, within last 10 years, more than 10 y ago)	Entire area	6 years		X	X	-	-	-
Land use (saltmarshes)	Cutting, grazing (intensive,	Entire area	6 years		-	X	-	-	-

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5 Annex

5.1 Syntax for the database and the html export

Because the TMAP guidelines were written with text processor MS Word and only then copied as data sets into the database, the simple method of copy & paste has been chosen to transfer the text of the Word documents as data sets into the MS Access TMAP guidelines database.

Databases are not intended to deal with formatted text. Because the wanted database output as web document (html) or text should be formatted a simple syntax within the database text has been defined, which interpreted by the java application exporter, allows formatted output as HTML or text. The following paragraph- and character formatting symbols, which have to be included in the database text of the TMAP guidelines, have been defined:

Header

Headers on different levels are marked with one or more '#' character. Die highest level has only one '#' , the second highest level '##' and so on. Example:

content in database	output in html document
#Header of highest level	**Header of highest level**
## Header of second highest level	**Header of second highest level**

The header stops with a carriage return (enter key), the '#' character has to be in the first column and cannot be separated by a blank from the header text.

Paragraphs

Each carriage return (enter key) in the text of the database results in a new paragraph followed by an empty in the output html document.

The content of some data sets will become content in the cells of table 5.1, like description, str_Frequency, str_Locationand str_Method. The used text should contain no carriage return. If only a new line is wanted it can be initiated with '\n' (backslash and 'n'). Formats for lists and tables are not allowed in tables itself or will be ignored in lists.

Lists

The minus sign '-' followed by a tab stop or a blank will create a paragraph in an unnumbered list. If a nested list is wanted more than one minus signs '-' have to be used in the same line. Example:

content in database	output in html document
- first topic	• first topic
-- first sub-topic	o first sub-topic
-- second sub-topic	o second sub-topic
- second topic	• second topic
- third topic	• third topic

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Tables

There are two techniques to implement tables in the output of the guidelines database:

1. Tab stop

Each line in the table must have at least one tab stop. The tab stops define the cells resp. rows in the line. Tab stops with no text in between or just in the beginning of a line will be empty cells in the output.

content in database	output in html document		
Row 1<TAB>Row 2<TAB> Row 3	Row 1	Row 2	Row 3
Row 2, Column 1<TAB> <TAB> Row 2, Column 3	Row 2, Column 1		Row 2, Column 3

The copy of a table from MS Word to MS Access by Copy & Paste works in the same way and also generates the appropriate rows and columns with tab stops and carriage returns.

2. Vertical line or bitwise logical OR ("Pipe") '|'

Tab stops are not easy recognizable in normal text and are not easy to handle in a standard GUI, because it is used for navigation between control units. Therefore an alternative way of table definition in the database by using the '|' is possible:

content in database	output in html document		
|Row 1 | Row 2 | Row 3	Row 1	Row 2	Row 3
| Row 2, Column 1 | | Row 2, Column 3	Row 2, Column 1		Row 2, Column 3

A new line in a table has to be created by a '|' as first sign. Tab stops are optional if they occur also in the middle of a line. If the first column of a table is completely empty it will not included in the output table.

Blanks and paginations

Because the output of the database is designed in html format several blanks in a row will not be included. In html format pagination is not defined. Therefore, it can not be included in the database text.

Links

Hyperlinks in texts can be created by using squared brackets:

content in database	output in html document
[http://www.brockmann-consult.de]	http://www.brockmann-consult.de
[Document XY|../_docs/Methoden/dokument_xy.doc]	Document XY
[Guideline Phytoplankton|guideline:Phytoplankton]	Guideline Phytoplankton

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A link inserted in the database can have two parts separated by a '|'. The left part will occur in the html document as the name of the link, the right part will be the link itself. If the left part is not used the name of the link will be also the link itself. See examples above.

Links are valid if the targets starts with the following values pointing to the protocols: http:, https:, ftp:, /, ..

If in the squared brackets no protocol is recognized by the java exporter like [www.brockmann-consult.de] or [Brockmann Consult|www.brockmann-consult.de] the text will be inserted as is. In this way notes can be created, which should not have a special format.

If the notation 'guideline:' followed by the exact name of another guideline is used, it is possible to jump from one guideline to another one.

Graphics

Graphics and photos can be included as follow:

content in database	output in html document
[Nice picture|img:photo.jpg]	Picture 'photo.jpg' with tooltip “Nice picture”
[img:grafik.png]	Image 'graphik.png' with no tooltip

Pictures and graphics have to be stored in the same directory, but absolute and relative addresses can be used for references to other directories.

Cross references within a document

If cross-references like to headers or foot notes within the html document are wanted, two special protocols are involved. With '[target:1]' the target [1] is defined. In html this means '<a name="1"/>'. The target '[anchor:1]' can be included but only in the same html document. This approach allows footnotes as text blocks in the database.

Italic, bold, underline

Text can be formatted in italic, bold or underline:

- Italic: Start and stop of the text with ('//') - double slash
- Bold: Start and stop of the text with ('**') – double asterisk
- Underline: Start and stop of text with ('__') – double underscore

content in database	output in html document
bold text	**Bold text**
__underlined text__	underlined text
//italic text//	*italic text*

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Comments

Comments will not be exported from the database into the html document. The comment starts with '>>' and ends with #<<' (>>This is comment<<). Carriage return is not allowed within comments.

5.2 Comparison with MS Word

After copy and paste of text from MS Word into the database the following changes have to be taken into account:

1. For unnumbered lines in a list the minus sign '-' has to be used. The special characters for listings used by words have to be substituted accordingly.

2. Special characters are often not displayed and exported correctly. This are e. g., '®', '→', '⇨', and quotation marks like (`, „ and “), and the long minus sign (—).

5.3 CSS-file for an individual layout

In the following box some CSS Formats are given as examples, which define an individual layout style. The css-file has to be stored in the same folder than the html files.

cwss.css

```
P, H1, H2, H3, H4, DIV
{
     font-style:ARIAL;
}

P
{
     fontsize:12pt;
}

.eb1 H1, H2, H3, H4, H5
{
     font-weight:bold;
}

.eb1 H1
{
     font-size:16pt;

}

.eb1 H2
{
     font-size:15pt;
}

.eb1 H3
{
     font-size:14pt;
}

.eb1 H4
{
     font-size:13pt;
}

.eb1 H5
{
     font-size:12pt;
}

.eb1 THEAD TD
```

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```
{
     background-color: #aaaaaa;
     font-weight:bold;
}

.eb1 TD
{
     background-color: #dddddd;
     text-align:center;
}
.italic {
     font-style: italic;
}

.bold
{
     font-weight: bold;
}

.underline
{
     text-decoration: underline;
}
```

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