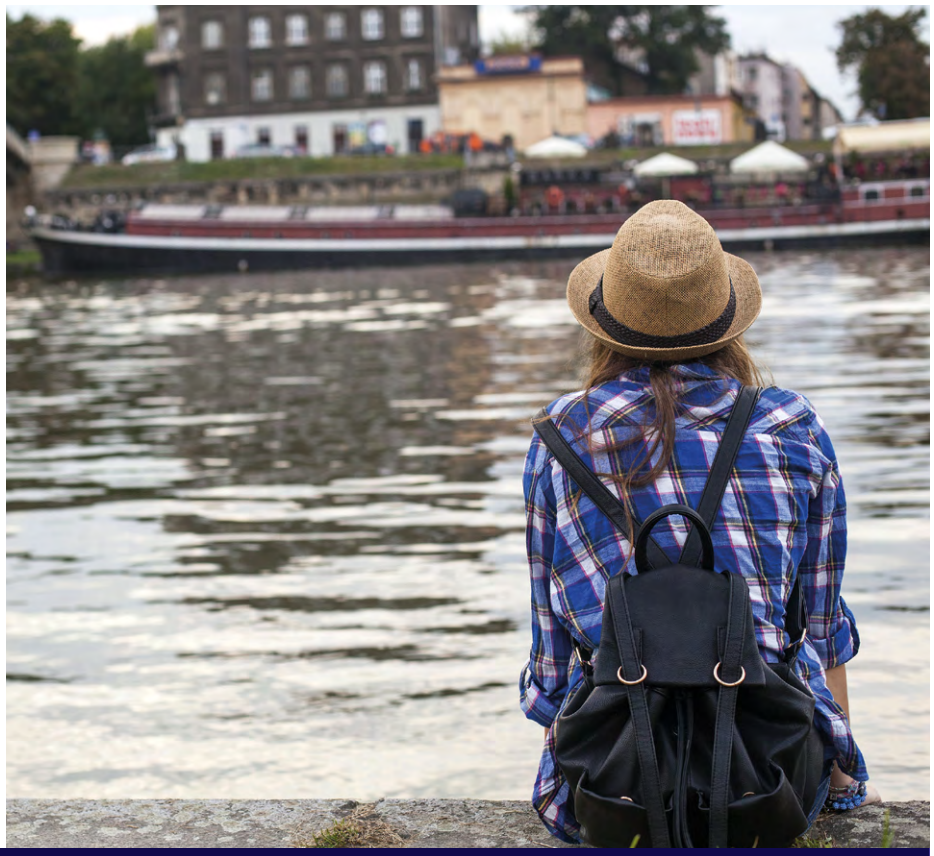
SedNet



9th International SedNet Conference
23-26 September 2015 Krakow Poland

Solving societal challenges; working with sediments

Final programme

Hosted and co-organized by

Faculty of Geology, Geophysics and Environmental Protection

AGH University of Science and Technology
Akademia Górniczo-Hutnicza im. Stanisława Staszica w Krakowie

Background

Sediments and society – what is the connection? Sediments – unseen or unnoticed most of the time – have a variety of impacts on human activities and vice versa, particularly along rivers. If the river is used for shipping, too much sediment may become an obstacle. The foundations of bridges may become unstable if too little sediment is available, creating a safety risk. After flooding, sediments are distributed over flood plains and with increased construction in natural flood plains these sediments add to the clean-up efforts and may become a health issue if contaminated. Even more dangerous are the mud and debris flows that can occur during larger floods.

Our aquatic resources are linked to sediment with its many and sometimes conflicting ecosystem services: recycling of nutrients, providing habitats for fish, adsorbing pollutants… But different ecosystem services are accompanied by different interests. How to deal along a watershed with too much or too little sediment? What to do about contaminated sediment that is mobile and may be taken downstream with the next flood? Or what about the contamination that stays in place but affects the local ecology and regional communities? Does contaminated mean "dangerous"? What is "too much" or "enough" sediment in a river and does it justify e.g. dredging or sand exploitation or are there alternatives?

Different countries have different experiences with the quantity and quality of sediments in their rivers, and with dealing with the challenges that arise from there. The role, attributed function and perception of sediments influence the way it is managed in a river system. At the core of the SedNet conference in 2015 will be the link between sediment and society, and the exchange of knowledge and respective experiences on an international level. Sediments are an integral part of the river system. Is this role acknowledged in a sufficient way?

Guus Schoonewille fotografie

Conference Programme

The conference programme consists of thematic platform sessions, special sessions, workshops and working group sessions.
Further there are poster sessions, an excursion, and ample room is available for networking and starting up new initiatives, like thematic working groups.

Platform Sessions

The following platform sessions are organised:

- Sediments and society *(23 September, morning)*
- Sediment quality and perception *(23 September, afternoon)*
- Sediment in historical and recent mining areas *(23 September, afternoon)*
- Sediment remediation and uses *(23 September, afternoon)*
- Valuing sediments and their services *(24 September, morning)*
- Understanding sediment fluxes and budgets on a river basin scale *(25 September, morning)*
- Building with dredged material and/or sediment *(25 September, morning)*

Special Session: Impact of Fine Sediment on Ecology (24 September, afternoon)

Excessive fine sediment loadings delivered to rivers from a variety of sources including agriculture have detrimental impacts on aquatic ecology and thereby degrade the ecological status of freshwater as well as estuarine and marine environments. Therefore there is a need to improve knowledge of the linkages between excess fine sediments and aquatic organisms in order to develop revised targets for guiding catchment management. These targets can be used to assess compliance to the Water Framework Directive and other environmental policies and should be accepted by Member States. This Special Session will review recent work examining the impact of excessive fine sediment loads on freshwater as well as estuarine/marine biology (fish, macroinvertebrates, diatoms, macrophytes) and the development of frameworks for supporting targeted decision-making for fine sediment management. A possible outcome may be a proposal for how to advance the scientific state-of-the-art in this field.

Special Session: How to Build Public Trust for Sediment Management? (25 September, morning)

The handling of sediments in the Elbe estuary is the key issue of a dialogue that began in late 2013. A group comprised of 40 regional stakeholders (environmental NGOs, business representatives, Ministries, communities, fishery and tourism organizations) is discussing future options for sediment management, the role of sediment remediation and river engineering measures. Within 16 meetings more than 35 measures have been identified, discussed and assessed. The extended value of this consultation becomes obvious when looking at the non-technical aspects added to the discussion by stakeholders representing societal, economic and environmental interests - sediments play a vital role for all of them.

The session during the SedNet conference aims at discussing stakeholder involvement in general. The Elbe case will be presented as recent example and will lay ground for an open discussion with the SedNet community to share experiences with communicating and building trust with a broader public on complex issues involving sediments.

Workshop on the Reuse of (Contaminated) Sediment (23 September, afternoon)

During the previous SedNet conference (Portugal, November 2013) there were sessions on future topics of interest for the SedNet participants. One of those topics was "Beneficial use of Dredged Material". Participants were invited to form a Working Group to identify the opportunities and to overcome the drawbacks with regard to reuse of dredged sediments. Now, two years later, some of the work undertaken since then will be presented.

A number of new research proposals have been submitted (to the EU HORIZON-2020 program), and new large land reclamation/reshaping programs are now granted in which sediment reuse plays an important part (examples: the Marker Wadden wetland creation, the Jakarta master plan, Louisiana Coastal Master Plan).

While large scale sediment reuse is getting a boost in some regions worldwide, we still struggle with legislation issues where contaminants are concerned. At the same time, dewatering and compaction of sediments is sometimes not enough to guaranty the strength and stability needed for the application of sediment. Programs like Building with Nature/Ecoshape look at ways to integrate natural processes to strengthen sediments, but are not primarily focussed on dealing with contaminants. But what about using natural chemical processes (like oxidation, reduction, acidification or alkalisation) to help to break down or immobilize contaminants and at the same time improve the properties of the sediment? To help along these processes secondary resources can be used to initiate the right conditions and improve the final results. And many of these secondary resources are cheaply available, and reuse of these secondary resources is promoted as part of a circular economy. Sounds familiar, but looking from a different perspective? Rewritten this could also be seen as dumping toxic waste products into the environment. The difference is often in the social acceptance of the application and the legal framework on how to define a useful reuse application and how to set criteria for the end of waste status on secondary resources.

This workshop is meant as a discussion platform for the direction in which the large scale reuse of sediments is going, and whether the use of secondary resources as a binder, a filler or catalyst has a place when looking at sediment reuse options.

The outcome of this workshop together with the outcome of the other SedNet Working Group sessions (Getting Sediment at the European Strategic Research Agenda & Sediments in a Changing Environment) can help formulate the questions that need to be addressed on the (EU) strategic research agenda, and formulate solutions which are already promising.

Workshop: Sediment Discharge Test (24 September, morning, and short version on 25 September, morning)

A tool, consisting of an Excel-application and Guidance Document developed in the Netherlands by Rijkswaterstaat (RWS) and Deltares, which enables its user to assess the effect of contaminated sediments on the water quality – COME AND TRY IT YOURSELF!

The Water Framework Directive (WFD) does not have compulsory standards to remediate contaminated sediments. There might be national legislation of course, but the only European obligation is that contaminated sediment may not hamper the WFD water quality standards and biological quality elements. However, it is not so easy to quantify the relationship between sediment and water quality or ecology in surface waters. Several tools are developed in the Netherlands to solve this problem. RWS and Deltares developed a Guidance Document for Sediment Assessment (including an Excel-application SEDIAS) to determine whether existing sediments threat the WFD objectives. If they do, remediation of the sediments will be part of the WFD measures.

However, sediments are often dredged or reused for other reasons, such as navigational depth. Licence agencies have to decide whether these activities threat compliance with the WFD-objectives. The Sediment Discharge Test is a simple Excel-application for water managers and authorities to decide whether they can give a permit. It basically fits in the approach of discharge licenses; that is why it is called Sediment Discharge Test. Typical examples of activities that can be evaluated by the SDT are: creating a new (historically) contaminated top layer of sediment after 1) maintenance dredging, 2) erosion of historically contaminated river banks as a result of hydraulic changes in the river bed, 3) deepening of a navigation channel, or 4) expanding the river area by adding a former industrial site.

At the workshop you will get some background information, an explanation of the tool, but most of the time you will be trying out the tool yourself by executing some practical exercises on a computer. If you wish, you can adjust the exercises to fit your own specific cases. You should have basic knowledge of MS Excel.

The English version of both the Guidance Document for Sediment Assessment and its SEDIAS Excel-application and the Guidance Sediment Discharge Test and its Excel-application can be found on www.helpdeskwater.nl (go to *English – Sediment*).

A full workshop session is held on 24 September in the morning; a short version of the workshop (focus more on theory and less on trying out the tool by participants) is held on 25 September in the morning.

SedNet Working Group: Sediments in a Changing Environment (24 September, afternoon)

In aquatic surroundings, especially in river basins, sediments are

- transported by natural processes over long distances
- manipulated due to construction, nautical causes etc.
- transferred to land by natural events
- deposited on land by man
- inhabited by organisms
- etc.

Mobile sediments – whether by natural or management processes – are exposed to changing environmental conditions which may have an impact on the quality of the material. For example, attached contaminants may become more or less bioavailable with changing pH, UV-radiation, redox potential, organic carbon... Changing conditions could therewith impact various sediment ecosystem services such as, for example, nutrient recycling, quality of habitat, storage of pollutants, but also e.g. capacity of land disposals.

In environmental sciences, a lot of information has been gathered on the effect of individual parameter changes on sediment quality, on bioavailability of single contaminants, on experiences with sediments that are transported to floodplains during floods. But do we have an idea, what the consequences are, when climate change leads to an increase of temperature?

While there will hardly be overall general trends that can be easily identified, with this WG we would like to gain insight into any environmentally relevant conclusions from the current, fragmented knowledge, identify research gaps and plan the way ahead towards further investigations that should help us to improve our understanding of the sediment environment.

The WG session during this SedNet conference 2015 is supposed to strengthen the formation of an active WG by people that are interested in this topic. All potential participants are invited to share ongoing discussions within our Linkedin discussion group "sediments in a changing environment" prior to and after the meeting, while this is not imperative for joining the WG session during the conference. For access to the discussion group please contact Eric de Deckere (Eric.deDeckere@haven.Antwerpen.be) or Susanne Heise (Susanne.heise@haw-hamburg.de).
The WG session in the afternoon will be divided into two parts:
Part 1 will focus on the topic "when sediment becomes soil and soil becomes sediment". There will be an introductory talk and statements/ input from the participants are welcome. Please contact Susanne Heise about any presentations that you would like to give on that topic.
Part 2 will be dedicated towards further topics of interest that should be followed up in this WG, possibly in the form of future workshops lasting several days, supported by SedNet. The outcomes of these workshops that SedNet envisions should be a state of the art of that respective topic, a collection of relevant questions and knowledge gaps and preferably a draft/suggestions on how to proceed in the coming future.

Getting Sediment at the European Strategic Research Agenda – Meeting of the SedNet Working Group Sediment Science and Policy Interfacing (SPI) (24 September, afternoon)

At the SedNet conference in Lisbon in 2013, some 30 sediment SPI enthusiasts – kicked-off the SedNet WG Sediment SPI. The objective of this WG is to strengthen the connection between science and policy for improved sediment management. The message the WG wishes to get across is that sustainable sediment management is an aid to reach the goals set in related EU policies (like WFD, MSFD, NATURA 2000, etc.). Furthermore, a better understanding of the (crucial) role and value of sediment in nature and aquatic systems will enable more sustainable sediment management. However, so far sediment does not receive proper attention in EU research programmes and Horizon 2020 (H2020) in particular.

Now a window-of-opportunity opens to get this changed!

The EC H2020 Coordination and Support Action project INSPIRATION aims to provide for Europe a Strategic Research Agenda (SRA) – including suggestions for (alternative) funding models – for the soil-sediment-water-system and land-use. This also in relation to using the soil-sediment-water-system for solving societal challenges. The 3-year project started 1st of March 2015. More information on the project can (soon) be found on: www.inspiration-h2020.eu.

At our SedNet conference in Krakow, INSPIRATION is right in the middle of collating the following information: 1) preferred topics for the SRA; 2) experiences regarding the use of scientific knowledge to tackle societal challenges (incl. improving of business opportunities); 3) predominantly used as well as promising alternative, national funding schemes/mechanisms/programmes for knowledge production and dissemination; 4) experiences regarding the use of any trans-national, common budget for scientific knowledge production.
You are invited to join this session to bring in and discuss your sediment related suggestions for these four topics. The session will be interactive.

All SedNet conference participants are welcome to join the SedNet SPI WG and this session in particular.

Poster Session

During the conference posters will be exposed in the coffee break area near the main conference room.
Extra attention will be paid to the posters on 23 September early evening and 24 September around lunchtime.
In addition to the general poster session, "Poster corners" will be organized around the following specific topics: "Sediment Issues in Poland" and "Sediment Remediation and Management". At these Poster Corners, authors will shortly present the highlights of their posters, followed by discussion with the audience.
The conference participants will be invited to give their votes for the best of all posters. The winner will be awarded with a prize.

Sediment stories

2015 is proclaimed as the International Year of Soils. The Flemish government had the idea to capitalise the momentum and to raise awareness about the role of soils, sediments and land. To reach the general public, politicians and policy makers, it is important to show how soils and sediments help to provide solutions for current societal challenges. On www.bodembewust.be/soilstories you can already find some inspirational stories about the positive aspects of soils.
You are invited to submit your own sediment stories via My Sediment Story (and/or send it to soilstories@ovam.be). Or share them on twitter using the hashtag #soilstories.
During the Sednet conference the call for sediment stories will be further explained and participants will get the opportunity to submit stories during coffee breaks.

Excursion to the Wieliczka Salt Mine and dinner (24 September, evening)

On Thursday 24 September, in the evening, an excursion by bus is organised to the Wieliczka Salt Mine, a world class monument, featuring among twelve objects on the UNESCO's World Cultural and Natural Heritage List. Dinner will be served in the mine. A leaflet with detailed information about the tour will be provided at the conference.

Excursion to Tyniec (26 September, morning)

Saturday morning the conference participants can join an excursion by boat to the historical village of Tyniec, a former fortified settlement that was founded in the 7th-5th century BC. The rivercruise starts near Wawel castle in the historical centre of Krakow. A leaflet with detailed information about the excursion will be provided at the conference.

Wednesday 23 September 2015

08.30-09.15	Registration
	Opening Session
09.15-09.35	Opening and welcome by - *Marc Eisma, Port of Rotterdam Authority, NL / Chairman SedNet* - *Adam Piestrzynski, dean Faculty of Geology, Geophysics and Environmental Protection, AGH University of Science and Technology, Poland* - *Edeltrauda Helios-Rybicka, on behalf of the AGH-local organizing team*
	Sediments and Society Chairman: Marc Eisma, Port of Rotterdam Authority, NL / Chairman SedNet
09.35-09.40	Sediment stories; raising awareness about the role of sediments *Goedele Vanacker, OVAM, Belgium*
09.40-10.00	Making sediment "relevant" to policy/decision makers: linking urban sediment management to social benefits and sustainability *Eugene Peck, Viridian Alliance, USA*
10.00-10.20	Economic modelling of the management of dredged marine sediments *Joe Harrington, Cork Institute of Technology, Ireland* *(CEAMaS project partners / funded by Interreg IVB North-West Europe)*
10.20-10.40	Is scientific knowledge enough? Considerations on sediment management. *Mafalda Carapuço, Universidade de Lisboa, Portugal*
10.40-11.00	Social, geographical, technical, environmental and economic approaches to strengthen marine sediment reuse options through the CEAMaS project *Tristan Debuigne, CD2E, France* *(CEAMaS project partners / funded by Interreg IVB North-West Europe)*
11.00-11.25	**Coffee break**
	Sediments and Society (continued) Chairman: Richard Eertman, Rijkswaterstaat, NL
11.25-11.30	*Videoclip "Room for the River", produced by Rijkswaterstaat, NL*
11.30-11.50	In situ management of contaminated sediment, habitat restoration, and community interests – can they co-exist? *Rebecca Gardner, Anchor QEA, Norway*
11.50-12.10	The role of the municipality in cleanup of contaminated sediments, lessons from the Thea Foss Waterway in Tacoma, Washington *Philip Spadaro, The Intelligence Group, USA*
12.10-12.30	Sharing knowledge on emerging contaminants and PFAS *Martijn van Houten, Witteveen+Bos, NL*
12.30-12.50	Human health risk assessment guidance for dredging and dumping at sea of marine and estuarine sediments *Julie Droit, Cerema, France*
12.50-14.20	**Lunch**

14.20-17.10	**Parallel Activities** A. Workshop on the Reuse of (contaminated) Sediments B. Session: Sediment Quality and Perception C. Session: Sediments in Historica land Recent Mining Areas, followed by session: Sediment Remediation and Uses	
14.20-17.10	**A. Workshop on the Reuse of (contaminated) Sediments** Convenors: Arjan Wijdeveld, TU Delft/Deltares, NL, Bruna Oliveira, Wageningen University, NL, Eugene Peck, Viridian Alliance, USA, Eric Stern, CDM Smith, USA *For background information on this workshop see page 3* This workshop is meant as a discussion platform for the direction in which the large scale reuse of sediments is going, and whether the use of secondary resources as a binder, a filler or catalyst has a place when looking at sediment reuse options. The outcome of this workshop together with the outcome of the other SedNet Working Group sessions (Getting Sediment at the European Strategic Research Agenda & Sediments in a Changing Environment) can help formulate the questions that need to be addressed on the (EU) strategic research agenda, and formulate solutions which are already promising.	
	B. Sediment Quality and Perception Chairpersons: Carmen Casado and Benoît Ferrari, Centre for Applied Ecotoxicology EAWAG-EPFL, Switzerland	**C. Sediments in Historical and Recent Mining Areas** Chairman: Peter Heininger, Federal Institute of Hydrology, Germany
14.20-14.40	Contamination of sediments in large riverine systems – assessment and its apprehension *Ewa Szalinska, Cracow University of Technology, Poland*	Contaminated sediments as a potential source of heavy metals in the Upper Vistula River, an historical mining and smelting area of South Poland *Edeltrauda Helios-Rybicka, AGH University of Science and Technology, Poland*
14.40-15.00	The complexity of sediment contamination in backwaters of the Elbe River, what can we learn from it and does it matter? *Susanne Heise, Hamburg University of Applied Sciences, Germany*	A comprehensive assessment of mercury loading, fate and transport within a mining impacted watershed *Eric Blischke, CDM Smith, USA*
15.00-15.20	Evaluation of the quality and significance of stormwater discharge to sediment quality in urban waterways *Katherine Cronin, Deltares, NL*	A field-based approach to linking biological responses of freshwater organisms to sediment contamination by metals *Iwan Jones, UK, Queen Mary University of London, UK*
15.20-15.40	Multi-decadal records of endocrine-disrupting compounds (PCBs, dioxins, furans, hormones, and parabens) in Rhône River sediment cores *Brice Mourier, Groupement de Recherche Eau Sol Environnement (GRESE), France*	
15.40-16.10	**Coffee break**	**Coffee break**
	B. Sediment Quality and Perception (continued) Chairperson: Susanne Heise, Hamburg University of Applied Sciences, Germany	**C. Sediment Remediation and Uses** Chairperson: Samira Brakni, CD2E, France
16.10-16.30	Contamination of coastal sediments from historic landfills: A ticking time-bomb *Francis O'Shea, Queen Mary University of London, UK*	Handling sediment transfer in practice *Dietrich Bartelt, DB Sediments, Germany*
16.30-16.50	Marine sediment indicators in the Gulf of Gdańsk and Oslofjord – a comparison of climate change impacts on the ecosystem *Gijs Breedveld, Norwegian Geotechnical Institute, Norway*	Strategic placement of dredged sediment to support surrounding resources *Joseph Gailani, US Army Corps of Engineers, USA*
16.50-17.10	The importance of understanding sediment dynamics to achieve a good chemical status in harbor environments *Johnny Teuchies, University of Antwerp, Belgium*	Transport of suspended sediment in ports, due to propeller activity *Anita Whitlock Nybakk, NGI, Norway*
17.10-20.00	**Welcome reception and Poster Session**	

Thursday 24 September 2015

	Valuing Sediments and their Services Chairperson: Jos Brils, Deltares, NL	**Workshop "Sediment Discharge Test"** Convenors Marieke Prins, Rijkswaterstaat, NL and Leonard Osté, Deltares, NL
	a. Mapping and assessment of sediment related ecosystem services	*For background information of this workshop, see page 3* - Welcome - Sediment quality and the objectives of the Water Framework Directive - Principles of the Sediment Discharge test (SDT) *by Marieke Prins* The Excel-application of the SDT *by Leonard Osté* Working with the SDT - Introduction Cases *by Marieke Prins and Leonard Osté*
09.00-09.30	Invited key-note: Mapping and assessment of ecosystems and their services (MAES) *Leon Braat, Alterra Wageningen UR, NL*	
09.30-09.50	Sediment-related ecosystem services – A definition and mapping approach *Miguel Péréz Quesada, University of Technology Darmstadt, Germany*	
09.50-10.10	Discussion	
	b. Examples of applying sediment related ecosystem services	
10.10-10.30	The utilization of bottom sediments to improve soil fertility *Tomasz Koniarz, University of Agriculture in Krakow, Poland*	
10.30-11.00	**Coffee break**	**Coffee break**
11.00-11.20	Microbial biostabilization – an important ecosystem service at microscale *Sabine Gerbersdorf, University Stuttgart, Germany*	Working with the SDT - Practical Exercises *by Marieke Prins and Leonard Osté* Summary, evaluation, conclusions *by Marieke Prins*
11.20-11.40	Lift up of lowlands, looking at the reuse of sediments on peat meadows by looking at the physical, chemical and biochemical properties in relation to the local situation *Arjan Wijdeveld, TU Delft, NL*	
11.40-12.00	Quantifying ecosystem service trade-offs at the catchment scale: from landscape management to aquatic protection *Sabine Apitz, SEA Environmental Decisions, UK*	
12.00-14.00	**Poster Session and lunch**	
	Parallel Activities A. SedNet Working Group: Sediments in a Changing Environment B. Getting Sediment at the European Strategic Research Agenda – Meeting of the SedNet Working Group Sediment Science and Policy Interfacing C. Special Session on the Impact of Fine Sediment on Ecology	
14.00-17.30	**A. SedNet Working Group: Sediments in a Changing Environment** Convened by Susanne Heise, Hamburg University of Applied Sciences, Germany, and Eric de Deckere, Antwerp Port Authority, Belgium *For background information on this Working Group session see page 4* The session will be divided into two parts: Part 1 will focus on the topic "when sediment becomes soil and soil becomes sediment". There will be an introductory talk, and statements/input from the participants are welcome. Please contact Susanne Heise (susanne.heise@haw-hamburg.de) about any presentations that you would like to give on that topic. Part 2 will be dedicated towards further topics of interest that should be followed up on in this working group, possibly in the form of future workshops lasting several days, supported by SedNet.	

14.00-17.30

B. Getting Sediment at the European Strategic Research Agenda –
Meeting of the SedNet Working Group Sediment Science and Policy Interfacing (SedNet WG Sediment SPI)
Moderators: Adriaan Slob (TNO, NL), Jos Brils (Deltares, NL, and representing H2020 project INSPIRATION)

For background information on this Working Group session see page 5

An interactive session to collate and discuss
1. preferred topics for the Strategic Research Agenda;
2. experiences regarding the use of scientific knowledge to tackle societal challenges (incl. improving of business opportunities);
3. predominantly used as well as promising alternative, national funding schemes/mechanisms/programmes for knowledge production and dissemination;
4. experiences regarding the use of any trans-national, common budget for scientific knowledge production.

You are invited to join this session to bring in and discuss your sediment related suggestions for these four topics.

14.00-17.30

C. Special Session on the Impact of Fine Sediment on Ecology
Convened by
- Adrian Collins, Rothamsted Research, UK
- Iwan Jones, Queen Mary University of London, UK
- Mike Stone, University of Waterloo, Canada

For background information on this Special Session see page 3

14.00-14.20	Linking agricultural fine sediment pressure and impacts on aquatic ecology for informing catchment management across England and Wales *Adrian Collins, Rothamsted Research, UK*
14.20-14.40	Using innovative geotextile constructions to control fine sediment transport and to improve water quality *Paul Stook or Gustav Egbring, Tauw Group, NL*
14.40-15.00	Exploring the linkage between fine sediment, phosphorus and stream ecology in wildfire impacted watersheds *Mike Stone, University of Waterloo, Canada*
15.00-15.20	Effect of diatoms on flocculation of suspended bed-sediments in a large shallow lake: consequences for ecology and sediment transport processes *Katherine Cronin, Deltares, NL*
15.20-15.50	**Coffee break**
15.50-16.10	Optical effects on aquatic ecosystems of fine suspended sediment, and optical methods for its monitoring and management *Rob Davies-Colley, National Institute of Water and Atmospheric Research, New-Zealand (to be confirmed)*
16.10-16.30	Sediment source risks in landscapes: from field scale scoring to Bayesian approaches *Sabine Apitz, SEA Environmental Decisions, UK*
16.30-16.50	Development and independent testing of a new biotic index of stream macroinvertebrate community response to deposited fine-grained sediment *Iwan Jones, Queen Mary University of London, UK*
16.50-17.30	Discussion and closure of session

18.00-22.00 **Visit to and dinner at the Wieliczka Salt Mine (see information on page 5)**

Friday 25 September 2015

09.00-10.50	**Parallel Activities** A. Short version of the Workshop "Sediment Discharge Test" B. Session: Understanding Sediments Fluxes and Budgets on a River Basin Scale C. Session: Building with Dredged Material and/or Sediments	
09.00-10.50	**A. Short version of the Workshop "Sediment Discharge Test"** This is a condensed version of the workshop held on 24 September in the morning; focus more on theory and less on trying out the tool by participants. *See for more information page 4*	
	B. Understanding Sediment Fluxes and Budgets on a River Basin Scale Chairman: Gijs Breedveld, Norwegian Geotechnical Institute, Norway	**C. Building with Dredged Material and/or Sediments** Chairperson: Astrid van Vosselen, Flemish Government, Belgium
09.00-09.20	Towards an integrated and cooperative management of fine sediment fluxes in a large transboundary basin: the case of Upper Rhône River *Christophe Peteuil, Compagnie Nationale du Rhône, France*	Management decision process of beneficial reuse of marine sediments in civil engineering applications *Gaetan Ngoufo Gangnimaze, Ecole Centrale de Lille, France (CEAMaS project partners / funded by Interreg IVB North-West Europe)*
09.20-09.40	Sediment flux from the Elbe River into the Elbe Estuary – indications from Multibeam Sonar Surveys *Axel Winterscheid, Federal Institute of Hydrology, Germany*	Concrete achievements containing dredged sediment carried out under of the "Sédimatériaux" approach in Nord-Pas de Calais region *Samira Brakni, CD2E, France* *(CEAMaS project partners / funded by Interreg IVB North-West Europe)*
09.40-10.00	The VERSEAU – TRACKSED - DRASTIC Project: Quantification of sediment fluxes in the Loire hydrographic basin *Rosalie Vandromme, BRGM, France*	A tool for pre-selecting beneficial uses of dam fine sediment *Antoine Faure, EDF R&D, France*
10.00-10.20	Suspended sediment and contaminant transport monitoring in navigable and unnavigable waterways (Wallonia, Belgium) *Anne-Cécile Denis, Institut scientifique de service public / University of Liège, Belgium*	Beneficial use of dredged material in agricultural land *Bruna Oliveira, Wageningen University and Research Centre, NL*
10.20-10.50	**Coffee break**	**Coffee break**

Pictures of excursion SedNet Oslo 2008



	Understanding Sediment Fluxes and Budgets on a River Basin Scale (continued) Chairman: Pieter de Boer, Rijkswaterstaat, NL	**Special Session: How to Build Public Trust for Sediment Management?** Convened by: Maik Bohne and Henrich Röper, Hamburg Port Authority, Germany
10.50-11.10	Contaminant fluxes across the sediment-water interface *Paul Frogner-Kockum, Swedish Geotechnical Institute, Sweden*	This session aims at discussing stakeholder involvement in general. The Elbe case will be presented as recent example and will lay ground for an open discussion with the SedNet community to share experiences with communicating and building trust with a broader public on complex issues involving sediments. The session will start with a 30 minutes introductory presentation by Maik Bohne and/or Henrich Röper, followed by a discussion session. *For more information see page 3*
11.10-11.30	From micro to macro scale – the impact on the sediment discharge after construction of the Three Gorges Dam on Yangtze River (Chang Jiang) *Aleksandra Dewiszek, University of Warsaw, Poland*	
11.30-11.50	Hydraulic and morphological model investigation of the River Oder along the Polish-German border *Thorsten Hüsener, Bundesanstalt für Wasserbau, Germany*	
11.50-12.10	Erosion modeling towards, and sediment transport modeling in the unnavigable watercourses in Flanders, Belgium *Bram Ferket, Antea Group, Belgium*	
12.10-12.30	Discussion and closure of session	
12.30-14.00	**Lunch**	
	Wrap-up Marc Eisma, Port of Rotterdam Authority, NL / Chairman SedNet	
14.00-15.00	Wrap-up of conference sessions and working groups *by session chairmen/convenors*	
15.00-15.15	SedNet Poster Prize 2015	
15.15-15.30	Closing and adjourn	

Saturday 26 September 2015

09.00-14.00	**Excursion by boat on the Vistula River to the historical village of Tyniec** Start and end of the excursion is near Wawel castle in the historical centre of Krakow. See for further details the leaflet that will be provided at the conference.

Conference Fee

Regular fee: 400 euro
Students: 100 euro
If a student has submitted an abstract that has been selected for oral presentation, then his/her fee is waived.

The fee includes admission to the whole conference programme, social (dinner) events on the evenings of 23 and 24 September 2015 and an excursion on 26 September. The fee excludes 23% Polish VAT.

Language

The conference language will be English. No translation facilities will be provided.

Conference Venue

The event will be hosted at the Faculty of Geology, Geophysics and Environmental Protection of AGH University of Science and Technology, Al. Mickiewicza 30, 30-059 Krakow, Poland.
AGH is one of the biggest technical universities in Poland with approximately 2000 teaching and research staff. Scientists from the Faculty of Geology, Geophysics and Environmental Protection were one of the first who initiated field research regarding geochemistry of sediments in Poland. First and the most important ecosystem of the research was the Vistula River, the biggest river in Poland, flowing through Krakow city. Vistula and its tributaries flow through the Carpathian region, which is a historical and present mining and smelting area in Upper Silesia. Krakow is an historic and visual gem. It's Poland's second largest city.
www.agh.edu.pl/en

Hotel accommodation

Suggestions for hotels can be found on the conference webpage on www.sednet.org

For Further Information

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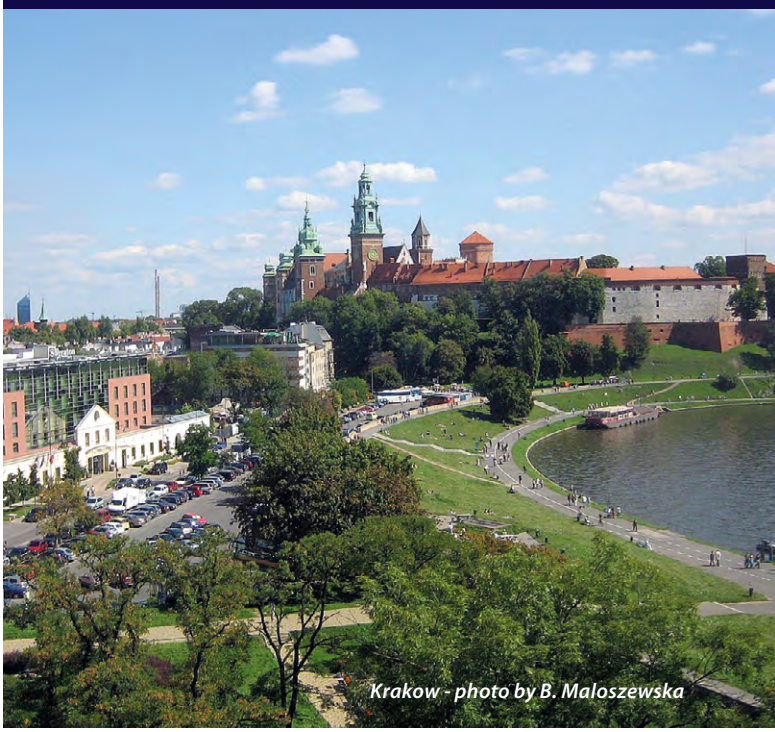
Entrance conference venue

SedNet

SedNet is the European network which aims to incorporate sediment issues and knowledge into European strategies to support the achievement of good environmental status and to develop new tools for sediment management. Its focus is on all sediment quality and quantity issues at the river basin scale, ranging from freshwater to estuarine and marine sediments. SedNet brings together experts from science, administration, industry and consultants. It interacts with the various networks in Europe that operate at national or international level or that focus on specific fields (such as science, policy making, sediment management, industry, education).

Special attention was devoted in recent years to the integration of sediment management in the WFD implementation process, and particularly in the River Basin Management Plans.

For further information about SedNet see www.sednet.org


Krakow - photo by B. Maloszewska