

Multimedia Geo-Information for e-Communities in Rural Areas with Eco-Tourism



IST-2001-32336





**IGiK** 









Agro

Deliverable 2.2.1 Report on data sources and data structure in the regions



REGEO Identifier: REGEO-WP2-UHUL-04-ReportD2.2.11

Date: 19/07/2002

Author(s) and Gabriela Zizkova, Martin Pospisil, Antonin Kusbach

company: UHUL

Document status: Final<sup>2</sup> Confidentiality: Restricted<sup>3</sup>

Keywords: Analysis, comparison, use case

Abstract: The analysis of user requirement is based on data This data sources were taken from sources. questionnaire which was completed by end users. A list of end users is put in to third part of this report. A number asked end users is expressed by a figure. The questionnaire contains several important themes of information, which will be used in next steps of ReGeo project. There has been found out data of these major themes as IT staff, IT equipment, presentation platforms (online, offline). Further then kind of data, data hierarchy, data definitions, data orientation, data types and formats and data quality. There has been created the list of these data, which have been used or had been currently used and incorporated in the questionnaire. All information of questionnaires of single participant countries were evaluated. The result of the evaluation was put into final summary questionnaire, which is assigned for all participant countries. It means to have been expressed final state of data for next cooperation. There has been made final summary description of every theme of the final summary questionnaire, which was used in this report.

#### DOCUMENT HISTORY

Version	Date	Reason of change
1	19/07/2002	document created
2	07/08/2002	document edited
3	08/08/2002	document edited

Confidentiality can be restricted or public.

Consists of <Project name>-<Work-package>-<Abbreviation of the company>-<Document name>

<sup>&</sup>lt;sup>2</sup> Status can be *draft* or *final* 

Dispatch list	European Commission
	Partner:
	FeLIS
	JRS DIB
	JRS IS&IM
	IGiK
	UHUL
	GEO
	AGRO
	LESP
	TAXUS
	<u>User:</u>
	NPP
	KPK
	NPTT
	LaWuF
	FVV-Th
	NP-Th

Writer validation	Validation reviewers
UHUL	Lesprojekt
Validated on	

# Summary of ReGeo Deliverable D 2.2.1

## 1. Goal of the report

Data sources and data structure

The main goal of this report is to create a list of using data or currently used data. The important themes of information are: IT staff, IT equipment, presentation platforms (offline or online). Kind of data are below and then succession of data definitions, orientation of data, data types and formats, and their quality.

## 2. Content of the report

Review of results of questionnaire and the summary of individual discussions with end users and results of additional questions.

- 1. Object of analysis
- 2. Description of Parks as subcontractors
- 3. One's own of data sources and data structure
- 4. Summary of data

### 3. Results of the report

All information was acquired by filling in the questionnaire. Description of processing for evaluation of getting data from single countries is meant in this chapter. There is also incorporated the summary list of end users, who were completed the questionnaire with. The number of the end users is expressed by a figure. Review of results of summary questionnaire it has been made for all participant countries together. Summary of the themes, which were used in this report, is located behind every respective theme of the questionnaire.

# **Table of Contents**

S	ummary o	of ReGeo Deliverable D 2.2.1	i
		of the report	
		nt of the report	
		ts of the report	
1		f analysis	1
		scription of the test regions	1
		ential group of end users of the ReGeo system product	
		astructure of end users	
	1.4 WP	participants	1
_	• • •		_
2		of the report	
		scription of Parks as subcontractors	
	2.1.1	Austria	
	2.1.2	Germany	
	2.1.3 2.1.4	Czech Republic	
		Polande's own of data sources and data structure	
		Austria	
	2.2.1		
	2.2.1.2		
		Germany	
	2.2.2.1		
	2.2.2.2		
		Czech Republic	
	2.2.3.1	· · · · · · · · · · · · · · · · · · ·	
	2.2.3.2		
	2.2.4	Poland	
	2.2.4.1		
	2.2.4.2	2 Mapping of existing data sources	24
_	0.	af data	
3	Summar	y of data	28
		nmary of getting data	
		astructure	
	3.3 Map	oping of existing data sources	30

## **Abbreviations:**

AGRO	Agrolab GmbH	HSMAP IGIK	Help service mapping s.r.o. Institute for Geodesy and
FeLis	Dep. Of Remote Sensing and Landscape Information Systems,		Cartography, Department of Cartography
	Albert-Ludwigs-University of Freiburg	JRS DIB	Joanneum Research Forschungsgesellschaft mbH
FVV-TW	Tourism association Thuringian Forest	JRS IS&IM	Joanneum Research Forschungsgesellschaft mbH
GEO	Geo-konzept, Gesellschaft für Umweltplanungssysteme	LaWuF	State Inst. For wood and forestry of Thuringia

LESP	Lesprojekt Slusby s.r.o.		
LKP	Kozienice Landscape Park	UHUL	Ustav pro hospodarskou upravu lesu Brandys nad Labem (Forest Management Institute)
NPP	Narodni Park Podyji	WP	Workpackage
	Turioum Farit Goyji	IS	Information System
NPTT	National-Park Thayatal, GmbH	IT	Information Technology
NP-TW	Naturepark Thüringer Wald		
TAXUS	Taxus Information Systems LTD		

## 1 Object of analysis

## 1.1 Description of the test regions

The description of area, test regions is in the following chapter 3.1.

## 1.2 Potential group of end users of the ReGeo system product

- Regional management all level of Local Administration from communal to ministerial level (e.g. connection to territorial or landscape planning). It includes self government administrations, district administrations and other institutions with connection to government and self government and the test region.
- Regional communities (National Parks, Landscape Parks...)
- Private sector commercial subjects (SME, travel agencies)
- Tourist info centres this is contemporary the main source of information about the test regions. In the future it will be the base of IS structure such as ReGeo.
- Cultural institutions (museums, galleries...)
- Educational institutions

In the test areas have been addressed only institutions, not individuals. The reason why we make the list only of potential end users of institutions no individuals is possibility to make investigation about their requirements and demands in short time and generally representative in the test regions. The institutions were taken as an end user with more concrete imagine about it. And they can easily and accurately express the demands of individual users, because they know it from common contacts with them as customers. The end-users are mostly characterized as both users and providers (contributors) of the information system.

#### 1.3 Infrastructure of end users

Information technology infrastructure of end users was a very important aspect taken into account and inquired by questionnaire. It was expected to reveal what equipment is present in the region and show, how the end users are ready to consume the results of implementing of the ReGeo system. The following facts were recognized by the questionnaires:

- Present situation in IT technologies
- PC HW, SW (GIS) facilities
- Network connection WWW
- Internet use
- Demands and requirements with respect to IT

### 1.4 WP participants

## Contractors:

- UHUL, Forest Management Institute, WP leader, CZ
- JRS, Joanneum Research, A
- IGIK, Institute of Geodesy and Cartography, PL

• FeLis, University of Freiburg, G

#### Subcontractors:

- NPP, Administration National Park Podyjí, CZ
- NTP, National-Park Thayatal GmBh, A
- NPTW, Naturpark Thuringer Wald e. V, G
- FVV-TW, Tourism association Thuringian Forest e.V.
- LaWuF, State Inst. for wood and forestry of Thuringia
- KLP, Kozienice Landscape Park, PL

## 2 Content of the report

## 2.1 Description of Parks as subcontractors

The description is divided in addition to single countries

#### 2.1.1 Austria

Austria has got two national parks which are incorporated into the project ReGeo.

#### **National Park Thayatal**

In 1997 the Federal government and the Government of Lower Austria establishment the National Park Thayatal. The National Park is leaded from a private company (National Park Thayatal Ltd.) which is in possession of the Federal Government and the Government of Lower Austria.

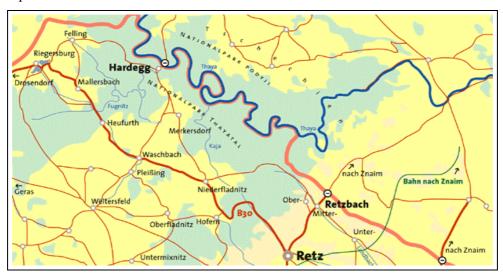


Figure 1: Situation of the National Park Thayatal

The park is the smallest and youngest national park in Austria, it has an area of about 0,13 sq.km. On the northern side the park is bordered by the river Thaya (see image), which is also the border to the Czech Republic with a length of 26 km. North of the Thaya there is the Czech national park Podyji, which has an area of about 60 km<sup>2</sup>. In 1999 an official agreement on the co-operation between Austrian National Park Thayatal and the National Park Podyji was signed by the ministers for Environment, Dr. Martin Bartenstein (A), and Milos Kuzvart (CZ).



Figure 2: River Thaya

The National Park Thayatal has a strong connection to the tourism region "Retzer Land" and a close cooperation in the marketing activities. Further, there is some cooperation with neighboring tourist

sights, e.g. Stift Geras in connection with their creative workshops. A strong co-operation between the Czech and Austrian part of the national park region is also existent.

Many special programs for different target groups are defined like "Tümpeln" for school children or "With the laptop trough the Thayatal" for "technical freaks". Some of these special programs are defined of both sides of the NP (Czech and Austrian side). So the National Park Thayatal is a interesting test region for the REGEO project.

Existing data from the park:

- Printed brochures for different themes like events, hiking, e.g. problem: people tend not to keep the brochure for more than some months
- Around 400 pictures on CD-ROM (different formats)
- Analogue maps (scanned for internet presentation)
- Detailed maps about forest and biology situation in the NP
- Detailed map about the geology of the Thayatal
- Digital aerial images (orthography)

Website: http://www.np-thayatal.at

Mainly textual information, some pictures

No geographical navigation

Complicated website maintenance (pure HTML, no Content Management System (CMS))

"Nature guide" and "hiking guide" with text and image information

"Hiking guide" with text, image and map information

Possible "themes" are not presented

Max. 3000 visits per month (May 2002)

#### IT-Infrastructure:

6 PCs with Microsoft Windows NT (one PC is a Multimedia Workstation)

LAN

ISDN Connection (128k)

Area View (only very little knowledge)

Arial images are there (formats gif, tiff)

The specification of picture database is ordered. The ReGeo requirements to such a system were discussed: There must be a possibility to store metadata like coordinates and date / time relevant information along with the picture itself (e.g. photo of a plant in late spring and summer). Additionally it should be possible to export all this information using open standards.

#### **Retzer Land:**

The tourism region "Retzer Land" is situated in the northern part of Austria and has the river Thaya as border to the Czech Republic (see Figure 1).





Figure 1: Situation of the region "Retzer Land"

Figure 2: Main place of Retz

The tourism board "Retzer Land", which is situated in the town Retz (see Figure 2), administers six communes (Retz, Retzbach, Hardegg, Zellerndorf, Pulkau and Schrattenthal).

The tourism region "Retzer Land" has a strong connection to the National Park Thayatal and a close cooperation in the marketing activities. So this region is an interesting rural test region for the REGEO project.

#### Existing data:

- Many printed brochures
- Analogue biking and hiking maps
- Many pictures on CD-ROM (different formats) an digital archive will be realized

#### Websites:

- http://www.thayatal.com
- http://www.retzer-land.at
- <a href="http://www.retz.at">http://www.retz.at</a> and a similar site for each municipality

All Websites are based on the Tiscover system (a global Tourism Information System). This is a content management system (CMS) to administrate the web pages data in a decentralized way. Geographical presentation is not presented.

#### IT-Infrastructure:

PCs with Microsoft Windows

Wireless LAN

#### 2.1.2 Germany

Germany has got only one nature park which is incorporated into project ReGeo

### **Thuringer Wald**

The Nature Park Thuringian Forest is located in the Southwest of Thuringia, one of 17 states in Germany. The Thuringian Forest is one of the German low mountain ranges with heights about 500 - 1 000 m above sea level. Famous is its ridge called "Rennsteig" once the border between Thuringia and Franconia.

The Nature Park Thuringian Forest covers about 2200 sq.km. 62 % of this area is forest, 33 % agriculture. The region is divided into seven administrative districts and two cities with all together 480 000 inhabitants.

The Nature Park contains several protected areas:

- Biosphere reservation Vessertal: 17 sq.km.
- 43 Nature reserves: 28,65 sq.km.
- 2 landscape conservation areas: 1500 sq.km.

Tourism is a very important economic factor in this region. Due to the beautiful landscape hiking, cross country skiing and biking are the most important activities. Additionally the people of this region want to establish "Specialities of the Thuringian Forest" as brand name to market their local products.

## 2.1.3 Czech Republic

Czech Republic has got only one national park which is incorporated into the project ReGeo – National park Podyjí.

Area of the NP 63 sq km

Protection zone 29 sq km

Highest point 536 m aSL

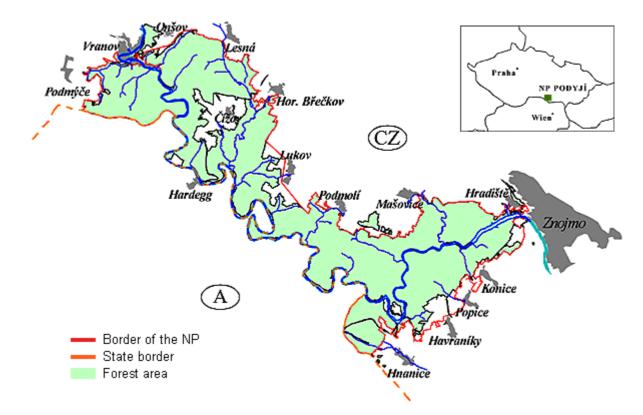
Lowest point 207 m aSL

Forests 84 %

Agricultural area 9 %

Other areas 7 %

The NP Podyjí is situated between the towns Znojmo and Vranov nad Dyjí, near the Czech - Austrian state border.



The beginning of the protection of the area of the middle stream of Dyje River dates back to 1978. At that time the Protected Landscape Area of Podyjí covering 103 sq km has been proclaimed. Its greater part belonged to the border zone, the access of which was forbidden for tourist public. In view of the remarkable scientific qualities of the area s nature, moves began in 1989, after the change of political climate, to re-classify Podyjí as a national park. The National Park has been proclaimed on July 1, 1991. Not later than January the 1st, 2000 the National Park Thayatal was proclaimed on the right Austrian riverside of Dyje River thus creating a unique bilateral area of European importance.

The national park presents an exceptionally well-preserved picture of river-valley landscape in the hilly grade of Middle Europe. The Canyon of Dyje River forms a unique river phenomenon with numerous meanders, deeply incised valleys of the tributaries, all kinds of rock-forms, stone runs and stone walls. The area is outstanding in its high diversity of plant and animal communities developed through various exposure of the slopes of the Dyje Valley. The natural axis of the area is the river Dyje. On its 40 km way from Vranov to Znojmo it has formed a canyon-like valley in the rocks of the Czech massif, 200 meters deep in some places.

The whole valley is almost absolutely covered by natural and close-to-nature forests. In the western part we may find residues of foot-hill beech woods with fir and yew, giving way towards East to oakhornbeam growths. Besides standard wood species we can meet also more uncommon species which are characteristic of the Dyje region.

In the whole region we find the so-called valley phenomenon causing westward penetration of thermophilous species of animals and plants from the south-eastern Panonian region. Vice versa there is an east-bound migration of foot-hill species we can find then on the cooler and shady northern slopes of the valley. Unique areas of heaths and steppe fallows have arisen in the middle Ages in the south-eastern part of the park through fell of the original oak woods with subsequent cattle pasturing. The heaths are prominent especially by rare species of themphilouse plants and insects. The number of especially protected plant species amounts to 77.

#### 2.1.4 Poland

Poland has got only one Landscape park which is incorporated in the project ReGeo.

### **Landscape Park Kozienice (Poland)**

Kozienice Landscape Park, located in central Poland (21°10' - 21°45' E and 51°22' -51° 41' N) was established in 1983. It has presently 622,43 sq. km (including 360,09 sq. km of buffer zone).

The Board of Kozienice Landscape Park was created in 1990 as a state financed unit of Mazowiecki Voivode (main unit of Polish governmental territory administration).

The main task of the Board is to preserve, popularize and disseminate natural, historic and cultural values of Kozienice Landscape Park, as well as to create conditions for their proper use in economic, tourist and scientific activities, in accordance with the rules of landscape conservation.

Forests cover 51% of area of the Park. The most valuable forest (some of them with 200 years old stands) is protected as reserves, which cover all together 10,12 sq. km Furthermore there are 156 "monumental" objects (like alone trees, group of trees, rocks etc.) and 25 architecture monuments (churches, palaces, historic parks and cemeteries). Park administrates the Museum's-Didactic Room with numerous collections of natural history and botanic garden, which serve for didactic purposes.

Board of the Park fulfils its tasks in collaboration with Voivodship's Nature Conservator, Voivodship's Conservator of Monuments, with 11 local communities, 4 local governmental administration units and with state forest administration units.

There are the following topics of collaboration:

- nature conservation
- spatial management
- management concerning forest, hunting, fishing, agriculture, afford stations, tourism and recreation
- preservation of historic and cultural values
- ecological education.

Annually 17 000 people (youth and adults) use different forms of ecological education in this park.

#### 2.2 One's own of data sources and data structure

In this report is used just two themes of data:

- infrastructure
- mapping of existing data sources.

The following parts of the questionnaire are divided in addition to single countries

## 2.2.1 Austria

Table 1 List of respondents

No.	Institucion	Institution
1	Retzer Land - Regionale Vermarktungs GmbH	Retzer Land Ltd.
2	Nationalpark Thayatal GmbH	National park Thayatal Ltd.

## 2.2.1.1 Infrastructure

Table 2

Theme	Que	estion	No. of answers	Of yes	Of no	Don't
IV.	31.	Has your company IT staff? (Network administrator, GIS experts)	2	2		
	32.	Have you any experience with IT technology?	2	2		
	33.	Do you use for your work personal computer?	2	2		
	34.	Do you use WINDOWS OS on your PC? (W95 or higher)?	2	2		
	35.	Do you use Mackintosh OS on your PC?	2		2	
	36.	Do you use Linux OS on your PC?	2		2	
	37.	Do you use any GIS software for your work?	2	1	1	
	38.	Has your computer removable device?(CD)	2	2		
	39.	Do you need analogue output of data?	2	2		
	40.	Are you able to work with digital data only?	2		1	1
	41.	Is your network WAN type?	2		2	
	42.	Is your network LAN type?	2	2		
	43.	Are you connected to the WWW?	2	2		
	44.	Are you an active web user?	2	1		1
	45.	Do you use internet for business?	2	1		1
	46.	Do you use internet for education?	2	<u> </u>	2	'
	47.	Do you use internet for planning of leisure time?	2		1	1
	48.	Do you use internet in office?	2	2	<u> </u>	-
			2	2		
	49. 50.	Do you use internet at home?  Do you use internet at other place? (internet café, tourist information center)	2	2		2
	51.	Do you use mobile phone for your work?	2	1	1	
	52.	Do you use mobile phone for other services than calls ( SMS, W@P )?	2	•	1	1
	53.	Do you use any mobile computers?	2		1	1
	54.	Do you inform others by web presentation?	2	2		
	55.	Do you inform others by distribution CD?	2	<del>  -</del>	2	
	56.	Do you inform others by info boards?	2	2		
	57.	Do you inform others by brochures or leaflets?	2	2		
	58.	Have you your own domain?	2	1	1	
	59.	Have you your own web page?	2	2	<u>'</u>	
	60.	Have you your hyperlink at other web pages?	2	2		
	61.	Have you your presentation in more than two languages? (native and English)?	2		2	
	62.	Do you have special network among several users? (LAN)	2		2	
	63.	Is there any hierarchy among users?	2	1	2	
	64.	Have you some superior provider?	2	1	2	
		Do you use or require some of these GIS-architecture:	2		_	
	65.	Server/Client – Application?	2		2	
	66.	Geo – server?	2		2	
	67.	Map – server?	2	+	2	

60.	Have you your hyperlink at other web pages?	2	2		
61.	Have you your presentation in more than two languages? (native and English)?	2		2	
62.	Do you have special network among several users? (LAN)	2		2	
63.	Is there any hierarchy among users?	2		2	
64.	Have you some superior provider?	2		2	
	Do you use or require some of these GIS-architecture:	2			
65.	Server/Client – Application?	2		2	
66.	Geo – server?	2		2	
67.	Map – server?	2		2	

Additional questions: (belong only to the theme)

What is bandwidth of your network?

ISDN (128 k)

## **Summary of 4<sup>th</sup> theme**

- IT staff with IT experience, equipment: PC, MS Win, CD device, GIS SW for work (1)
- Network LAN, connected to internet
- Internet in office and at home
- Own web page, hyperlink at others web pages
- Mobile devices (phones, computers) aren't used so often
- Analogue output of data it is necessary for further work
- Information are given to others by web presentation, info boards brochures and leaflets not by CD
- Bilingual presentation there two languages native and English
- No special networking intranet is not used
- No experience with special GIS architecture: Server/Client application, Geo-server, Map-server.

### 2.2.1.2 Mapping of existing data sources

Table 3

Theme	Ques	stion	No. of answers	Of yes	Of no	Don't know
\/	68.	Do you administer common tourist information?	2	1	1	
V .	69.	Do you administer natural conditions information?	2	2		
	70.	Do you administer nature protection?	2	1	1	
	71.	Do you administer forestry data?	2	1	1	
	72.	Do you administer information about accommodation?	2	1	1	
	73.	Do you administer information about boarding?	2	1	1	
	74.	Do you administer information about traffic accessibility?	2	1	1	
	75.	Do you administer Information of local speciality?	2	1	1	
	76.	Do you work with analogue data? (mostly)	2	2		
	77.	Do you work with digital data? (mostly)	2		2	

		1	ı		
78.	Have you plan to transfer analogue data to digital data?	2	2		
79.	Do you work with raster data?	2		2	
80.	Do you work with vector data?	2		2	
81.	Do you work with text data?	2	2		
82.	Do you work with DBF data?	2		2	
83.	Do you work with multimedia data?	2		2	
84.	Do you work with aerial photograph?	2	1	1	
85.	Do you work with satellite image?	2		2	
86.	Do you work with laser scanner data?	2		2	
87.	Do you work with metadata?	2	1	1	
	Do you work with these raster data formats:				
88.	*.BMP?	2	2		
89.	*.JPEG?	2	2		
90.	*.TIFF?	2	2		
91.	*.CIT?	2	_	2	
92.	*.RAK?	2		2	
93.	*.COT?	2		2	
55.	Do you work with these vector data formats:				
94.	*.DXF?	2		2	
	*.SHP?	2		2	
95.		2		2	
96.	*.DGN?				
97.	*.ARC?	2		2	
98.	ORACLE spatial extension?	2		2	
99.	ACCESS spatial extension?	2		2	
100.	MSSQL spatial extension?	2		2	
101.	Mapinfo?	2		2	
102.	IBM Spatial?	2		2	
103.	Informix Spatial?	2		2	
	Do you work with these text data formats:				
104.	*.TXT?	2	1	1	
105.	*.DOC?	2	2		
106.	*.RTF?	2		2	
107.	*.PDF?	2	2		
	Do you work with these database data formats:				
108.	*.DBF?	2		2	
109.	*.XLS?	2	2		
110.	*.MDB?	2		2	
111.	*.DB?	2		2	
112.	Oracle?	2		2	
113.	Informix?	2		2	
	Do you work with these multimedia data formats:				
114.	*.AVI?	2		2	
115.	*.MOV?	2		2	
116.	*.WMA?	2		2	
117.	*.RM?	2		2	
118.	*.MP3?	2		2	
	Do you work with these GEO data formats of the				
	digital model terrain:?				

119	ATKIS (DLM)?	2	2	
120	. DTM?	2	2	
121	. DEM?	2	2	

### Additional questions: (belong only to the theme)

What coordinate system do you use in your GIS system?

The system of Austria cartography (Projection: Transverse Mercator. Datum: MGI. Ellipsoid: Bessel)-both of the end users

#### List of available digital data:

- Aerial photographs (pseudo-color)
- Digital maps of hiking routes inside the park
- Descriptions of the park (doc-files, pdf-files)
- Photographs of points of interest inside the park

Where are the data from; ownership?

Aerial photographs from government -.both of the end users.

Who else is/should be allowed to use the data and how is he/she allowed to use them?

Both of the end users do not know.

How and how often can the data/information of the geo-data base be updated? Both of the end users do not know.

#### List of additional analogue data:

- Analogue brochure
- Analogue maps of the park
- Analogue maps of biking and hiking routes

## Summary of 5<sup>th</sup> theme

- Information about natural conditions there is a high level
- Common tourist information, nature protection, forestry data, information about accommodation, boarding, traffic accessibility, local speciality there is a low level
- Work with analogue data mostly than with digital data in the future there is a plan to transfer all into to digital data
- Work with text data mostly, in part with aerial photograph and metadata
- Raster data formats: \*.BMP, \*.JPEG, \*.TIFF
- Text data formats: \*.DOC, \*.PDF, \*.TXT

# 2.2.2 Germany

List of respondents:

Table 4 List of respondents

No.	Institucion	Institution
1	Nationalpark Thüringer Wald	National park Thüringer Forest
2	Fremdenverkehrsverband	Tourist association Thuringian Forest e.V (FVV-TWT)
3	LaWuF	State institution for wood and forestry of Thuringia (LaWuF)

## 2.2.2.1 Infrastructure

Table 5

Theme	neme Question			Of yes	Of no	Don't know
IV.	31.	Has your company IT staff? (Network administrator, GIS experts)	3	2	1	
	32.	Have you any experience with IT technology?	3	3		
	33.	Do you use for your work personal computer?	3	3		
	34.	Do you use WINDOWS OS on your PC? (W95 or higher)?	3	3		
	35.	Do you use Mackintosh OS on your PC?	3		3	
	36.	Do you use Linux OS on your PC?	3		3	
	37.	Do you use any GIS software for your work?	3	1	2	
	38.	Has your computer removable device?(CD)	3	3		
	39.	Do you need analogue output of data?	3	3		
	40.	Are you able to work with digital data only?	3	3		
	41.	Is your network VAN type?	3		3	
	42.	Is your network LAN type?	3	2	1	
	43.	Are you connected to the WWW?	3	3		
	44.	Are you an active web user?	3	3		
	45.	Do you use internet for business?	3	3		
	46.	Do you use internet for education?	3	1	2	
	47.	Do you use internet for planning of leisure time?	3	2	1	
	48.	Do you use internet in office?	3	3		
	49.	Do you use internet at home?	3	3		
	50.	Do you use internet at other place? (internet café, tourist information center )	3	2	1	
	51.	Do you use mobile phone for your work?	3	2	1	
	52.	Do you use mobile phone for other services than calls ( SMS, W@P )?	3	1	2	
	53.	Do you use any mobile computers?	3	2	1	
	54.	Do you inform others by web presentation?	3	3		
	55.	Do you inform others by distribution CD?	3	3		
	56.	Do you inform others by info boards?	3	3		
	57.	Do you inform others by brochures or leaflets?	3	3		
	58.	Have you your own domain?	3	3		
	59.	Have you your own web page?	3	3		
	60.	Have you your hyperlink at other web pages?	3	3		

6	61.	Have you your presentation in more than two languages? (native and English)?	3		3	
6	62.	Do you have special network among several users? (LAN)	3	2	1	
6	63.	Is there any hierarchy among users?	3	3		
6	64.	Have you some superior provider?	3	2	1	
		Do you use or require some of these GIS-architecture:				
6	65.	Server/Client – Application?	3	2	1	
6	66.	Geo – server?	3	1	1	1
6	67.	Map – server?	3	1	1	1

Additional questions: (belong only to the theme)

What is bandwidth of your network?

100 Mbit LAN / 2Mbit WAN.

Which local internet provider is/will be used as a gateway?

"Landesdatennetz/Landesrechenzentrum".

Data net/Computing Center of the Thuringian state.

Provider: Pronet.

## Summary of 4<sup>th</sup> theme

• IT staff with IT experience, equipment: PC, MS Win, CD device, GIS SW for work (1)

Network LAN, connected to internet, active web user

Internet in office, at home, for business and planning

- Own web page and domain, hyperlink on others web pages
- Mobile devices (phones, computers) are in use
- Analogue output of data is able to work only with digital data
- Information are given to others by web presentation, CD, info boards brochures and leaflets
- Bilingual presentation there are two languages native and English
- Special networking intranet is used
- Experience with special GIS architecture: Server/Client application, Geo-server, Map-server

#### 2.2.2.2 Mapping of existing data sources

#### Table 6

Theme	Ques	Question		Of yes	Of no	Don't know
\/	68.	Do you administer common tourist information?	3	3		
<b>V</b> .	69.	Do you administer natural conditions information?	3	2	1	
	70.	Do you administer nature protection?	3	2	1	
	71.	Do you administer forestry data?	3	2	1	
	72.	Do you administer information about accommodation?	3	2	1	
	73.	Do you administer information about boarding?	3	2	1	

74.   Do you administer information about traffic accessibility?   75.   Do you administer Information of local specialities?   3						
76.         Do you work with digital data? (mostly)         3         2         1           77.         Do you work with digital data? (mostly)         3         3           78.         Have you plan to transfer analogue data to digital data?         3         3           79.         Do you work with raster data?         3         2         1           80.         Do you work with text data?         3         1         1         1           81.         Do you work with best data?         3         2         1           82.         Do you work with best data?         3         2         1           83.         Do you work with multimedia data?         3         2         1           84.         Do you work with satellite image?         3         1         2           85.         Do you work with laser scanner data?         3         3         3           85.         Do you work with these raster data formats:         8         8.BMP?         3         1         2           80.         *JPEG?         3         3         2         1           81.         *LEFC?         3         3         3           82.         *LEFC?         3         3         3	74.		3	1	1	1
77.         Do you work with digital data? (mostly)         3         3           78.         Have you plan to transfer analogue data to digital data?         3         2         1           79.         Do you work with raster data?         3         2         1           80.         Do you work with vector data?         3         1         1         1           81.         Do you work with DBF data?         3         2         1           82.         Do you work with DBF data?         3         2         1           83.         Do you work with bBF data?         3         2         1           84.         Do you work with multimedia data?         3         1         2           85.         Do you work with aserial photograph?         3         1         2           86.         Do you work with these rester data?         3         1         2           86.         Do you work with these raster data formats:         3         2         1           87.         Do you work with these raster data formats:         3         1         2           88.         *BMP?         3         3         3         3           99.         *TIFF?         3         3	75.	Do you administer Information of local specialities?	3	2	1	
78. Have you plan to transfer analogue data to digital data?         3         3           79. Do you work with raster data?         3         2         1           80. Do you work with vector data?         3         1         1         1           81. Do you work with bBF data?         3         2         1         1         1           82. Do you work with mitlimedia data?         3         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         2         1         2         1         2         2         1         2         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1	76.	Do you work with analogue data? (mostly)	3	2	1	
data?	77.	Do you work with digital data? (mostly)	3	3		
80.       Do you work with vector data?       3       1       1       1         81.       Do you work with text data?       3       3       3         82.       Do you work with DBF data?       3       2       1         83.       Do you work with netial photograph?       3       1       2         85.       Do you work with satellite image?       3       1       2         86.       Do you work with laser scanner data?       3       3       3         87.       Do you work with metadata?       3       2       1         Do you work with these raster data formats:       0       2       1         88.       *BMP?       3       1       2         89.       *JPEG?       3       3       3       3         90.       *TIFF?       3       2       1       1         91.       *CIT?       3	78.		3	3		
81.       Do you work with text data?       3       3       2       1         82.       Do you work with DBF data?       3       2       1         83.       Do you work with multimedia data?       3       2       1         84.       Do you work with aerial photograph?       3       1       2         85.       Do you work with satellite image?       3       1       2         86.       Do you work with laser scanner data?       3       2       1         87.       Do you work with metadata?       3       2       1         Do you work with these raster data formats:       8       8       8BMP?       3       1       2         89.       *JPEG?       3       3       3       3       3       3       3       9       9       *TIFF?       3       2       1       1       1       1       2       8       8       *BMP?       3       <	79.	Do you work with raster data?	3	2	1	
82.       Do you work with DBF data?       3       2       1         83.       Do you work with multimedia data?       3       2       1         84.       Do you work with aerial photograph?       3       1       2         85.       Do you work with satellite image?       3       1       2         86.       Do you work with laser scanner data?       3       2       1         B0.       Do you work with metadata?       3       2       1         B0.       PDFG?       3       3       2       1         B0.       *JPEG?       3       3       3       2       1         90.       *TIFF?       3       2       1       1       1       2       8       1       2       1       1       1       1       1       1       2       1 <td< td=""><td>80.</td><td>Do you work with vector data?</td><td>3</td><td>1</td><td>1</td><td>1</td></td<>	80.	Do you work with vector data?	3	1	1	1
83.       Do you work with multimedia data?       3       2       1         84.       Do you work with aerial photograph?       3       1       2         85.       Do you work with satellite image?       3       1       2         86.       Do you work with metadata?       3       2       1         87.       Do you work with these raster data formats:       3       2       1         88.       *.BMP?       3       1       2         89.       *.JPEG?       3       3       3         90.       *.TIFF?       3       2       1         91.       *.CIT?       3       3       3       3         92.       *.RAK?       3	81.	Do you work with text data?	3	3		
84.       Do you work with aerial photograph?       3       1       2         85.       Do you work with satellite image?       3       1       2         86.       Do you work with laser scanner data?       3       2       1         87.       Do you work with metadata?       3       2       1         B0       Do you work with these raster data formats:       3       1       2         88.       *.BMP?       3       1       2         89.       *.JPEG?       3       3       3         90.       *.TIFF?       3       2       1         91.       *.CIT?       3       3       3         92.       *.RAK?       3       3       3         93.       *.COT?       3       3       3         94.       *.DXF?       3       1       2         94.       *.DXF?       3       1       2         95.       *.SHP?       3       1       2         96.       *.DGN?       3       3       3         97.       *.ARC?       3       1       2         98.       ORACLE spatial extension?       3       1       2	82.	Do you work with DBF data?	3	2		1
85.       Do you work with satellite image?       3       1       2         86.       Do you work with laser scanner data?       3       2       1         87.       Do you work with metadata?       3       2       1         Do you work with these raster data formats:       88.       *.BMP?       3       1       2         88.       *.BMP?       3       1       2       88       *.JPEG?       3	83.	Do you work with multimedia data?	3	2	1	
86.       Do you work with laser scanner data?       3       3         87.       Do you work with metadata?       3       2       1         Do you work with these raster data formats:       88.       *.BMP?       3       1       2         89.       *.JPEG?       3       3       3       9       99.       *.TIFF?       3       2       1       99.       *.TIFF?       3<	84.	Do you work with aerial photograph?	3	1	2	
87.       Do you work with metadata?       3       2       1         Do you work with these raster data formats:       3       1       2         88.       *.BMP?       3       1       2         89.       *.JPEG?       3       3       9         90.       *.CIT?       3       2       1         91.       *.CIT?       3       3       3         92.       *.RAK?       3       3       3         94.       *.DXF?       3       1       2         95.       *.SHP?       3       1       2         96.       *.DGN?       3       3       3         97.       *.ARC?       3       1       2         98.       ORACLE spatial extension?       3       1       2         99.       ACCESS spatial extension?       3       3       3         100.       MSSQL spatial?       3       3       3         101.       Mapinfo? <t< td=""><td>85.</td><td>Do you work with satellite image?</td><td>3</td><td>1</td><td>2</td><td></td></t<>	85.	Do you work with satellite image?	3	1	2	
Do you work with these raster data formats:	86.	Do you work with laser scanner data?	3		3	
88.       *.BMP?       3       1       2         89.       *.JPEG?       3       3       3         90.       *.TIFF?       3       2       1         91.       *.CIT?       3       3       3         92.       *.RAK?       3       3       3         93.       *.COT?       3       3       3         95.       *.DXF?       3       3       3         95.       *.SHP?       3       1       2         96.       *.DGN?       3       3       3         97.       *.ARC?       3       1       2         98.       ORACLE spatial extension?       3       1       2         99.       ACCESS spatial extension?       3       1       2         99.       ACCESS spatial extension?       3       3       3         101.       Mapinfo?       3       3       3         102.       IBM Spatial?       3       3       3         103.       Informix Spatial?       3       3       3         104.       *.TXT?       3       3       3         105.       *.DOC?       3 <td>87.</td> <td>Do you work with metadata?</td> <td>3</td> <td>2</td> <td>1</td> <td></td>	87.	Do you work with metadata?	3	2	1	
89.       *JPEG?       3       3       1         90.       *.TIFF?       3       2       1         91.       *.CIT?       3       3       3         92.       *.RAK?       3       3       3         92.       *.RAK?       3       3       3         93.       *.COT?       3       3       3         90.       *.DXF?       3       1       2         94.       *.DXF?       3       1       2         96.       *.DGN?       3       1       2         96.       *.DGN?       3       1       2         96.       *.DGN?       3       1       2         98.       ORACLE spatial extension?       3       1       2         99.       ACCESS spatial extension?       3       1       2         100.       MSSQL spatial extension?       3       3       3         101.       Mapinfo?       3       3       3         102.       IBM Spatial?       3       3       3         103.       Informix Spatial?       3       3       3         104.       *.TXT?       3		Do you work with these raster data formats:				
90.       *.TIFF?       3       2       1         91.       *.CIT?       3       3       3         92.       *.RAK?       3       3       3         93.       *.COT?       3       3       3         Do you work with these vector data formats:       9       9       4       *.DXF?       3	88.	*.BMP?	3	1	2	
91. *.CIT?       3       3         92. *.RAK?       3       3         93. *.COT?       3       3         Do you work with these vector data formats:       94. *.DXF?       3         94. *.DXF?       3       1       2         95. *.SHP?       3       1       2         96. *.DGN?       3       3       3         97. *.ARC?       3       1       2         98. ORACLE spatial extension?       3       1       2         99. ACCESS spatial extension?       3       1       2         100. MSSQL spatial extension?       3       3       3         101. Mapinfo?       3       3       3         102. IBM Spatial?       3       3       3         103. Informix Spatial?       3       3       3         104. *.TXT?       3       3       3         105. *.DOC?       3       3       3         106. *.RTF?       3       3       3         107. *.PDF?       3       3       2       1         109. *XLS?       3       2       1         110. *.MDB?       3       2       1         111. *.DB?	89.	*.JPEG?	3	3		
92.       *.RAK?       3       3         93.       *.COT?       3       3         Do you work with these vector data formats:       94.       *.DXF?       3       3         95.       *.SHP?       3       1       2         96.       *.DGN?       3       3       3         97.       *.ARC?       3       1       2         98.       ORACLE spatial extension?       3       1       2         99.       ACCESS spatial extension?       3       1       2         100.       MSSQL spatial extension?       3       3       3         101.       Mapinfo?       3       3       3         102.       IBM Spatial?       3       3       3         103.       Informix Spatial?       3       3       3         104.       *.TXT?       3       3       3         105.       *.DOC?       3       3       3         106.       *.RTF?       3       3       3         107.       *.PDF?       3       3       2       1         108.       *.DBF?       3       2       1         109. <td< td=""><td>90.</td><td>*.TIFF?</td><td>3</td><td>2</td><td>1</td><td></td></td<>	90.	*.TIFF?	3	2	1	
93. *.COT?         3         3           Do you work with these vector data formats:         94. *.DXF?         3         3           95. *.SHP?         3         1         2           96. *.DGN?         3         3         3           97. *.ARC?         3         1         2           98. ORACLE spatial extension?         3         1         2           99. ACCESS spatial extension?         3         1         2           100. MSSQL spatial extension?         3         3         3           101. Mapinfo?         3         3         3           102. IBM Spatial?         3         3         3           103. Informix Spatial?         3         3         3           104. *.TXT?         3         3         3           105. *.DOC?         3         3         3           106. *.RTF?         3         3         3           107. *.PDF?         3         3         2         1           109. *.XLS?         3         2         1           110. *.MDB?         3         2         1           111. *.DB?         3         3         3           112. Oracle?	91.	*.CIT?	3		3	
Do you work with these vector data formats:   94. *.DXF?   3	92.	*.RAK?	3		3	
94.       *.DXF?       3       3       3       9       95.       *.SHP?       3       1       2       2       96.       *.DGN?       3 <td>93.</td> <td>*.COT?</td> <td>3</td> <td></td> <td>3</td> <td></td>	93.	*.COT?	3		3	
95. *.SHP?       3       1       2         96. *.DGN?       3       3       3         97. *.ARC?       3       1       2         98. ORACLE spatial extension?       3       1       2         99. ACCESS spatial extension?       3       1       2         100. MSSQL spatial extension?       3       3       3         101. Mapinfo?       3       3       3         102. IBM Spatial?       3       3       3         103. Informix Spatial?       3       3       3         104. *.TXT?       3       3       3         105. *.DOC?       3       3       3         106. *.RTF?       3       3       3         107. *.PDF?       3       3       3         Do you work with these database data formats:       1       1         109. *.XLS?       3       2       1         110. *.MDB?       3       2       1         111. *.DB?       3       3       3         112. Oracle?       3       1       2         113. Informix?       3       3       1       2         114. *.AVI?       3       1       2 <td></td> <td>Do you work with these vector data formats:</td> <td></td> <td></td> <td></td> <td></td>		Do you work with these vector data formats:				
96. *.DGN?       3       3       3         97. *.ARC?       3       1       2         98. ORACLE spatial extension?       3       1       2         99. ACCESS spatial extension?       3       1       2         100. MSSQL spatial extension?       3       3         101. Mapinfo?       3       3         102. IBM Spatial?       3       3         103. Informix Spatial?       3       3         104. *.TXT?       3       3         105. *.DOC?       3       3         106. *.RTF?       3       3         107. *.PDF?       3       3         108. *.DBF?       3       2       1         109. *.XLS?       3       2       1         110. *.MDB?       3       2       1         111. *.DB?       3       3       3         112. Oracle?       3       1       2         113. Informix?       3       3       1       2         114. *.AVI?       3       1       2	94.	*.DXF?	3		3	
97. *ARC?       3       1       2         98. ORACLE spatial extension?       3       1       2         99. ACCESS spatial extension?       3       1       2         100. MSSQL spatial extension?       3       3         101. Mapinfo?       3       3         102. IBM Spatial?       3       3         103. Informix Spatial?       3       3         104. *.TXT?       3       3         105. *.DOC?       3       3         106. *.RTF?       3       3         107. *.PDF?       3       3         108. *.DBF?       3       2       1         109. *.XLS?       3       2       1         111. *.DB?       3       2       1         112. Oracle?       3       1       2         113. Informix?       3       3       1       2         114. *.AVI?       3       1       2	95.	*.SHP?	3	1	2	
98.       ORACLE spatial extension?       3       1       2         99.       ACCESS spatial extension?       3       1       2         100.       MSSQL spatial extension?       3       3         101.       Mapinfo?       3       3         102.       IBM Spatial?       3       3         103.       Informix Spatial?       3       3         Do you work with these text data formats:       0       0       0         104.       *.TXT?       3       3         105.       *.DOC?       3       3         106.       *.RTF?       3       3         107.       *.PDF?       3       3         108.       *.DBF?       3       2       1         109.       *.XLS?       3       2       1         110.       *.MDB?       3       2       1         111.       *.DB?       3       3       3         112.       Oracle?       3       1       2         113.       Informix?       3       3       1       2         114.       *.AVI?       3       1       2	96.	*.DGN?	3		3	
99.       ACCESS spatial extension?       3       1       2         100.       MSSQL spatial extension?       3       3         101.       Mapinfo?       3       3         102.       IBM Spatial?       3       3         103.       Informix Spatial?       3       3         Do you work with these text data formats:       0       0       0         104.       *.TXT?       3       3         105.       *.DOC?       3       3         106.       *.RTF?       3       3         107.       *.PDF?       3       3         108.       *.DBF?       3       2       1         109.       *.XLS?       3       2       1         110.       *.MDB?       3       2       1         111.       *.DB?       3       3       3         112.       Oracle?       3       1       2         113.       Informix?       3       3       1       2         114.       *.AVI?       3       1       2	97.	*.ARC?	3	1	2	
100.       MSSQL spatial extension?       3       3         101.       Mapinfo?       3       3         102.       IBM Spatial?       3       3         103.       Informix Spatial?       3       3         Do you work with these text data formats:       104. *.TXT?       3       3         105.       *.DOC?       3       3         106.       *.RTF?       3       3         107.       *.PDF?       3       3         108.       *.DBF?       3       2       1         109.       *.XLS?       3       2       1         110.       *.MDB?       3       2       1         111.       *.DB?       3       3       3         112.       Oracle?       3       1       2       1         113.       Informix?       3       3       3       3         Do you work with these multimedia data formats:       1       2       1         114.       *.AVI?       3       1       2	98.	ORACLE spatial extension?	3	1	2	
101.       Mapinfo?       3       3         102.       IBM Spatial?       3       3         103.       Informix Spatial?       3       3         Do you work with these text data formats:       104. *.TXT?       3       3         105.       *.DOC?       3       3         106.       *.RTF?       3       3         107.       *.PDF?       3       3         Do you work with these database data formats:       108. *.DBF?       3       2       1         109.       *.XLS?       3       2       1         110.       *.MDB?       3       2       1         111.       *.DB?       3       3       3         112.       Oracle?       3       1       2       1         113.       Informix?       3       3       3       1       2         114.       *.AVI?       3       1       2       1       2       1       3       1       2       1       3       3       3       3       3       3       3       3       3       3       3       3       3       3       3       3       3       3 <td< td=""><td>99.</td><td>ACCESS spatial extension?</td><td>3</td><td>1</td><td>2</td><td></td></td<>	99.	ACCESS spatial extension?	3	1	2	
102. IBM Spatial?       3       3         103. Informix Spatial?       3       3         Do you work with these text data formats:       104. *.TXT?       3       3         104. *.TXT?       3       3       3         105. *.DOC?       3       3       3         106. *.RTF?       3       3       3         107. *.PDF?       3       3       3         Do you work with these database data formats:       108. *.DBF?       3       2       1         109. *.XLS?       3       2       1	100.	MSSQL spatial extension?	3		3	
103.   Informix Spatial?   3   3   3	101.	Mapinfo?	3		3	
Do you work with these text data formats:	102.	IBM Spatial?	3		3	
104. *.TXT?       3       3         105. *.DOC?       3       3         106. *.RTF?       3       3         107. *.PDF?       3       3         Do you work with these database data formats:       108. *.DBF?       3       2       1         109. *.XLS?       3       2       1       <	103.	Informix Spatial?	3		3	
105. *.DOC?       3       3         106. *.RTF?       3       3         107. *.PDF?       3       3         Do you work with these database data formats:       3       2         108. *.DBF?       3       2       1         109. *.XLS?       3       2       1         110. *.MDB?       3       2       1         111. *.DB?       3       3       3         112. Oracle?       3       1       2         113. Informix?       3       3       3         Do you work with these multimedia data formats:       1       2         114. *.AVI?       3       1       2		Do you work with these text data formats:				
106. *.RTF?       3       3         107. *.PDF?       3       3         Do you work with these database data formats:       3       2         108. *.DBF?       3       2       1         109. *.XLS?       3       2       1         110. *.MDB?       3       2       1         111. *.DB?       3       3       3         112. Oracle?       3       1       2         113. Informix?       3       3       3         Do you work with these multimedia data formats:       1       2         114. *.AVI?       3       1       2	104.	*.TXT?	3	3		
107. *.PDF?       3       3         Do you work with these database data formats:       3       2       1         108. *.DBF?       3       2       1         109. *.XLS?       3       2       1         110. *.MDB?       3       2       1         111. *.DB?       3       3       3         112. Oracle?       3       1       2         113. Informix?       3       3       3         Do you work with these multimedia data formats:       1       2         114. *.AVI?       3       1       2	105.	*.DOC?	3	3		
Do you work with these database data formats:	106.	*.RTF?	3	3		
108. *.DBF?       3       2       1         109. *.XLS?       3       2       1         110. *.MDB?       3       2       1         111. *.DB?       3       3       3         112. Oracle?       3       1       2         113. Informix?       3       3       3         Do you work with these multimedia data formats:       1       2         114. *.AVI?       3       1       2	107.	*.PDF?	3	3		
108. *.DBF?       3       2       1         109. *.XLS?       3       2       1         110. *.MDB?       3       2       1         111. *.DB?       3       3       3         112. Oracle?       3       1       2         113. Informix?       3       3       3         Do you work with these multimedia data formats:       1       2         114. *.AVI?       3       1       2		Do you work with these database data formats:				
110. *.MDB?       3       2       1         111. *.DB?       3       3         112. Oracle?       3       1       2         113. Informix?       3       3         Do you work with these multimedia data formats:       1       2         114. *.AVI?       3       1       2	108.	<del>                                     </del>	3	2	1	
111. *.DB?       3       3         112. Oracle?       3       1       2         113. Informix?       3       3         Do you work with these multimedia data formats:       1       2         114. *.AVI?       3       1       2	109.	*.XLS?	3	2	1	
112. Oracle?       3       1       2         113. Informix?       3       3         Do you work with these multimedia data formats:       114. *.AVI?       3       1       2	110.	*.MDB?	3	2	1	
113.     Informix?     3       Do you work with these multimedia data formats:     114.       *.AVI?     3     1	111.	*.DB?	3		3	
Do you work with these multimedia data formats:  114. *.AVI?  3 1 2	112.	Oracle?	3	1	2	
114. *.AVI? 3 1 2	113.	Informix?	3		3	
114. *.AVI? 3 1 2		Do you work with these multimedia data formats:				
	114.		3	1	2	
	115.	*.MOV?	3		3	

116.	*.WMA?	3		3	
117.	*.RM?	3		3	
118.	*.MP3?	3	1	2	
	Do you work with these GEO data formats of the digital model terrain:?				
119.	ATKIS (DLM)?	3	1	2	
120.	DTM?	3	1	2	
121.	DEM?	3	1	2	

### Additional questions: (belong only to the theme)

What coordinate system do you use in your GIS system?

Gauß-Krüger, 4<sup>th</sup> Meridian.

#### List of available digital data:

- Forest data (incl. maps) GIS (forest areas, forest trails, nature protection and monuments)
- Trails for visitors/tourists
- Satellite data
- Data format of the digital model terrain: DTM
- Data format of the digital model terrain: ATKIS
- Information system about roads and trails
- Point information (sight seeing spots, hotels etc.)
- Map of villages and towns
- Referenced information about places of events; sample of restaurants; hotels

Where are the data from; ownership?

LaWuF.

Forest data are owned by LaWuF.

Topographic data (DTM, ATKIS, ortho-photos) Thuringian Office for Land Surveying

**FVV-TW**:

Data are owned by FVV-TW.

Who else is/should be allowed to use the data and how is he/she allowed to use them?

#### LaWuF data.

Derived products from the data will be available.

These products can be used for representations tasks in the project. Further use is not allowed.

#### FVV-TW data:

It is only for presentation tasks.

How and how often can the data/information of the geo-data base be updated?

### LaWuF

Forest data every 10 years; thematic data will be updated if necessary (hotels, etc.).

The updating of the topographic data depends on the Office of Land Surveying.

#### FVV-TW.

Updates mostly from LaWuF,

Daily updates of events by SEI (company that runs the Thuringian Forest tourism internet side).

#### List of additional analogue data.:

- Events
- URLs of villages and towns

## Summary of 5<sup>th</sup> theme

- Common tourist information there is a high level
- Natural conditions info, nature protection, forestry data, info about accommodation, boarding, local speciality there is a low level
- Information about traffic accessibility there is the lowest level
- Work with digital data mostly than with analogue data in the future there is a plan to transfer all into digital data
- Text data formats \*.DOC, \*.PDF, \*.TXT, \*.RTF there is a high level
- Raster data formats \*.JPEG, \*.tiff, \*.bmp there is a low level
- Aerial photograph, satellite image and metadata—there is a low level
- Database data formats \*.XLS, \*.MDB, \*.DBF, Oracle there is a low level
- Vector data formats\*. DXF ,\*.ARC, Oracle and Access s.e.-there is the lowest level
- Multimedia data formats \*.AVI, \*.MP3 there is the lowest level
- Geo data formats DLM, DTM, DEM there is the lowest level

### 2.2.3 Czech Republic

## Table 7 List of respondents

No.	Instituce	Institution
1	Znovín Znojmo	Znovín Znojmo
2	Turistické informační centrum Znojmo	Toutrist info centre Znojmo
3	JM Muzeum Znojmo	SM(South Moravia) Museum Znojmo,
4	OÚ,Okresní úřad Lesná	District Authority Lesná
5	OÚ,Okresní úřad Vranov n. Dyjí	District Authority Vranov n. Dyjí
6	OKÚ Znojmo, referát regionálního rozvoje	District Authority Znojmo, region development division
7	Informačni centrum Vranov	Information centre, Vranov
8	Státní Zámek Vranov n. Dyjí	State castle Vranov n. Dyjí
9	Národní park Podyjí	National park Podyji

## 2.2.3.1 Infrastructure

Table 8

Theme	Que	estion	No. of answers	Of yes	Of no	Don't know
IV.	31.	Has your company IT staff? (Network administrator, GIS experts)	9	3	6	
	32.	Have you any experience with IT technology?	9	7	1	1
	33.	Do you use for your work personal computer?	9	9	0	
	34.	Do you use WINDOWS OS on your PC? (W95 or higher)?	9	9	0	
	35.	Do you use Mackintosh OS on your PC?	9	0	9	
	36.	Do you use Linux OS on your PC?	9	0	9	
	37.	Do you use any GIS software for your work?	9	2	7	
	38.	Has your computer removable device?(CD)	9	9	0	
	39.	Do you need analogue output of data?	9	9	0	
	40.	Are you able to work with digital data only?	9	0	9	
	41.	Is your network VAN type?	9	1	8	
	42.	Is your network LAN type?	9	3	6	
	43.	Are you connected to the WWW?	9	9	0	
	44.	Are you an active web user?	9	9	0	
	45.	Do you use internet for business?	9	2	7	
	46.	Do you use internet for education?	9	9	0	
	47.	Do you use internet for planning of leisure time?	9	9	0	
	48.	Do you use internet in office?	9	9	0	
	49.	Do you use internet at home?	9	6	3	
	50.	Do you use internet at other place? (internet café, tourist information centre)	9	0	9	
	51.	Do you use mobile phone for your work?	9	9	0	
	52.	Do you use mobile phone for other services than calls ( SMS, W@P )?	9	9	0	
	53.	Do you use any mobile computers?	9	6	3	
	54.	Do you inform others by web presentation?	9	9	0	
	55.	Do you inform others by distribution CD?	9	1	8	
	56.	Do you inform others by info boards?	9	7	2	
	57.	Do you inform others by brochures or leaflets?	9	8	1	
	58.	Have you your own domain?	9	7	2	
	59.	Have you your own web page?	9	7	2	
	60.	Have you your hyperlink at other web pages?	9	9	0	
	61.	Have you your presentation in more than two languages? (native and English)?	9	5	4	
	62.	Do you have special network among several users? (LAN)	9	9	0	
	63.	Is there any hierarchy among users?	9	7	0	2
	64.	Have you some superior provider?	9	6	2	1
		Do you use or require some of these GIS-architecture:	9			
	65.	Server/Client – Application?	9	2	7	
	66.	Geo – server?	9	1	8	
	67.	Map – server?	9	1	8	

Additional questions: (belong only to the theme)

What is bandwidth of your network?

33,6 kBps fixed line.

Which local Internet provider is/will be used as a gateway?

SkyNet

## Summary of 4th theme

- IT staff no each one has got, IT experience, equipment: PC, MS Win, CD device, GIS SW for work (2)
- Network LAN, connected to internet, active web user
- Internet in office, at home, for education and planning
- Own web page and domain, hyperlink on others web pages
- Mobile devices (phones, computers) are used

Analogue output of data – there is necessity to have it

- Information are given to others by web presentation, info boards brochures and leaflets but not by CD
- Multilingual presentation there are three languages like native, English and German, ....
- Special networking intranet is used
- Experience with special GIS architecture: Server/Client application, Geo-server, Map-server no each one has got them

#### 2.2.3.2 Mapping of existing data sources

Table 9

Theme	Ques	stion	No. of answers	Of yes	Of no	Don't know
\/	68.	Do you administer common tourist information?	9	6	3	
V .	69.	Do you administer natural conditions information?	9	6	3	
	70.	Do you administer nature protection?	9	6	3	
	71.	Do you administer forestry data?	9	2	7	
	72.	Do you administer information about accommodation?	9	4	5	
73. Do yo		Do you administer information about boarding?	9	4	5	
	74.	Do you administer information about traffic accessibility?	9	3	6	
	75.	Do you administer Information of local speciality?	9	6	3	
	76.	Do you work with analogue data? (mostly)	9	3	5	1
	77.	Do you work with digital data? (mostly)	9	5	3	1
	78.	Have you plan to transfer analogue data to digital data?	9	7	0	2
	79.	Do you work with raster data?	9	8	1	
	80.	Do you work with vector data?	9	6	3	
	81.	Do you work with text data?	9	9	0	
	82.	Do you work with DBF data?	9	5	4	
	83.	Do you work with multimedia data?	9	7	2	

84.       Do you work with aerial photograph?       9       3       6         85.       Do you work with satellite image?       9       1       8         86.       Do you work with laser scanner data?       9       0       9         87.       Do you work with metadata?       9       2       0         Do you work with these raster data formats:       88.       *.BMP?       9       8       1         88.       *.BMP?       9       9       0       9         90.       *.TIFF?       9       7       2         91.       *.CIT?       9       2       7         92.       *.RAK?       9       2       7         93.       *.COT?       9       1       8         94.       *.DXF?       9       4       5         95.       *.SHP?       9       2       7         96.       *.DGN?       9       1       8         97.       *.ARC?       9       2       7         98.       ORACLE spatial extension?       9       0       9         100.       MSSQL spatial extension?       9       0       9         101. <t< th=""><th></th></t<>	
86.       Do you work with laser scanner data?       9       0       9         87.       Do you work with metadata?       9       2       0         Do you work with these raster data formats:       88.       *.BMP?       9       8       1         88.       *.BMP?       9       9       0       0         90.       *.JPEG?       9       9       0       0         90.       *.TIFF?       9       7       2       7         91.       *.CIT?       9       2       7       9       1       8       8       8       1       8       1       8       1       8       1       9       2       7       2       2       7       9       2       7       2       9       2       7       9       1       8       8       1       8       1       8       1       8       1       8       1       8       1       8       1       8       1       8       1       8       1       8       1       8       1       8       1       8       1       8       1       8       1       8       1       8       2       7	
87.       Do you work with metadata?       9       2       0         Do you work with these raster data formats:       88. *.BMP?       9       8       1         88.       *.BMP?       9       9       0         90.       *.TIFF?       9       7       2         91.       *.CIT?       9       2       7         92.       *.RAK?       9       2       7         93.       *.COT?       9       1       8         Do you work with these vector data formats:       9       4       5         94.       *.DXF?       9       4       5         95.       *.SHP?       9       2       7         96.       *.DGN?       9       1       8         97.       *.ARC?       9       2       7         98.       ORACLE spatial extension?       9       0       9         99.       ACCESS spatial extension?       9       0       9         100.       MSSQL spatial extension?       9       0       9         101.       Mapinfo?       9       0       9         102.       IBM Spatial?       9       0       9 <td></td>	
Do you work with these raster data formats:   88. *.BMP?   9   8   1   89. *.JPEG?   9   9   0   0   90. *.TIFF?   9   7   2   91. *.CIT?   9   2   7   92. *.RAK?   9   2   7   93. *.COT?   9   1   8   8   8   8   8   8   8   8   9   9	
88. *.BMP?       9       8       1         89. *.JPEG?       9       9       0         90. *.TIFF?       9       7       2         91. *.CIT?       9       2       7         92. *.RAK?       9       2       7         93. *.COT?       9       1       8         Do you work with these vector data formats:       9       4       5         94. *.DXF?       9       4       5         95. *.SHP?       9       2       7         96. *.DGN?       9       1       8         97. *.ARC?       9       2       7         98. ORACLE spatial extension?       9       0       9         99. ACCESS spatial extension?       9       0       9         100. MSSQL spatial extension?       9       0       9         101. Mapinfo?       9       0       9         102. IBM Spatial?       9       0       9         103. Informix Spatial?       9       0       9         104. *.TXT?       9       7       2         105. *.DOC?       9       9       0         106. *.RTF?       9       3       6 <td></td>	
89.       *.JPEG?       9       9       0         90.       *.TIFF?       9       7       2         91.       *.CIT?       9       2       7         92.       *.RAK?       9       2       7         93.       *.COT?       9       1       8         Do you work with these vector data formats:       9       1       8         94.       *.DXF?       9       4       5         95.       *.SHP?       9       2       7         96.       *.DGN?       9       1       8         97.       *.ARC?       9       2       7         98.       ORACLE spatial extension?       9       0       9         99.       ACCESS spatial extension?       9       0       9         100.       MSSQL spatial extension?       9       0       9         101.       Mapinfo?       9       0       9         102.       IBM Spatial?       9       0       9         103.       Informix Spatial?       9       0       9         104.       *.TXT?       9       7       2         105.       *.DOC? </td <td></td>	
90.       *.TIFF?       9       7       2         91.       *.CIT?       9       2       7         92.       *.RAK?       9       2       7         93.       *.COT?       9       1       8         Do you work with these vector data formats:       9       1       8         94.       *.DXF?       9       4       5         95.       *.SHP?       9       2       7         96.       *.DGN?       9       1       8         97.       *.ARC?       9       2       7         98.       ORACLE spatial extension?       9       0       9         99.       ACCESS spatial extension?       9       0       9         100.       MSSQL spatial extension?       9       0       9         101.       Mapinfo?       9       0       9         102.       IBM Spatial?       9       0       9         103.       Informix Spatial?       9       0       9         104.       *.TXT?       9       7       2         105.       *.DOC?       9       9       0         106.       *.RTF? </td <td></td>	
91. *.CIT?       9       2       7         92. *.RAK?       9       2       7         93. *.COT?       9       1       8         Do you work with these vector data formats:       9       1       8         94. *.DXF?       9       4       5         95. *.SHP?       9       2       7         96. *.DGN?       9       1       8         97. *.ARC?       9       2       7         98. ORACLE spatial extension?       9       0       9         99. ACCESS spatial extension?       9       0       9         100. MSSQL spatial extension?       9       0       9         101. Mapinfo?       9       0       9         102. IBM Spatial?       9       0       9         103. Informix Spatial?       9       0       9         104. *.TXT?       9       7       2         105. *.DOC?       9       9       0         106. *.RTF?       9       3       6	
92.       *.RAK?       9       2       7         93.       *.COT?       9       1       8         Do you work with these vector data formats:       9       1       8         94.       *.DXF?       9       4       5         95.       *.SHP?       9       2       7         96.       *.DGN?       9       1       8         97.       *.ARC?       9       2       7         98.       ORACLE spatial extension?       9       0       9         99.       ACCESS spatial extension?       9       0       9         100.       MSSQL spatial extension?       9       0       9         101.       Mapinfo?       9       0       9         102.       IBM Spatial?       9       0       9         103.       Informix Spatial?       9       0       9         104.       *.TXT?       9       7       2         105.       *.DOC?       9       9       0         106.       *.RTF?       9       3       6	
93.       *.COT?       9       1       8         Do you work with these vector data formats:       9       4       5         94.       *.DXF?       9       4       5         95.       *.SHP?       9       2       7         96.       *.DGN?       9       1       8         97.       *.ARC?       9       2       7         98.       ORACLE spatial extension?       9       0       9         99.       ACCESS spatial extension?       9       0       9         100.       MSSQL spatial extension?       9       0       9         101.       Mapinfo?       9       0       9         102.       IBM Spatial?       9       0       9         103.       Informix Spatial?       9       0       9         104.       *.TXT?       9       7       2         105.       *.DOC?       9       9       0         106.       *.RTF?       9       3       6	
Do you work with these vector data formats:         94. *.DXF?       9       4       5         95. *.SHP?       9       2       7         96. *.DGN?       9       1       8         97. *.ARC?       9       2       7         98. ORACLE spatial extension?       9       0       9         99. ACCESS spatial extension?       9       0       9         100. MSSQL spatial extension?       9       0       9         101. Mapinfo?       9       0       9         102. IBM Spatial?       9       0       9         103. Informix Spatial?       9       0       9         Do you work with these text data formats:       0       9         104. *.TXT?       9       7       2         105. *.DOC?       9       9       0         106. *.RTF?       9       3       6	
94. *.DXF?       9       4       5         95. *.SHP?       9       2       7         96. *.DGN?       9       1       8         97. *.ARC?       9       2       7         98. ORACLE spatial extension?       9       0       9         99. ACCESS spatial extension?       9       0       9         100. MSSQL spatial extension?       9       0       9         101. Mapinfo?       9       0       9         102. IBM Spatial?       9       0       9         103. Informix Spatial?       9       0       9         Do you work with these text data formats:       104. *.TXT?       9       7       2         105. *.DOC?       9       9       0       9       0         106. *.RTF?       9       3       6	
95.       *.SHP?       9       2       7         96.       *.DGN?       9       1       8         97.       *.ARC?       9       2       7         98.       ORACLE spatial extension?       9       0       9         99.       ACCESS spatial extension?       9       0       9         100.       MSSQL spatial extension?       9       0       9         101.       Mapinfo?       9       0       9         102.       IBM Spatial?       9       0       9         103.       Informix Spatial?       9       0       9         Do you work with these text data formats:       9       7       2         104.       *.TXT?       9       7       2         105.       *.DOC?       9       9       0         106.       *.RTF?       9       4       5         107.       *.PDF?       9       3       6	
96. *.DGN?       9       1       8         97. *.ARC?       9       2       7         98. ORACLE spatial extension?       9       0       9         99. ACCESS spatial extension?       9       0       9         100. MSSQL spatial extension?       9       0       9         101. Mapinfo?       9       0       9         102. IBM Spatial?       9       0       9         103. Informix Spatial?       9       0       9         Do you work with these text data formats:       0       9         104. *.TXT?       9       7       2         105. *.DOC?       9       9       0         106. *.RTF?       9       4       5         107. *.PDF?       9       3       6	
97. *.ARC?       9       2       7         98. ORACLE spatial extension?       9       0       9         99. ACCESS spatial extension?       9       0       9         100. MSSQL spatial extension?       9       0       9         101. Mapinfo?       9       0       9         102. IBM Spatial?       9       0       9         103. Informix Spatial?       9       0       9         Do you work with these text data formats:       0       9         104. *.TXT?       9       7       2         105. *.DOC?       9       9       0         106. *.RTF?       9       4       5         107. *.PDF?       9       3       6	
98.       ORACLE spatial extension?       9       0       9         99.       ACCESS spatial extension?       9       0       9         100.       MSSQL spatial extension?       9       0       9         101.       Mapinfo?       9       0       9         102.       IBM Spatial?       9       0       9         103.       Informix Spatial?       9       0       9         Do you work with these text data formats:       9       7       2         104.       *.TXT?       9       7       2         105.       *.DOC?       9       9       0         106.       *.RTF?       9       4       5         107.       *.PDF?       9       3       6	
99.       ACCESS spatial extension?       9       0       9         100.       MSSQL spatial extension?       9       0       9         101.       Mapinfo?       9       0       9         102.       IBM Spatial?       9       0       9         103.       Informix Spatial?       9       0       9         Do you work with these text data formats:       104. *.TXT?       9       7       2         105.       *.DOC?       9       9       0         106.       *.RTF?       9       4       5         107.       *.PDF?       9       3       6	
100.       MSSQL spatial extension?       9       0       9         101.       Mapinfo?       9       0       9         102.       IBM Spatial?       9       0       9         103.       Informix Spatial?       9       0       9         Do you work with these text data formats:       104.       *.TXT?       9       7       2         105.       *.DOC?       9       9       0         106.       *.RTF?       9       4       5         107.       *.PDF?       9       3       6	
101. Mapinfo?       9       0       9         102. IBM Spatial?       9       0       9         103. Informix Spatial?       9       0       9         Do you work with these text data formats:       104. *.TXT?       9       7       2         105. *.DOC?       9       9       0         106. *.RTF?       9       4       5         107. *.PDF?       9       3       6	
102. IBM Spatial?       9       0       9         103. Informix Spatial?       9       0       9         Do you work with these text data formats:            104. *.TXT?       9       7       2         105. *.DOC?       9       9       0         106. *.RTF?       9       4       5         107. *.PDF?       9       3       6	
103. Informix Spatial?       9       0       9         Do you work with these text data formats:       9       7       2         104. *.TXT?       9       7       2         105. *.DOC?       9       9       0         106. *.RTF?       9       4       5         107. *.PDF?       9       3       6	
Do you work with these text data formats:       9       7       2         104. *.TXT?       9       7       2         105. *.DOC?       9       9       0         106. *.RTF?       9       4       5         107. *.PDF?       9       3       6	
104. *.TXT?       9       7       2         105. *.DOC?       9       9       0         106. *.RTF?       9       4       5         107. *.PDF?       9       3       6	
105. *.DOC?       9       9       0         106. *.RTF?       9       4       5         107. *.PDF?       9       3       6	
106. *.RTF?       9       4       5         107. *.PDF?       9       3       6	
107. *.PDF? 9 3 6	
Do you work with these database data formats:	
108. *.DBF? 9 4 5	
109. *.XLS? 9 9 0	
110. *.MDB? 9 5 4	
111. *.DB? 9 2 7	
112. Oracle? 9 0 9	
113. Informix? 9 0 9	
Do you work with these multimedia data formats:	
114. *.AVI? 9 7 2	
115. *.MOV? 9 3 6	
116. *.WMA? 9 2 7	
117. *.RM? 9 5 4	
118. *.MP3? 9 3 6	
Do you work with these GEO data formats of the digital model terrain:?	
119. ATKIS (DLM)? 9 0 9	'
120. DTM? 9 0 9	
121. DEM? 9 0 9	

Additional questions: (belong only to the theme)

What coordinate system do you use in your GIS system?

S-JTSK.

### List of available digital data:

All digital data exist in Metadata system in NP Podyji administration.

Where are the data from; ownership?

From our sources or there are other licensed data.

Who else is/should be allowed to use the data and how is he/she allowed to use them? General and professional public.

How and how often can the data/information of the geo-data base be updated? Permanently.

### List of additional analogue data.:

The analogue data exist in the bibliography of research in NP Podyjí administration.

### Summary of 5<sup>th</sup> theme

- Common tourist information, natural conditions info, nature protection and local speciality there is a high level
- Information about accommodation, boarding there is a low level
- Forestry data and info about traffic accessibility the level is the lowest
- Work with analogue and digital data equal level in the future there is a plan to transfer all into to digital data
- Raster, vector, text, multimedia and DBF data there is a high level
- Aerial photograph, satellite image and metadata there is a low level
- Raster data formats: \*.BMP, \*.JPEG, \*.TIFF, (\*.cit, \*.rak, \*.cot)
- Vector data formats: \*. DXF, (\*.shp, \*.dgn, \*.arc)
- Text data formats: \*.DOC, \*.TXT, (\*.pdf, \*.rtf)

Database data formats: \*.XLS, (\*.mdb, \*.dbf, \*.db)

• Multimedia data formats: \*.AVI, (\*.rm, \*.mov, \*.mp3, \*.wma)

#### 2.2.4 Poland

#### Table 10 List of respondents

No.	Instytucja	Institution
1	Nadleśnictwo Kozienice	Forest Division Kozienice
2	Nadleśnictwo Radom	Forest Division Radom
3	Nadleśnictwo Zwoleń	Forest Division Zwolen
4	Starostwo Powiatowe w Kozienicach	Starosty Administration District in Kozienice
5	Starostwo Powiatowe w Radomiu	Starosty Administration District in Starosty
		Administration District in Radom

6	Starostwo Powiatowe w Zwoleniu	Starosty Administration District in Zwolen
7	Gmina Miasta Pionki	Commune Administration District in Pionki
8	Gmina Policzna	Commune Administration District in Policzna
9	Mazowiecki Urząd Wojewódzki w Warszawie Delegatura-Placówka Zamiejscowa w Radomiu	Mazovia Voivodeship Governmental Office Department in Radom
10	Radomskie Stowarzyszenie Turystyki Wiejskiej	Rural Tourist Association in Radom
11	Regionalne Centrum Doradztwa Rozwoju Rolnictwa i Obszarów Wiejskich w Radomiu	Regional Advisory Centre for Rural Area in Radom
12	Muzeum Regionalne w Kozienicach	Regional Museum in Kozienice
13	Muzeum im Jacka Malczewskiego w Radomiu	Malczewski Museum in Radom
14	Muzeum Sztuki Współczesnej w Radomiu	Modern Art Museum in Radom
15	Muzeum Wsi Radomskiej w Radomiu	Museum of Radom Countryside in Radom
16	Miejska Biblioteka Publiczna w Pionkach	Public Library in Pionki
17	Polskie Towarzystwo Turystyczno- Krajoznawcze Oddział w Pionkach	Polish Tourist Country-Lovers' Association Department in Pionki
18	Centrum Edukacji Ekologicznej w Radomiu	Ecological Education Centre Radom
19	Związek Harcerstwa Polskiego Hufiec Pionki	Scouts' Association
20	Stacja Hydrologiczno-Meteorologiczna w Kozienicach	Kozienice Hydrological and Meteorological Monitoring Station

# 2.2.4.1 Infrastructure

Table 11

Theme	Que	estion	No. of answers	Of yes	Of no	Don't know	No answer
IV.	31.	Has your company IT staff? (Network administrator, GIS experts)	20	5	12	1	2
	32.	Have you any experience with IT technology?	20	4	14		2
	33.	Do you use for your work personal computer?	20	12	7		1
	34.	Do you use WINDOWS OS on your PC? (W95 or higher)?	20	13	6		1
	35.	Do you use Mackintosh OS on your PC?	20		19		1
	36.	Do you use Linux OS on your PC?	20		19		1
	37.	Do you use any GIS software for your work?	20	2	14	3	1
	38.	Has your computer removable device?(CD)	20	13	6		1
	39.	Do you need analog output of data?	20	10	5	3	2
	40.	Are you able to work with digital data only?	20	5	10	3	2
	41.	Is your network VAN type?	20	1	16	1	2
	42.	Is your network LAN type?	20	6	10	2	2
	43.	Are you connected to the WWW?	20	15	4		1
	44.	Are you an active web user?	20	13	6		1
	45.	Do you use internet for business?	20	14	5		1
	46.	Do you use internet for education?	20	14	5		1

47.	Do you use internet for planning of leisure time?	20	5	12		3
48.	Do you use internet in office?	20	15	4		1
49.	Do you use internet at home?	20	5	14		1
50.	Do you use internet at other place? (internet café, tourist information center)	20	4	13		3
51.	Do you use mobile phone for your work?	20	10	9		1
52.	Do you use mobile phone for other services than calls ( SMS, W@P )?	20	7	11		2
53.	Do you use any mobile computers?	20	3	16		1
54.	Do you inform others by web presentation?	20	13	6		1
55.	Do you inform others by distribution CD?	20	2	16		2
56.	Do you inform others by info boards?	20	2	16		2
57.	Do you inform others by brochures or leaflets?	20	14	4		2
58.	Have you your own domain?	20	8	6	2	4
59.	Have you your own web page?	20	12	7		1
60.	Have you your hyperlink at other web pages?	20	5	9	2	4
61.	Have you your presentation in more than two languages? (native and English)?	20	5	11	2	2
62.	Do you have special network among several users? (LAN)	20	7	9	1	3
63.	Is there any hierarchy among users?	20	6	9	3	2
64.	Have you some superior provider?	20	9	10		1
	Do you use or require some of these GIS-architecture:					
65.	Server/Client – Application?	20	4	4	8	4
66.	Geo – server?	20	1	5	8	6
67.	Map – server?	20	2	5	8	5

Additional questions: (belong only to the theme)

What is bandwidth of your network?

Respondent's network has bandwith.:

256kB/s - 3 respondents

56kB/s – 1 respondent

don't know - 5 respondents

no answer - 11 respondents

Which local internet provider is/will be used as a gateway?

Permanent – 6 respondents

Modem – 1 respondent

Do not know - 2 respondents

No answer - 11 respondents

## Summary of 4<sup>th</sup> theme

• IT staff – no each one has got, low IT experience, equipment PC, MS Win, CD device, GIS SW for work just two respondents

- Network LAN, connected to internet, active web user
- Internet in office, for education and business
- Own web page, hyperlink at(on) others web pages
- Mobile devices (phones, computers) aren't so often used

Analogue output of data is able to work with digital data too

- Information are given to others by web presentation, brochures and leaflets by CD and info boards (2)
- Multilingual presentation there are three languages like native, English and German, ....
- Special networking intranet is used
- Experience with special GIS architecture: Server/Client application, Geo-server, Map-server no each one has got them

## 2.2.4.2 Mapping of existing data sources

Table 12

Theme	Que	stion	No. of answers	Of yes	Of no	Don't know	No answer
V.	68.	Do you administer common tourist information?	20	5	14		1
	69.	Do you administer natural conditions information?	20	6	12	1	1
	70.	Do you administer nature protection?	20	9	10		1
	71.	Do you administer forestry data?	20	8	11		1
	72.	Do you administer information about accommodation?	20	4	15		1
	73.	Do you administer information about boarding?	20	3	15	1	1
	74.	Do you administer information about traffic accessibility?	20	2	16	1	1
	75.	Do you administer Information of local speciality?	20	6	12	1	1
	76.	Do you work with analogue data? (mostly)	20	8	7	3	2
	77.	Do you work with digital data? (mostly)	20	5	10	3	2
	78.	Have you plan to transfer analogue data to digital data?	20	8	5	3	4
	79.	Do you work with raster data?	20	7	7	2	4
	80.	Do you work with vector data?	20	4	9	3	4
	81.	Do you work with text data?	20	11	4	1	4
	82.	Do you work with DBF data?	20	8	7	1	4
	83.	Do you work with multimedia data?	20	5	9	2	4
	84.	Do you work with aerial photograph?	20	1	15		4
	85.	Do you work with satellite image?	20		16		4
	86.	Do you work with laser scanner data?	20	2	14		4
	87.	Do you work with metadata?	20		12	4	4
		Do you work with these raster data formats:					
	88.	*.BMP?	20	7	6	2	5
	89.	*.JPEG?	20	7	6	2	5

90.	*.TIFF?	20	8	5	2	5
91.	*.CIT?	20		10	2	8
92.	*.RAK?	20		10	2	8
93.	*.COT?	20		10	2	8
-	Do you work with these vector data formats:					
94.	*.DXF?	20	1	11	1	7
95.	*.SHP?	20	1	11	1	7
96.	*.DGN?	20		12	1	7
97.	*.ARC?	20		12	1	7
98.	ORACLE spatial extension?	20		12	1	7
99.	ACCESS spatial extension?	20		12	1	7
100.	MSSQL spatial extension?	20		12	1	7
101.	Mapinfo?	20		12	1	7
102.	IBM Spatial?	20		12	1	7
103.	Informix Spatial?	20		12	1	7
	Do you work with these text data formats:					
104.	*.TXT?	20	11	4		5
105.	*.DOC?	20	11	5		4
106.	*.RTF?	20	6	6		8
107.	*.PDF?	20	6	7		7
	Do you work with these database data formats:					
108.	*.DBF?	20	4	7	3	6
109.	*.XLS?	20	9	4	3	4
110.	*.MDB?	20	4	7	3	6
111.	*.DB?	20	2	8	3	7
112.	Oracle?	20	2	8	3	7
113.	Informix?	20	3	7	3	7
	Do you work with these multimedia data formats:					
114.	*.AVI?	20	3	8	2	7
115.	*.MOV?	20	3	8	2	7
116.	*.WMA?	20	1	10	2	7
117.	*.RM?	20	1	10	2	7
118.	*.MP3?	20	3	8	2	7
	Do you work with these GEO data formats of the digital model terrain:?					
119.	ATKIS (DLM)?	20		11	3	6
120.	DTM?	20		11	3	6
121.	DEM?	20		11	3	6

## Additional questions: (belong only to the theme)

What coordinate system do you use in your GIS system?

no answer -17 respondents

"1965" – 2 respondents

"1992" – 1 respondent

"2000" – 1 respondent

#### List of available digital data:

Do not know – 1 respondent

No answer – 16 respondents

For Kozienice Landscape Park there are: Census data, cadastre data, information about organizations and institutions, traffic accessibility, accommodation, boarding, leisure and recreation information (Commune Administration District in Pionki).

Forest numerical map (Forest Division Kozienice).

Where are the data from; ownership?

Do not know - 1 respondent

No answer - 10 respondents

Own data – 6 respondets:

Forest Division Radom

Malczewski Museum in Radom

Modern Art Museum in Radom

Museum of Radom Countryside in Radom

Scouts' Association

Kozienice Hydrological and Meteorological Monitoring Station

Federal and self-government administration -> 3 respondents:

Starosty Administration District in Kozienice

Starosty Administration District in Zwolen

Commune Administration District in Pionki

Who else is/should be allowed to use the data and how is he/she allowed to use them?

Do not know - 1 respondent

No answer -12 respondents

Nobody - 1 respondent

Everybody - 2 respondents:

Starosty Administration District in Zwolen,

Museum of Radom Countryside in Radom)

Owners the full access, professionals (specialists) – the wide access- 1 respondent:

Forest Division Kozienice

Owners the full access, professionals – the wide access, the others – partial access – 3 respondents:

Commune Administration District in Pionki

Malczewski Museum in Radom

Modern Art Museum in Radom

How and how often can the data/information of the geo-data base be updated?

No answer - 15 respondents

Permanently - 1 respondent:

Regional Advisory Centre for Rural Area in Radom

Once a month, four times a year - 3 respondents:

Starosty Administration District in Zwolen

Malczewski Museum in Radom

Modern Art Museum in Radom

Not less than once a year - 1 respondent:

Forest Division Kozienice

#### List of additional analogue data:

- don't know -> 2 respondents
- no answer -> 14 respondents
- descriptive and photograph specification of museum collection
- information about museum exhibitions

## Summary of 5<sup>th</sup> theme

- Nature protection, forestry data, natural conditions info and common tourist information and local speciality there is a low level
- Information about accommodation, boarding and about traffic accessibility the level is the lowest
- Work with analogue data mostly than with digital data in the future there is a plan to transfer all into digital data
- Text, DBF data, raster, multimedia, vector there is a high level
- Aerial photograph, laser scanner– there is a low level
- Raster data formats: \*.BMP, \*.JPEG, \*.TIFF
- Vector data formats: \*. DXF, \*.SHP
- Text data formats: \*.DOC, \*.TXT, (\*.pdf, \*.rtf)

Database data formats: \*.XLS, (\*.mdb, \*.dbf, \*.db, Oracle, Informix)

• Multimedia data formats: \*.AVI, \*.MP3, \*.MOV, (\*.rm, \*.wma)

## 3 Summary of data

## 3.1 Summary of getting data

In addition to getting data by filling in the questionnaires was created the summary questionnaire for all participant countries.

A number of asked end users from individual countries were different:

Germany – 3 responded end users

Austria – 2 responded end users

Czech Republic – 9 responded end users

Poland – 20 responded end users

The progress, which was chosen for evaluation of a questionnaire, is described lower.

There can be mild distorting of summary evaluation in consideration of smaller amount of getting date from Austria and Germany.

Results of clear answers (YES/NO) have been turn into per-cent expression in summary list of individual test regions. The expression was put in an average for whole sum of all of the regions. Then these values were used for evaluation. Not clear answers (I do not know or not replying questions) were not taken into account.

## 3.2 Infrastructure

Table 13 Summary table of 4<sup>TH</sup> theme

Theme	Que	estion	Ger	Aut	Pol	Cze	Average
IV.	31.	Has your company IT staff? (Network administrator, GIS experts)	67	100	29	33	57
	32.	Have you any experience with IT technology?	100	100	22	88	78
	33.	Do you use for your work personal computer?	100	100	67	100	92
	34.	Do you use WINDOWS OS on your PC? (W95 or higher)?	100	100	68	100	92
	35.	Do you use Mackintosh OS on your PC?	0	0	0	0	0
	36.	Do you use Linux OS on your PC?	0	0	0	0	0
	37.	Do you use any GIS software for your work?	33	50	12	22	29
	38.	Has your computer removable device?(CD)	100	100	68	100	92
	39.	Do you need analogue output of data?	100	100	67	100	92
	40.	Are you able to work with digital data only?	100	0	33	0	33

41.	Is your network VAN type?	0	0	6	11	4
42.	Is your network LAN type?	67	100	38	33	60
43.	Are you connected to the WWW?	100	100	79	100	95
44.	Are you an active web user?	100	100	68	100	92
45.	Do you use internet for business?	100	100	74	22	74
46.	Do you use internet for education?	33	0	74	100	52
47.	Do you use internet for planning of leisure time?	67	0	29	100	49
48.	Do you use internet in office?	100	100	79	100	95
49.	Do you use internet at home?	100	100	26	67	73
50.	Do you use internet at other place? (internet café, tourist information center )	67	0	24	0	23
51.	Do you use mobile phone for your work?	67	50	53	100	68
52.	Do you use mobile phone for other services than calls ( SMS, W@P )?	33	0	39	100	43
53.	Do you use any mobile computers?	67	0	16	67	38
54.	Do you inform others by web presentation?	100	100	68	100	92
55.	Do you inform others by distribution CD?	100	0	11	11	31
56.	Do you inform others by info boards?	100	100	11	78	72
57.	Do you inform others by brochures or leaflets?	100	100	78	89	92
58.	Have you your own domain?	100	50	57	78	71
59.	Have you your own web page?	100	100	63	78	85
60.	Have you your hyperlink at other web pages?	100	100	36	100	84
61.	Have you your presentation in more than two languages? (native and English)?	0	0	31	56	22
Que	stion	Ger	Aut	Pol	Cze	Average
62.	Do you have special network among several users? (LAN)	67	0	44	100	53
63.	Is there any hierarchy among users?	100	0	40	100	60
64.	Have you some superior provider?	67	0	48	75	48
	Do you use or require some of these GIS-architecture:					
65.	Server/Client – Application?	67	0	50	22	35
66.	Geo – server?	50	0	16	11	19
67.	Map – server?	50	0	29	11	23
C 441	41				·	·

### **Summary of 4th theme**

- IT staff with IT experience, equipment: PC, MS Win, CD device, GIS SW for work no each one has got them
- Network LAN, connected to(with) internet, active web user
- Internet for business in office
- Own web page and domain, hyperlink at(on) others web pages
- Mobile devices (phones, computers) are in use but not so often
- Analogue output of data is able to work with digital data but not so often
- Information are given to others by web presentation, info boards brochures and leaflets CD is not often
- Bilingual presentation there are only two languages like native and English .It would be better multilingual presentation
- Special networking intranet is used

• Experience with special GIS architecture: Server/Client application, Geo-server, Map-server

# 3.3 Mapping of existing data sources

Table 14 Summary table of 5<sup>th</sup> theme

Theme	Ques	tion	Ger	Aut	Pol	Cze	average
\/	68.	Do you administer common tourist information?	100	50	26	67	61
V .	69.	Do you administer natural conditions information?	67	100	33	67	67
	70.	Do you administer nature protection?	67	50	48	67	58
	71.	Do you administer forestry data?	67	50	42	22	45
	72.	Do you administer information about accommodation?	67	50	21	44	46
	73.	Do you administer information about boarding?	67	50	17	44	45
	74.	Do you administer information about traffic accessibility?	50	50	11	33	36
	75.	Do you administer Information of local speciality?	67	50	33	67	54
	76.	Do you work with analogue data? (mostly)	67	100	53	38	65
	77.	Do you work with digital data? (mostly)	100	0	33	62	49
	78.	Have you plan to transfer analogue data to digital data?	100	100	62	83	86
	79.	Do you work with raster data?	67	0	50	89	52
	80.	Do you work with vector data?	50	0	31	67	37
	81.	Do you work with text data?	100	100	73	100	93
	82.	Do you work with DBF data?	100	0	53	56	52
	83.	Do you work with multimedia data?	67	0	36	78	45
	84.	Do you work with aerial photograph?	33	50	6	33	31
	85.	Do you work with satellite image?	33	0	0	11	11
	86.	Do you work with laser scanner data?	0	0	12	0	3
	87.	Do you work with metadata?	67	50	0	22	35
		Do you work with these raster data formats:					
	88.	*.BMP?	33	100	54	89	69
	89.	*.JPEG?	100	100	54	100	89
	90.	*.TIFF?	67	100	62	78	77
	91.	*.CIT?	0	0	0	22	6
	92.	*.RAK?	0	0	0	22	6
	93.	*.COT?	0	0	0	11	3
		Do you work with these vector data formats:					
	94.	*.DXF?	0	0	8	44	13
	95.	*.SHP?	33	0	8	22	16
	96.	*.DGN?	0	0	0	11	3
	97.	*.ARC?	33	0	0	22	14
	98.	ORACLE spatial extension?	33	0	0	0	8
	99.	ACCESS spatial extension?	33	0	0	0	8
	100.	MSSQL spatial extension?	0	0	0	0	0
	101.	Mapinfo?	0	0	0	0	0
	102.	IBM Spatial?	0	0	0	0	0
	103.	Informix Spatial?	0	0	0	0	0

	Do you work with these text data formats:					
104.	*.TXT?	100	50	73	78	75
105.	*.DOC?	100	100	69	100	92
106.	*.RTF?	100	0	50	44	49
107.	*.PDF?	100	100	46	33	70
	Do you work with these database data formats:					
108.	*.DBF?	67	0	36	44	37
109.	*.XLS?	67	100	69	100	84
110.	*.MDB?	67	0	36	56	40
111.	*.DB?	0	0	20	22	11
112.	Oracle?	33	0	20	0	13
113.	Informix?	0	0	30	0	4
	Do you work with these multimedia data formats:					
114.	*.AVI?	33	0	27	78	35
115.	*.MOV?	0	0	27	33	15
116.	*.WMA?	0	0	1	22	6
117.	*.RM?	0	0	1	56	14
118.	*.MP3?	33	0	27	33	23
	Do you work with these GEO data formats of the digital model terrain:?					
119.	ATKIS (DLM)?	33	0	0	0	8
120.	DTM?	33	0	0	0	8
121.	DEM?	33	0	0	0	8

## Summary of 5<sup>th</sup> theme

- Common tourist information, information about natural conditions, nature protection the level of the information is high
- Forestry data, information about accommodation, boarding, local specialities the level of data is low
- Information about traffic accessibility the level of this information is the lowest
- Work with analogue data mostly than with digital data in the future there is a plan to transfer all into digital data
- Text data formats: \*.DOC, \*.PDF, \*.TXT, \*.RTF there is a high level of using
- Raster data formats: \*.JPEG, \*.TIFF, \*.BMP there is a low level of using
- Database data formats: \*.XLS, \*.MDB, \*.DBF, Oracle there is a low level of using
- Multimedia data formats: \*.AVI, \*.MP3 there is a low level of using
- Vector data formats: \*. SHP, \*.ARC, \*. DXF, Oracle and Access s.e.- there is a low level of using
- Aerial photograph, metadata and satellite image- there is a low level of using
- Geo data formats DLM, DTM, DEM there is the lowest level of using