

# Project SONDAR SK-AT

## Soil protection in Danube Region

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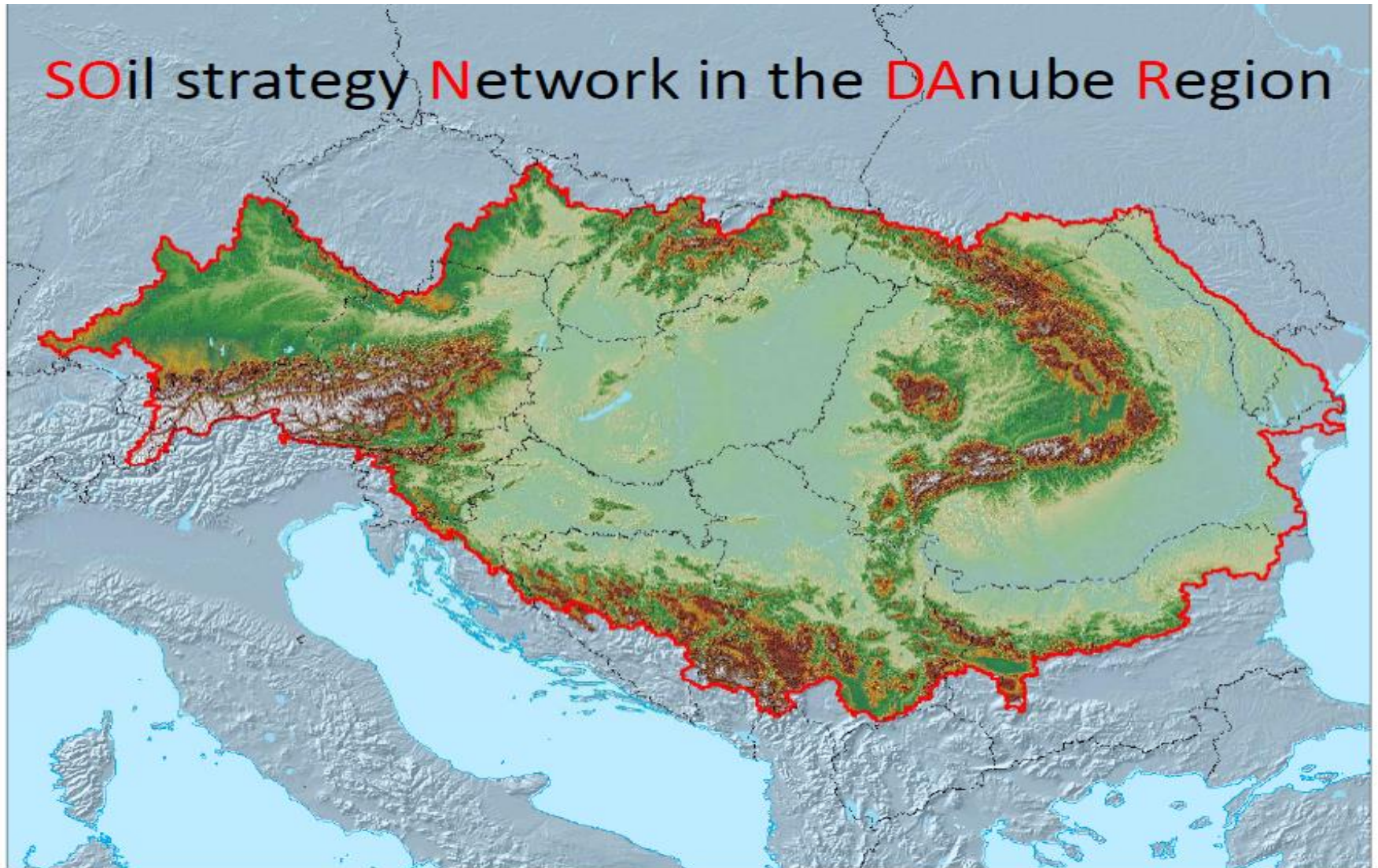
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Programm zur grenzüberschreitenden Zusammenarbeit SLOWAKEI - ÖSTERREICH 2007-2013  
Program cezhraničnej spolupráce SLOVENSKÁ REPUBLIKA - RAKÚSKO 2007-2013

# SOil strategy Network in the DANube Region



# What is SONDAR?

- SONDAR SK-AT project (2010 - 2013) - **project of the European Rural and Development Fund (ERDF)** between Slovakia (BA + TT regions) and Austria (Lower Austria)
- It represents **the interface** among applied soil science disciplines, land management and practices at the local and regional level in the Danube region
- It focuses and emphasizes knowledge transfer about soil for the public, which does not have got **sufficient awareness** about soil as a natural resource in the country and the environment
- The project was supported within the "**ARGE Donauländer**" for regions in the Danube River Basin: <http://www.argedonau.at/neu/index.htm>

It supports the **EU Danube Strategy** concerning activities 6, which explicitly mentions the soils and their sustainable development



# Partners of the project

There were 4 partners (2 from AT a 2 from SK)

1. Principal investigator from AT: **BIENE** – *Soil and Bio-Energy Network of European Countries*

2nd partner – **BOKU Vienna**

2. Principal investigator from SK: **Vodohospodárska výstavba, š.p. Bratislava**

2nd partner – **VÚPOP Bratislava**

Associated partners: **Záhorská ves, Angern an der March**

Strategic partner: **Societas pedologica slovac, c.o.**





# Community SONDAR SK-HU-CZ-AT



# Goals of the projects

- WP1** Information activities (flyers, media communication, guidelines publication)
- WP2** Awareness raising on soil, its meaning and functions through the action „Painting with earth colours“, contacts with municipalities,
- WP3** Soil as a indicator of flooding and risk management of areas affected by floods on the example of the joint modelling area Záhorská Ves – Angern an der March,
- WP4** Education program: training of soil ambassadors, engagement within the European Land and Soil Alliance (ELSA), action of the bedding boxes with vermicomposting,
- WP5** Communication strategy (meetings, reports)



# Work package WP1



**unser Boden braucht Partner wie Sie!**



SONDAR	Best-Practice	Print
<b>Title:</b> <b>Greening of tram line in Bratislava</b>		
<b>Current Status (Date)</b>		
Date:	2009-08-27	
Current status:	realized and fully functional	
<b>Objective</b>		
Enlargement green areas in Bratislava, contribution to the reduction of climate change impacts in the town environment.		
<b>Place (Community)</b>		
Slovakia, Bratislava, Ruzinov		
<b>GEO-data</b>		
Lat=[°N]	48,1562789	
Lon=[°E]	17,1449141	
<b>Soil relevancy</b>		
Decrease in soil sealing, improvement of soil functionality.		
<b>Project promoter -planning</b>		
Capital Bratislava Municipality, Transport Company Bratislava		
<b>Realization period</b>		
22.8. - 26.8. 2009		
<b>Soil alliance member</b>		
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
<b>Project in soil alliance region</b>		
<b>Contact</b>		
<b>Initial Situation:</b> The tram line was situated on concrete and asphalt ground. It was dusty and noisy area disturbing people living in closer environment. The soil was sealed performing almost no soil functions.		
<b>Idea/Concept:</b> Enlargement green areas in the town. Improvement the environment for people, animals and vegetation, contribution to the decrease of heat effects especially during summer time.		
<b>Aims and actions for implementation:</b> After elaboration of the project the greening was realized as a contract of the Municipality of Bratislava capital with the Transport company Bratislava. To the project preparation contributed also activists for healthy environment.		
<b>Project progress/realization:</b> The project was realized in August 2009.		
<b>Funding/costs:</b> not known		
<b>Results:</b> The grass cover around the tram line. The decrease of noise and vibrations originating from trans crossing. The decrease of dustiness of the line. Functional soil cover in the tracked area. Internal irrigation system for grass cover maintenance was installed and is fully functional.		
<b>Miscellaneous/Other:</b> Esthetical solution for public transport areas.		
<b>Future prospects:</b> Enlargement of the area representing the tram lines greening in Bratislava especially in years 2015 - 2016.		
<b>Foto 1 (Description):</b> The old tram line before reconstruction		



# Work package WP1

**Anmeldung zur Tagung:**  
Boden zum Begreifen,  
Bodenschutznetzwerk im Donaauraum  
**31. Mai und 1. Juni 2012**

Anmeldung auch per E-Mail an [info@sondar.at](mailto:info@sondar.at)  
oder per Fax unter +43 (0) 2742 3005 10230  
oder unter [www.itsos-boden.at](http://www.itsos-boden.at)


**Ar:**  
Amt der NÖ Landesregierung  
Abteilung Landentwicklung  
Landhausplatz 1, Haus 13  
3109 St. Pölten

**Binn zureichend**  
(Freiwaren)

**31. Mai, Anreise nach St. Pölten:**

**NÖ Landesregierung**  
Landhausplatz 1  
3109 St. Pölten



ab **St. Pölten Hauptbahnhof (Süd)**  
**Bus 4** (Richtung Unterradlberg Gewerbeplatz)  
**Bus 9** (Richtung St. Pölten Arbeitergasse)  
**Bus 6** (Richtung St. Pölten Traisenpark)  
bis „**Tor zum Landhaus**“



**Boden zum Begreifen,  
Bodenschutznetzwerk im Donaauraum**

SONDAR-Tagung in Kooperation mit  
11. ELSA-Jahrestagung 2012

**31. Mai und 1. Juni 2012**  
in St. Pölten (Niederösterreich)  
und Záhorská Ves (Slowakei)

THM, Von und Zuerne

Organisation

Stadt, Kreis, Ort

RZ, Ort

EMAI

**1. Juni, Anreise nach Záhorská Ves:**

**Obecný úrad Záhorská Ves**  
Hlavná 29  
90065 Záhorská Ves

**Nordbahn** (Regionalbahn Strecke 930) ab Wien Nord bis Angern  
**Fähre** von Angern nach Záhorská Ves



**unser Boden**  
mit Zukunft im Blick




Die Veranstaltung wird aus Mitteln des Fonds zur Europäischen Territorialen Zusammenarbeit (ETZ) finanziert.







# Work Package WP2

## Awareness raising

- Through the information on the meaning and functions of soil and sustainable management for decision-makers and the public,
- Project launch of the website

## Work with schools:

- Production of painting boxes from earth, international competition in painting
- Organization of training for art teachers, common exhibitions.



# Work package WP2

- project „**Painting with earth colours**“, where scholar pupils and adolescents participating in the competition in painting with soil colours in their region



Testing of pigmentation of soil colours



# Work package WP2



The winning art works in Slovakia: 1st grade and 2nd grade schools





# Work package WP2



The exhibition of children's art works on MPRV SR

Evaluation of the competition of children's art works in Záhorská Ves on MPRV SR











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# Work package WP3

- **Indication of areas affected by risk flooding** on the base of soil maps and modelling of hydrolines
- Create **conditions for the prevention** of natural threats floods and to protect citizens and stakeholders against flood
- Training (manual) how to **use soil maps** in cases of flood risks and capture the local fire departments, rescue teams and local NGOs



# Modelling area

## Angern an der March - Zahorska Ves



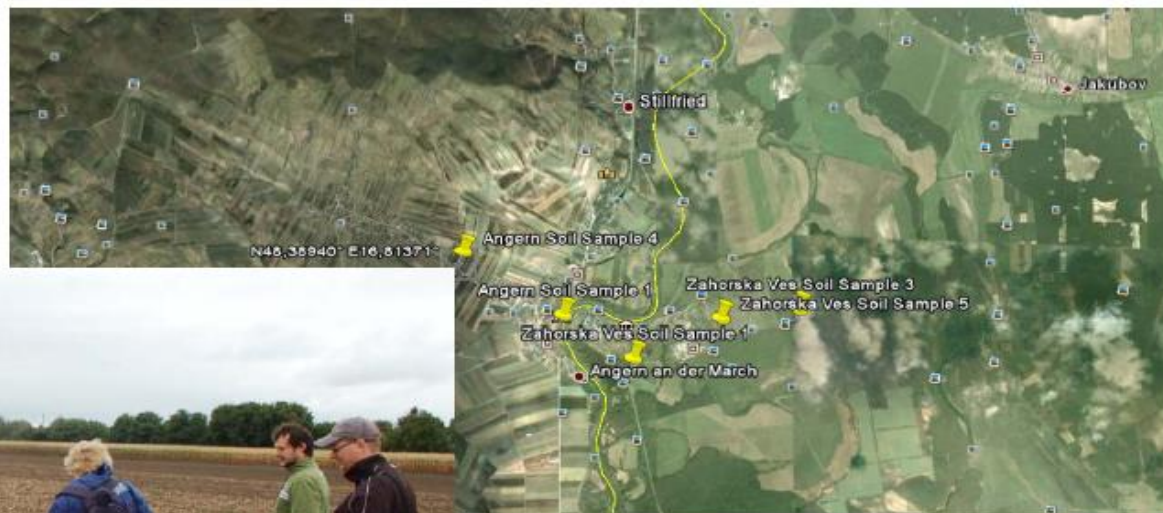
# Identification of flooding areas

- Fluvial sediments can indicate each flood during 1000 years, these sediments (layers) can be rather **well identify and diagnose** in the soil profile
- On the river Morava there were recorded **extreme flood events** in 1996, 2002 and 2006
- The identification of such areas is possible on the basis of soil units as **Fluvisols, Gleysols, respectively their subtypes**

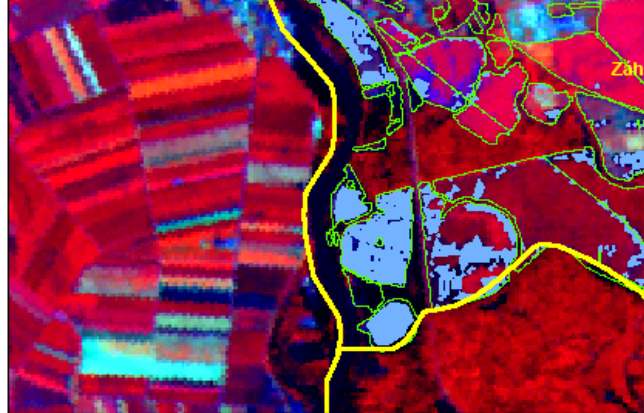
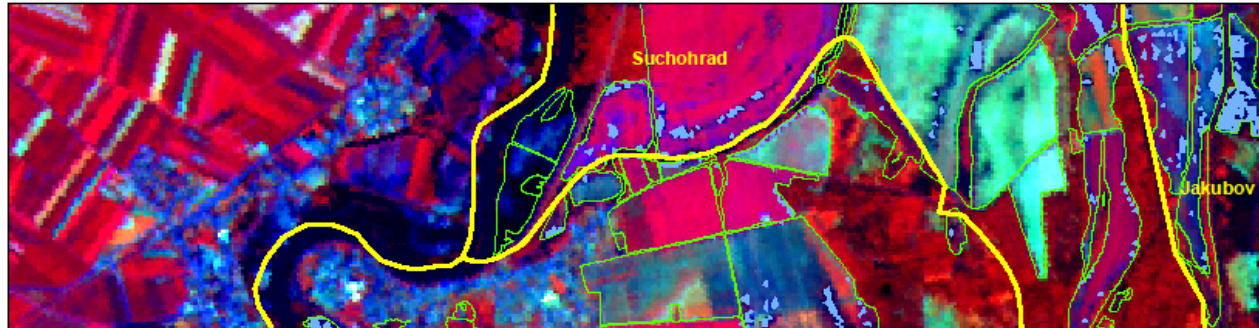







# Field soil survey SK - AT


















**Legenda**

-  hranica obce
-  hranica kultúrneho dielu
-  zaplavené územie
- irs-033-034\_12-06-2010\_ref-nn.img

**Floods vs. soil groups and texture**  
Záhorská Ves

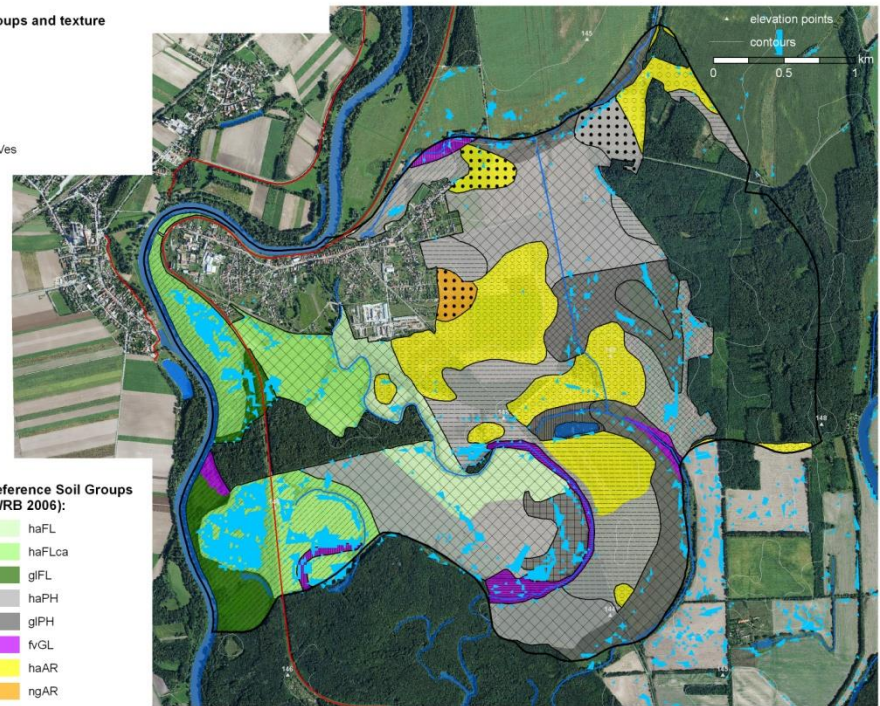
-  Záhorská Ves cadastral
-  dams
-  rivers
-  channels
-  water bodies
-  floods

**Soil texture (Novák):**

-  P/P
-  P(HP)/P
-  HP/HP
-  PH/PH
-  PH/H
-  H/PH
-  H/H
-  H/JH
-  JH/JH
-  JH/JH
-  JV/JV

**Reference Soil Groups (WRB 2006):**

-  haFL
-  haFLca
-  giFL
-  haPH
-  giPH
-  nVGL
-  haAR
-  ngAR

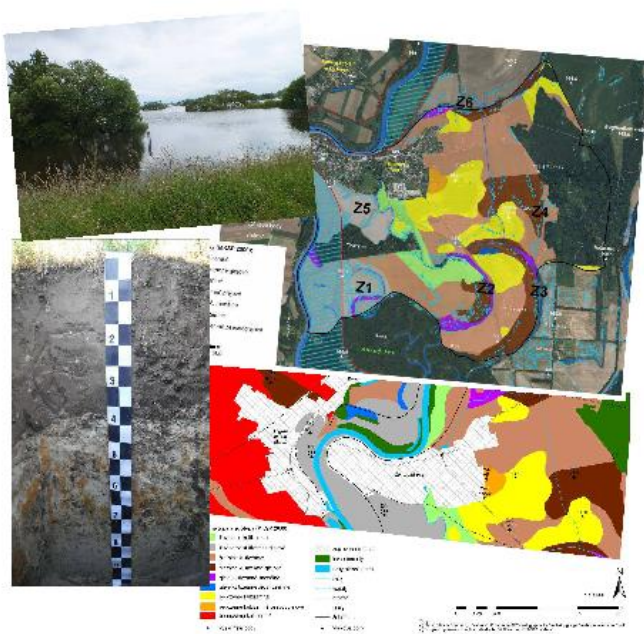


Basic maps



## Pôda ako indikátor povodní

Pôdne mapy ako nástroj pre predpovedanie povodní a zvyšovanie povedomia o pôde



Soil survey of the Slovak-Austrian area, film making about project



# Work package WP4

Elaboration of the program and training course content: Soil conservation (in interaction with water). **Implementation of 2 training courses on soil protection:**

- 1st type of training program for the **children's population until 15 years and for the general public, NGOs** and others
- 2nd the type of training program for **stakeholders** such as local government, land owners, land offices workers, planners and others

The important role: to integrate them into the international actions on land, the cooperation of all stakeholders in the **European Land and Soil Alliance (ELSA).**



# European Land and Soil Alliance (ELSA)

1 SONDAR SK-AT, Projektmeeting 12.11.2012 – St. Pölten, Lilienhof

## MANIFEST European Land and Soil Alliance (ELSA)



Working meeting with Austrian partners in Lilienhof



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# Bedding boxes with vermicomposting





# Bedding boxes with vermicompost and earth delivered for 5 schools in BA VÚC



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# Work package balík WP5



Numerous workshops and Minutes to them

Project: *Severo-ŠK - Podlipná loď* Date: *8.6.2011*

Institution	Name	E-mail	Signature
BIENE	Bohuslav Vlček	vlcek@biene-network.cz	<i>[Signature]</i>
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Very good and  
cordial cooperation  
with Austrian  
colleagues, but also  
with workers  
Vodohospodárska  
výstavba





# On behalf of the SONDAR team thank you for your attention!



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