

OUTPUT TITLE:
30 EXPERTS TRAINED AT
3. SIMONA TRAINING EVENT
OUTPUT T5.3

PROJECT TITLE:
SEDIMENT-QUALITY INFORMATION, MONITORING AND
ASSESSMENT SYSTEM TO SUPPORT TRANSNATIONAL
COOPERATION FOR JOINT DANUBE BASIN WATER MANAGEMENT
ACRONYM: SIMONA

PROJECT DURATION:
1ST JUNE 2018 TO 30TH NOV 2021, 42 MONTHS

DATE OF PREPARATION:
15/11/2021

Project co-funded by the European Union (ERDF, IPA and ENI)

Danube Transnational Programme
Sediment-quality Information, Monitoring and Assessment System
to support transnational cooperation for joint Danube Basin water management

INVITATION

TO

SIMONA FINAL CONFERENCE EVENT

9TH – 10TH NOVEMBER 2021

BAIA MARE, ROMANIA

ONLINE EVENT

Event: SIMONA FINAL CONFERENCE EVENT

Date: 9TH – 10TH NOVEMBER 2021

Topic: SIMONA 3rd Training Event and Final Conference Meeting (Scientific Conference and Stakeholder Workshop)

Type: ONLINE

Time zone: EEST time (Bucharest)

Organizers: RO-TUCN project partners (Prof Gheorghe Damian, Dr Zsolt Szakacs, Dr Daniel Nasui, Gheorghe Iepure) – local organizers with support of scientific coordinator (Dr Gyozo Jordan), WP7 Training leader (Dr Edith Haslinger and Paul Kinner), LP team GEO-ZS (project manager Dr Meta Dobnikar, Kristina Koret and Dr Teja Ceru)

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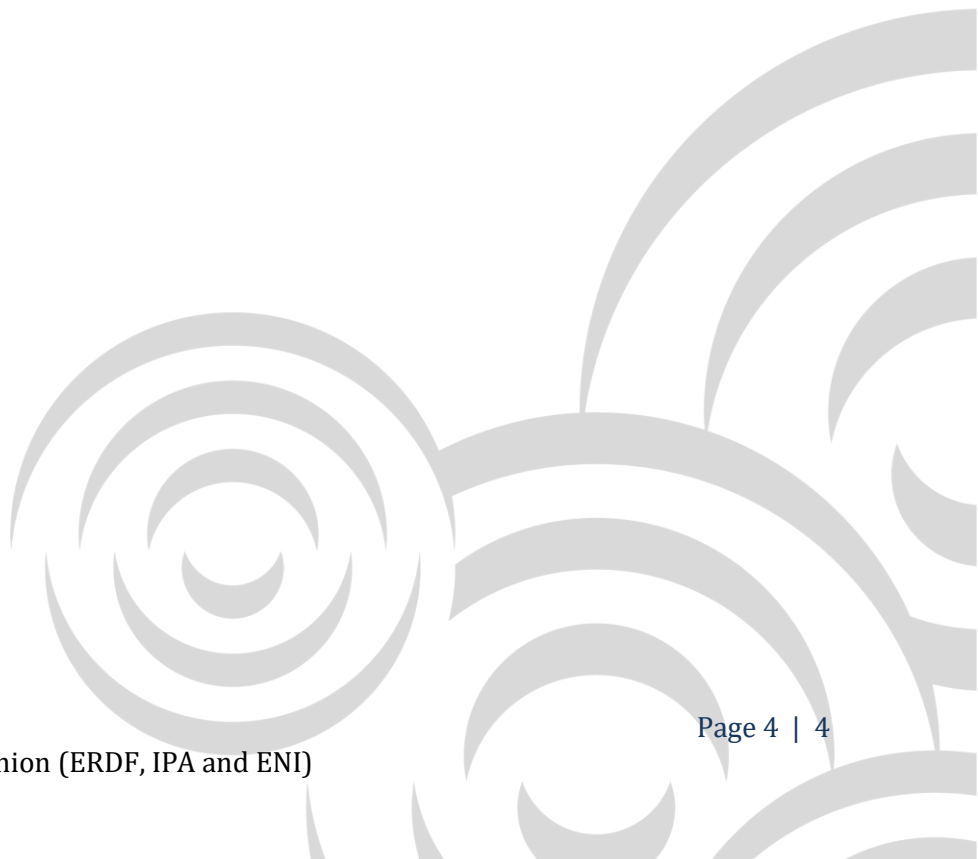
nasui@cunbm.utcluj.ro

iepure@cunbm.utcluj.ro

09 NOVEMBER, Tuesday - AFTERNOON SESSION (EEST TIME ZONE)

3rd Training Event: Sediment Quality Evaluation and IT Tool Application

13:00 – 13:30	Registration on site, welcome coffee; Online meeting room will be opened, virtual morning coffee
13:30 – 13:40	Meta Dobnikar (Lead Partner Coordinator): Welcome by the project coordinator and introduction into the project
13:40 – 13:50	Edith Haslinger (Leader, WP7 Training): Review of the agenda and goals for the day
13:50 – 14:00	Kata Dudas (Leader, WP5 Evaluation & IT Tool): Evaluation Protocol
14:00 – 14:20	Bese Pal (IT Tool Developer): Concepts and development of the SIMONA IT Tool
14:20 – 14:50	Bese Pal (IT Tool Developer): Application of the IT Tool
14:50 – 15:00	Discussion - moderators Paul Kinner and Edith Haslinger





SIMONA Evaluation protocol

3rd Training Event: Sediment Quality Evaluation and IT Tool Application
RO Baia Mare, 09th Nov. 2021

Katalin Mária DUDÁS

Hungarian University of Agriculture and Life Sciences, HU-MATE

Structure of the Evaluation Protocol

SIMONA OUTPUT T3.1.

SEDIMENT QUALITY EVALUATION PROTOCOL FOR HAZARDOUS SUBSTANCES IN SURFACE WATERS

PART OF THE SEDIMENT-QUALITY INFORMATION,
MONITORING AND ASSESSMENT SYSTEM (SIMONA)

THE MAIN AIM IS TO SUPPORT TRANSNATIONAL
COOPERATION FOR JOINT DANUBE BASIN WATER
MANAGEMENT

31/10/2021

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SEDIMENT QUALITY SAMPLING PROTOCOL FOR HAZARDOUS SUBSTANCES IN SURFACE WATERS

Appendix 1: Organic carbon – water partition coefficient (K_{oc}), sediment – water partition coefficient ($K_{sed-water}$) and octanol-water partition coefficient (K_{ow}) for the HSs listed in the EU EQS Directive.

Appendix 2: List of Priority Substances and Danube River Basin Specific Pollutants

Appendix 3: Annex 1 of the DIRECTIVE 2008/105/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on environmental quality standards in the field of water policy, amending and subsequently repealing Council Directives 82/176/EEC, 83/513/EEC, 84/156/EEC, 84/491/EEC, 86/280/EEC and amending Directive 2000/60/EC of the European Parliament and of the Council

Appendix 4a: QS bottom sediment and QS suspended sediment calculation excel tool

Appendix 4b: Template for QS input to the SIMONA IT-tool

Appendix 4c: Existing and calculated QSs for SIMONA IT-tool

Appendix 5: Normalisation by grain size distribution methodology description

Appendix 6a: Evaluation calculations by excel template;

Appendix 6b: Evaluation calculations descriptions.

Appendix 7: Factsheets for hazardous substances

The annexes are downloadable
from the SIMONA website:

[http://www.interreg-
danube.eu/simona/](http://www.interreg-danube.eu/simona/)



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1. Purpose and 2. Scope of the Protocols

The purpose of the Protocol is **to give practical guidance for sediment quality monitoring data evaluation** in compliance with the **EU Water Framework Directive**, (EU WFD) (EC 2000), with focus on the **use for the Danube Basin Countries**.

Scope of the SIMONA sediment quality monitoring data evaluation:

- **river** sediment (sediment associated with the fluvial – flowing surface water – system);
- **surveillance** monitoring (regular **monitoring for long-term changes**);
- **single monitoring site** (sampling station);
- hazardous substances listed in the EU WFD Annex X and EQS directive (**priority substances and priority hazardous substances**); **single substances** (mixtures are not considered);
- monitoring **data** that is complete and have **proper quality for the evaluation**;
- **evaluation is limited to** the assessment of **sediment quality** according to the Water Framework Directive; (water and biota quality assessment is out of the scope);
- environmental quality standard (EQS) contamination limit values are available for surface water hazardous substances (HS) concentrations, (**EQS dossiers are available**);
- developing toxicity tests related to EQS values for sediment quality evaluation is outside of the scope.

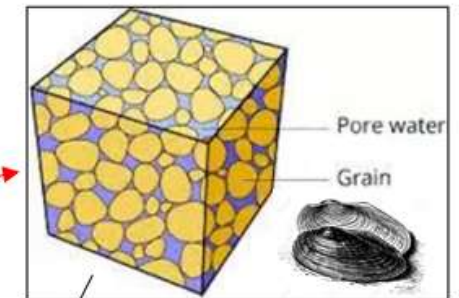
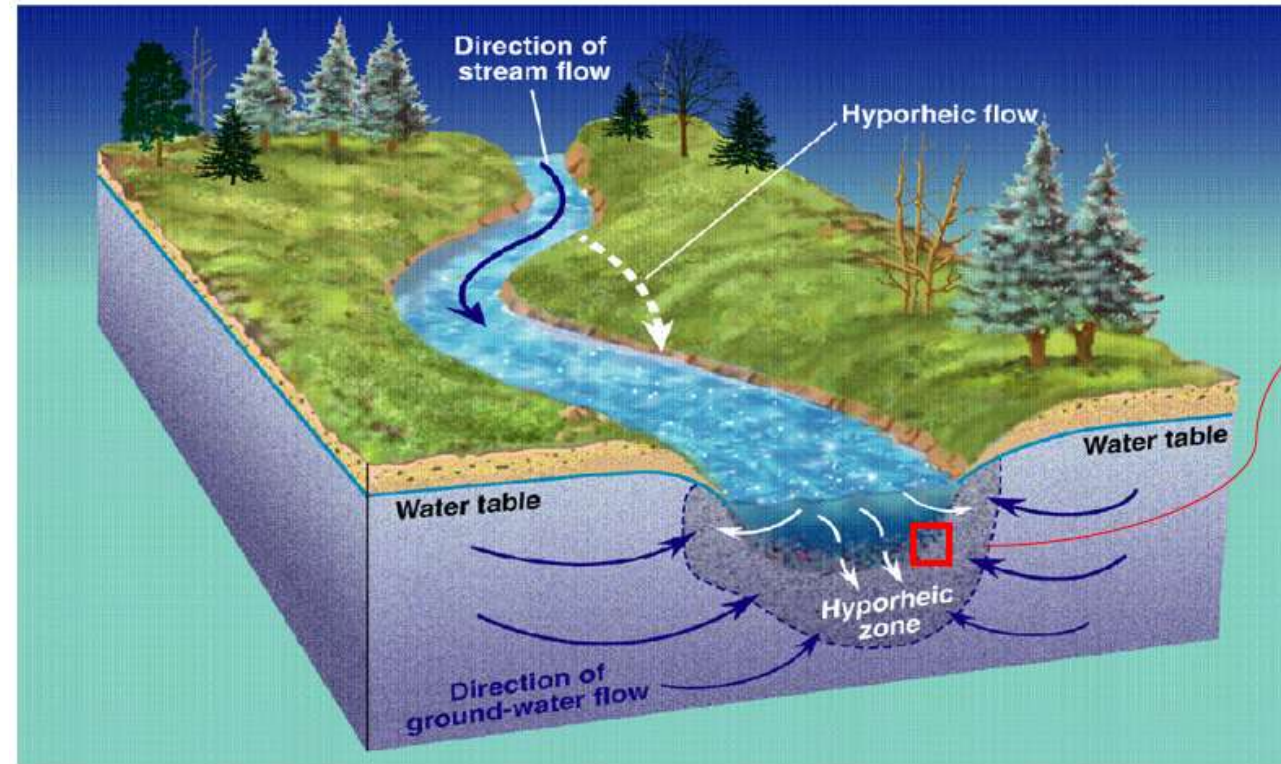
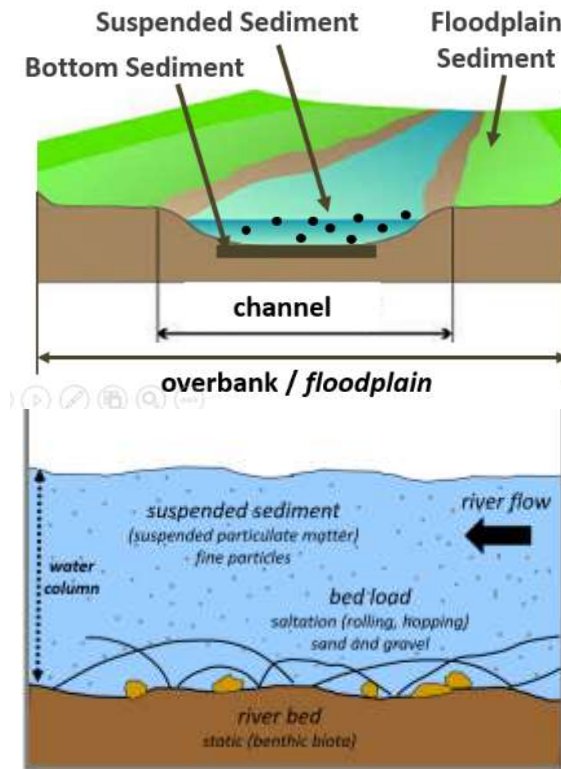
3. Basic terms

- **Surface water**
- **River**
- **Body of surface water**
- **Fluvial sediment**
- **Sub-basin**, also called **catchment**.
- **Surveillance monitoring**
- **Monitoring site**, also called **sampling station**
- **Hazardous substances** (priority substances + priority hazardous substances + WFD Annex VIII)
- **Quality Standard** for any measured medium (i.e. water, suspended sediment, bottom sediment, overbank sediment, soil or biota) means the concentration of a particular pollutant or group of pollutants in measured medium which should not be exceeded in order to protect the relevant receptors connected to the measured medium.
- **Monitoring data is complete (no missing data)** and have proper quality

4. SOURCES AND PRESENTATION

- EC 2018. Common Implementation Strategy for the Water Framework Directive (2000/60/EC): Guidance Document **No. 27** Technical Guidance for deriving **Environmental Quality Standards**. Luxembourg, Office for Official Publications of the European Communities. (Updated version 2018)
- Other primary sources are the following:
 - EC 2010. Common Implementation Strategy for the Water Framework Directive (2000/60/EC): Guidance Document **No. 25** Guidance on **chemical monitoring of sediment** and biota under the Water Framework Directive. Luxembourg: Office for Official Publications of the European Communities.
 - EC 2003. Common Implementation Strategy for the Water Framework Directive (2000/60/EC): Guidance Document **No. 7 Monitoring** under the Water Framework Directive. Luxembourg: Office for Official Publications of the European Communities.
 - EC 2009. Common Implementation Strategy for the Water Framework Directive (2000/60/EC): Guidance Document **No. 19** Guidance on **Surface Water Chemical Monitoring** under The Water Framework Directive Luxembourg: Office for Official Publications of the European Communities.
- The particular feature of this document is the harmonisation of the evaluation with the sampling methods (Šorša and The SIMONA Project Team, 2019) and laboratory methods (Čaić Janković, A., Šorša, A. and The SIMONA Project Team, 2019).
- Reviewed existing risk assessment methods which are based on ecotoxicological data, grain size distribution normalization methodologies.

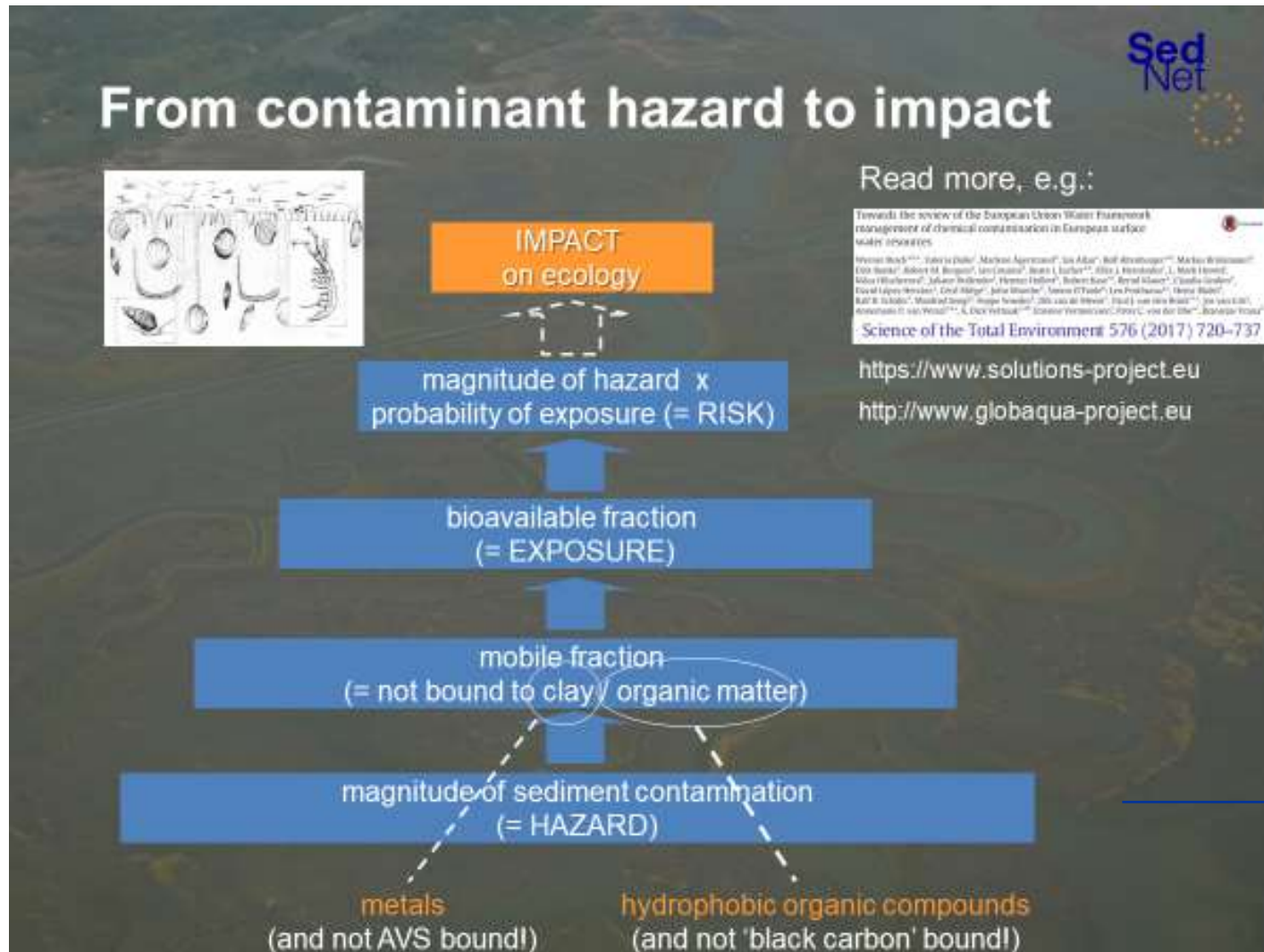
5. UNDERSTANDING THE FLUVIAL SEDIMENT SYSTEM



bottom sediment
where benthic
biota dwells

- What is exactly the 3 types of sediment?
- How to connect the surface water to the groundwater?
- What is bottom sediment where benthic biota dwells?
- Where should take surveillance monitoring samples (catchment scale aspect)?

6. UNDERSTANDING SEDIMENT QUALITY EVALUATION



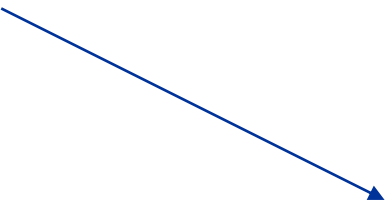
The relationship of hazard, exposure and impact in the fluvial sediment system.

Source: Drafted CIS Guidance Document on Sediment, 2021

Can measure and evaluate in chemical monitoring.

How to calculate local (site specific) Quality Standard values?

- Evaluation of overbank (floodplain) sediment quality (Section 7.)
 - Evaluation of suspended sediment quality (Section 8.)
 - Evaluation of bottom sediment quality (Section 9.)
1. Principal considerations
 2. Principal evaluation (with equations, how to get input values and predefined default values)
 3. Recommendation for transnational monitoring



Appendix 4. Excel for make easier the calculations
IT tool collects and stores the calculated regional/local QS values.
Now the tool works with EU values and local values for test areas.

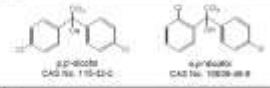
This EQS dossier was prepared by the Sub-Group on Review of the Priority Substances List (under Working Group E of the Common Implementation Strategy for the WFD Framework Directive).

The dossier was reviewed by the Scientific Committee on Health and Environmental Risks (SCHER), which approved with the identification of the QS_{water} as the critical EQS but indicated a need to reassess its value in the light of the available literature. As a result of the reassessment, the QS_{water} has been revised.

This version of the Dicofol dossier includes information retrieved from the non-public version of the Draft Assessment Report (DAR) elaborated in the context of Directive 91/416/EEC (E.C., 2006). Despite the DAR, it was not possible to derive a QS_{water} value because of a lack of reliable ecotoxicological data, notably of chronic data on invertebrates which usually represent the main sensitive taxon for organochlorinated pesticides such as Dicofol. Such data were not provided by the notifier, who decided not to proceed with the Annex I notification. The critical EQS proposed for this highly bioaccumulative substance is based on QS_{soil} values.

1 CHEMICAL IDENTITY

Table with 2 columns: Property and Value. Includes Common name (Dicofol), Chemical name (IUPAC) (2,2,2-trichloro-1,1-bis(4-chlorophenyl)ethanol), Synonym(s) (Kallthane), CAS number (116-30-2 (p,p'-isomer)), EU number (204-062-0), Molecular formula (C₁₄H₉Cl₅O), and Molecular weight (370.47).



p,p'-dicofol is the main isomer contained in the commercial product (E.C., 2006a). Most of the data contained in the present fact sheet are therefore presented for this isomer but o,p'-dicofol data are also provided as supplemental information when available.

Appendix 4. Excel for calculations

EQS dossier -> Appendix 1-3. + monitoring site measurements ↓ Appendix 4. -> Site specific QSs.

8. EVALUATION OF SUSPENDED SEDIMENT QUALITY

8.2 PRACTICAL EVALUATION OF sediment quality for site overall

Evaluation protocol based STEP 4. If suspended sediment (SS) data values are not available (in your country's legislation) and SS concentration is assessed in suspended sediment

Excel spreadsheet interface for sediment quality evaluation. It includes a header with instructions and a main table with columns for Parameter description, Value, Unit, and Option description. The table is divided into steps (STEP 4, STEP 5, STEP 6, STEP 7, STEP 8, STEP 9) and contains numerical values and units for various parameters like organic carbon content, weight fraction of organics, partition coefficient, and sediment quality standard.

9. EVALUATION OF BOTTOM SEDIMENT QUALITY

9.2 PRACTICAL EVALUATION of sediment quality for site overall

Evaluation protocol based STEP 4. If suspended sediment (SS) data values are not available (in your country's legislation) and SS concentration is assessed in bottom sediment

Excel spreadsheet interface for bottom sediment quality evaluation. It includes a header with instructions and a main table with columns for Parameter description, Value, Unit, and Option description. The table is divided into steps (STEP 4, STEP 5, STEP 6, STEP 7, STEP 8, STEP 9) and contains numerical values and units for various parameters like organic carbon content, weight fraction of organics, partition coefficient, and sediment quality standard.

*Need to use by expert.
SIMONA WP8 will deliver
QS values for test areas
and helps for Danube River
Basin.*

Tomorrow 10:30-10:50, The scientific approach of the SIMONA project: sediment quality monitoring under the EU Water Framework Directive (Gyozo Jordan)



10. Selection of hazardous substances for sediment quality evaluation

11. Trend assessment methodology for sediment quality

sediment quality trend assessment at a surveillance monitoring site has to consider the following:

- what is 'change' (in natural and anthropogenic HS),
- what is 'significant' change,
- what is trend,
- how to detect and characterise trend.

Appendix 5: Normalisation by grain size distribution methodology description

Appendix 6: Evaluation calculations by excel template = How SIMONA IT-tool risk assessment works

Tomorrow 12:15-12:30, Evaluation methods (SIMONA case) - Kata Dudas

Appendix 1: Organic carbon – water partition coefficient (K_{OC}), sediment – water partition coefficient ($K_{sed-water}$) and octanol-water partition coefficient (K_{OW}) for the HSs listed in the EU EQS Directive. (Based on EQS dossiers.)

Appendix 2: List of Priority Substances and Danube River Basin Specific Pollutants

Appendix 3: **Annex I of the Directive 2008/105/EC** of the European Parliament and of the Council (EQS values)

1. Appendix 4a: QS bottom sediment and QS suspended sediment calculation excel tool

(useful tool for deliver site-specific QS values)

Appendix 4b: QS report template (input for the SIMONA IT-tool)

Appendix 4c: Collection of the existing and calculated QSs (calculation details / reports are in the Factsheets: Annex 7.)

Appendix 5: QS normalization based on grain size distribution, methodology description (needed for general QSs)

2. Appendix 6a: Measured value and QS comparison calculations by excel template

Appendix 6b: Measured value and QS comparison calculations descriptions (how IT-tool risk assessment works)

Appendix 7: Factsheets for hazardous substances

(QS reports with used EQS dossiers and filled excel calculations, collection of used input values)

Tomorrow 12:15-12:30, Evaluation methods (SIMONA case) - Kata Dudás

Sampling protocol

- How, where, when to take samples
- *Templates: Site observation sheet & Sampling event minutes*

Laboratory protocol

- How to analyse samples
- *Laboratory results template (WISE compatible)*

Evaluation protocol

- How to deliver QSs, and how to compare measured value with QSs
- *Templates: EU/regional/local QS value calculation & Comparison measured value with QSs*

*QS = quality standard
= limit value*

SIMONA IT-tool

- Store: site observations, sampling minutes, laboratory results, delivered QS values
- Calculate risks and status of sediment quality
- Visualize the results in maps, create reports for WISE and create exports for Water managers



Thank you for your attention

For more details on evaluation methods and see you tomorrow at
10:30 – 10:50 on The scientific approach of the SIMONA project: sediment quality
monitoring under the EU Water Framework Directive (Gyozo Jordan)
and 12:15 - 12:30 on Evaluation methods (SIMONA case) - Kata Dudas



SIMONA IT Tool

Final Conference, 9 November 2021

Bese Pál, Geonardo

Concepts and development of the IT Tool



- Purpose of the IT tool
- Concept and general considerations
- Phases the IT tool supports
- Main user stories
- Testing results
- Upcoming release
- Legal framework

Purpose of the IT tool



The SIMONA-Tool is a web application for

- supporting surveillance monitoring
- collecting, analysing sediment sample data,
- running risk evaluation and
- generating sediment quality reports.

Concept and general considerations



- WISE-5 spatial data
- WISE-6 reporting via Eionet CDR
- Eionet synchronisation
- CAS / EEA support

Phases the IT tool supports



- Field observation phase
- Laboratory analysis phase
- Monitoring phase
- Reporting phase



Main user stories



Browsing publicly available data

- Geolocation service for navigating by address
- Searchable database of registered monitoring sites
- Features on the map are associated to a popup
- Sediment quality status layer

The screenshot shows the Interreg Danube Transnational Programme SIMONA web application. The interface is divided into several sections:

- Search by location:** A search bar with the placeholder text "Search for an address".
- Layers:** A list of layers with toggle switches, including "Water quality status", "Monitoring sites", "Surface water", "Ground water", "Surface water bodies", "Sub units", and "River basin districts".
- Quality standard:** A dropdown menu.
- Map:** A map of Budapest showing monitoring sites (blue dots) and various geographical features.
- Data Table:** A table with columns for Country, Name, INSPIRE Id, and Thematic Id. The table shows three rows of data for Austria (AT).

Country	Name	INSPIRE Id	Thematic Id
AT	ACHAU, BR	300012	AT300012
AT	SCHWECHAT, BL 369	300020	AT300020
AT	BREITENAU, BR HAUS-NR.184	300103	AT300103

At the bottom of the table, it indicates "1 - 100 of 139187 items".



Monitoring site details

- Risk evaluation results
- General geographic details
- Monitoring site observations
- Sediment samplings
- Laboratory results
- Assessments

The screenshot displays the 'Monitoring Site Details' interface for a site named 'TORKOLAT FELETT' (HU101845839). The interface includes a search bar, a map, and a table of monitoring data. The table shows various substances with their quality status and risk levels.

Substance	QS	Uncertainty	Status	Risk
Anthracene	1.5	1.16667	good	low
Arsenic	1.3	1.16667	bad	high
Benzo(a)pyrene	1.3	1.16667	good	low
Benzo(g,h,i)perylene	1.3	1.16667	good	low
Cadmium	1.3	1.16667	bad	high
Chromium	1.3	1.16667	bad	high
Copper	1.3	1.16667	bad	high
Dicofol	1.3	1.16667	good	low



Recording site observation

- On-site field observation
- Site identification supported by the GIS database
- Min/avg/max inputs for observed parameters

Interreg
Danube Transnational Programme
SIMONA

Home Map User Guide

Search by location
Search for an address

Layers
Water quality status
Monitoring sites
Surface water
Ground water
Surface water bodies
Sub units
River basin districts
Quality standard

All countries
Country
AT
AT
AT

Site Observation

MONITORING SITE IDENTIFICATION

Monitoring Site: TORKOLAT FELETT
Observation date: 11/8/2021 5:22 PM

Downstream end (Longitude) Downstream end (Latitude) Upstream end (Longitude) Upstream end (Latitude)

Monitoring site length Monitoring site altitude

WATER - HYDROMORPHOLOGY

Hydromorphologic classification: - Channel type: - Channel material: -

Average width of river channel in the site: m

Remarks

WATER - HYDROGRAPHY

Water depth: min avg max cm

1 - 100 of 139198 items



Submitting sediment sample data

- Sediment sampling data linked to a monitoring site
- Measured and estimated values under:
- Weather conditions
- Water conditions
- Sediment conditions

The screenshot displays the 'Observation' form in the Interreg SIMONA web application. The form is organized into several sections:

- SAMPLING IDENTIFICATION**: Includes a 'Sampling date' field set to '11/8/2021 5:22 PM'.
- WEATHER CONDITIONS**: Contains fields for 'Air temperature', 'Humidity', and 'Precipitation', each with radio buttons for 'measurement' and 'estimation'. 'Air pressure' and 'Wind speed' also have radio buttons, and 'Wind direction' has a dropdown menu.
- WATER CONDITIONS**: Includes fields for 'pH', 'Electric conductivity', 'Redox potential', and 'Dissolved Oxygen', each with a dropdown menu for units. Below these are fields for 'Temperature', 'Nephelometric turbidity', 'Water flow rate', and 'Water depth', each with radio buttons for 'measurement' and 'estimation'.
- SEDIMENT CONDITIONS**: Includes fields for 'Temperature', 'Electric conductivity', 'pH', and 'Redox potential'.

The application interface includes a search bar, a sidebar with filters (Layers, Monitoring sites, Surface water, Ground water, Surface water bodies, Sub units, River basin districts, Quality standard), and a map on the right side showing the location of the monitoring site.



Submitting sediment sample data

- Sediment sample data linked to a specific sampling
- Internal sample identification
- Unit of measure conversion
- Arbitrary number of samples

Interreg
Danube Transnational Programme
SIMONA

Home Map User Guide

Sample

Search by location
Search for an address

Layers
Water quality status
Monitoring sites
Surface water
Ground water
Surface water bodies
Sub units
River basin districts
Quality standard

All countries
Country
AT
AT
AT

SAMPLE IDENTIFICATION	SAMPLING DETAILS	SAMPLE DESCRIPTION
Code HU1018458397/SS	Sampling system [Dropdown]	Sample volume [Dropdown] dm3
Analysed matrix SS	Equipment Composite sample [Toggle]	Weight [Dropdown] g
Duplicate sample [Toggle]	Number of sub-samples [Dropdown]	pH 7.00
Duplicate sample identifier [Text]	Point sample [Toggle]	Electric conductivity [Dropdown] uS/cm
	Distance from river bank [Dropdown] m	Redox potential [Dropdown] mV
	Sample depth [Dropdown] m	Temperature [Dropdown] °C
	Depth of sediment sample [Dropdown] cm	Texture [Dropdown]
		Particle size description [Dropdown]
		Odour [Dropdown]

1 - 100 of 139198 items



Uploading laboratory results

- Downloadable template
- Drag-n-drop spreadsheet upload
- Laboratory results are linked to stored sediment samples

Interreg
Danube Transnational Programme
SIMONA

Home Map User Guide

Search by location
Search for an address

Monitoring Site Details

OVERVIEW GENERAL DETAILS SITE OBSERVATIONS SEDIMENT SAMPLINGS LABORATORY RESULTS ASSESSMENT

Drop files here to upload

LABORATORY RESULTS TEMPLATE

Substance	Quantity	UoM	Uncertainty
Sample: HU101845839/6/SS			
Arsenic	11.3	mg/kg	0
Cadmium	2.12	mg/kg	0
Chromium	35.4	mg/kg	0
Copper	54.1	mg/kg	0
Mercury	0.06	mg/kg	0

1 - 100 of 432 items

1 - 100 of 139198 items



Data analysis

- Status and risk classification
- Uncertainty assessment

The screenshot displays the Interreg SIMONA web application interface. The main content area shows the 'Monitoring Site Details' for a site named 'TORKOLAT FELETT' (Thematic Id: HU101845839). The 'ASSESSMENT' tab is active, showing a table of monitoring data for Arsenic. The table includes columns for Year, Quantity, LOQ, Unit, Uncertainty, and Exclusion. The data shows a significant decrease in quantity from 76.6 mg.kg⁻¹ in 2010 to 0.06 mg.kg⁻¹ in 2011, with a corresponding change in risk status from 'Risk' to 'high' and uncertainty from 3 to 1.16667.

Year	Quantity	LOQ	Unit	Uncertainty	Exclusion
2010	76.6	0.1	mg.kg ⁻¹	3	
2010	76.6	0.1	mg.kg ⁻¹	3	
2010	76.6	0.1	mg.kg ⁻¹	3	
2010	69.6	0.1	mg.kg ⁻¹	3	
2010	69.6	0.1	mg.kg ⁻¹	3	
2010	69.6	0.1	mg.kg ⁻¹	3	
2011	0.06	0.1	mg.kg ⁻¹	1	

Summary table:

Status	Risk	Uncertainty
bad	high	1.16667



Managing quality standards

- Quality standard manager is available for region managers, national contacts and researchers
- Setting up QS values for each substances

Interreg
Danube Transnational Programme
SIMONA

Home Map User Guide

Search by location
Search for an address

Quality Standard Manager

Layers

Water quality status

Monitoring sites

Surface water

Ground water

Surface water bodies

Sub units

River basin districts

Quality standard

MANAGE

All countries

Name	Description	Scope
Demo standard	Lorem dolor sit amet	global

Code	Substance	QS	Unit
CAS_50-32-8	Benzo(a)pyrene	2	mg/kg
CAS_191-24-2	Benzo(g,h,i)perylene	2	mg/kg
CAS_7440-43-9	Cadmium	2	mg/kg
CAS_7440-47-3	Chromium	2	mg/kg
CAS_7440-50-8	Copper	2	mg/kg
CAS_115-32-2	Dicofof	2	mg/kg

1 - 18 of 18 items

1 - 7 of 7 items

300103 AT300103

1 - 100 of 139198 items

https://simona.geonardo.com/map



Adaptive layout

- Panels automatically collapse on small devices
- Navigation bars are scrollable
- Forms' layout adapt to the screen size

Interreg
Danube Transnational Programme
SIMONA

TORKOLAT FELETT

Thematic Id HU101845839

Local Id HU101845839

Water quality

Status bad

Risk high

DETAILS REPORT

All countries

Country	INSPIRE Id	Themat
AT	300012	AT3000
AT	300020	AT3000

Interreg
Danube Transnational Programme
SIMONA

Dunakeszi

Monitoring Site Details

OVERVIEW GENERAL DETAILS SITI

Demo standard

QS	Uncertainty	Status	Risk
1.6	1.16667	good	low
2	1.16667	bad	high
2	1.16667	good	low
2	1.16667	good	low
2	1.16667	bad	high
2	1.16667	bad	high
2	1.16667	bad	high
2	1.16667	bad	high
2	1.16667	good	low

Site Observation

MONITORING SITE IDENTIFICATION

Monitoring Site

TORKOLAT FELETT

Observation date

11/8/2021 6:14 PM

Downstream end (Longitude)

Downstream end (Latitude)

Upstream end (Longitude)

Upstream end (Latitude)

Monitoring site length

Monitoring site altitude

WATER - HYDROMORPHOLOGY



API Client

- Listing monitoring sites
- Accessing sediment quality status information

The screenshot shows the GitHub interface for the repository 'emg-group / simona-api-client-php'. The repository is public and has 1 branch and 1 tag. The main branch is selected. The repository contains a list of files and folders, all of which have been updated with 'Documentation and unit testing added (#1)' 4 minutes ago. The files include 'src', 'test', '.editorconfig', '.gitattributes', '.gitignore', '.phplint.yml', '.phpmd.xml', 'LICENSE', 'README.md', 'composer.json', 'composer.lock', and 'config.json'. The repository also has a 'Code' dropdown menu, 'Go to file', 'Add file', and 'Code' buttons. The 'About' section on the right provides information about the repository, including the description 'PHP client of the SIMONA IT Tool's public API', the repository URL 'simona.emg.systems', and the license 'GPL-3.0 License'. The 'Releases' section shows 1 release, 'Public API covered', and the 'Packages' section shows no packages published.

File/Folder	Commit Message	Time
src	Documentation and unit testing added (#1)	4 minutes ago
test	Documentation and unit testing added (#1)	4 minutes ago
.editorconfig	Documentation and unit testing added (#1)	4 minutes ago
.gitattributes	Documentation and unit testing added (#1)	4 minutes ago
.gitignore	Documentation and unit testing added (#1)	4 minutes ago
.phplint.yml	Documentation and unit testing added (#1)	4 minutes ago
.phpmd.xml	Documentation and unit testing added (#1)	4 minutes ago
LICENSE	Documentation and unit testing added (#1)	4 minutes ago
README.md	Documentation and unit testing added (#1)	4 minutes ago
composer.json	Documentation and unit testing added (#1)	4 minutes ago
composer.lock	Documentation and unit testing added (#1)	4 minutes ago
config.json	Documentation and unit testing added (#1)	4 minutes ago

SIMONA API client PHP

Languages

- PHP 100.0%

Beta testing results



- Requests related to user friendliness
- Feedbacks on usability
- User interface improvements
- Single bug was reported (user session)

Upcoming release



- Enhanced quality standard manager is under development
- Fine-tuned user interface

Ongoing activities



- SIMONA case studies will be set up in the system
- The online user manual will be updated
- User accounts will be set up

Legal framework



- Owner of the tool: MATE
- IP rights hold by GEO: nJinn
- Open source: no
- Openly available: yes