

SedNet Corner (Demand-driven, European Sediment Research Network)

SedNet regularly publishes a NEWSLETTER with information on the organization's activities. The first and second editions have already been issued and can be downloaded (www.sednet.org). The third edition will presumably be available before the end of October 2002. Here you will find more information on the Intermediate SedNet conference (definite date, outline, etc.). This 2nd SedNet Conference is scheduled for 2003 and will again be hosted by the SedNet home base at San Servolo Island in Venice, Italy (www.SedNet.org).



SedNet is the demand driven, European sediment research network. The SedNet mission is to provide a European network for environmentally, socially and economically viable practices of sediment management at river basin scales.

The SedNet activities are financially supported for three years by the European Union under the Energy, Environment and Sustainable Development program and within area 1.4.1 on 'Abatement of water pollution from contaminated land, landfills and sediments' (Thematic Network project, contract No. EVK1-CT-2001-20002, starting date: 1 January 2002).

More detailed information on SedNet and its activities is available via the SedNet website (www.SedNet.org). If you would like to join SedNet (which is free of charge) and ensure you receive all future newsletters, then please visit the website and complete the questionnaire at the 'join SedNet' page.

From the Editorial of the second SedNet newsletter

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At our Inaugural Conference (see our first newsletter and JSS 2002, No. 1, pp. 2–3, No. 2, pp. 54–66) it became clear that there is a need to prepare a strategic document that can serve as an umbrella for the SedNet activities to come, the Sediment Management Guideline. Currently, the SedNet team is preparing the first draft of this document that should describe how to evolve from mission to vision, to strategy, to guidance. In due time, we will make this draft available for your comments.

Guidance to integrated, sustainable sediment management, from local to river basin level, is the main and final deliverable of the EU SedNet project. The specific SedNet working groups, and especially their workshops, play a key role in achieving this goal. Therefore, we want to present the SedNet working groups and the titles, aims, dates and locations of their first workshops in this newsletter.

1 Working Groups

The SedNet conferences, and especially the workshops, will provide the essential input to the **Sediment Management Guideline**. Three technical Working Groups (WG 1 to 3) and three socio-economic oriented Working Groups (WG 4 to 6) address the most urgent sediment issues. Each WG organizes specific workshops where selected issues related to the scope of the WG are being handled.

Working Group 1: Site investigation and characterization

Leader/contact: Eric de Deckere (Deckere@uia.ua.ac.be); Joop Bakker (J.F.Bakker@rikz.rws.minvenw.nl)

Physical, chemical and biological investigation and characterization of sediments and the associated dredged material, in-situ at specific sites as well as ex-situ in the laboratory. Specific issues are, for example: in-situ physical sediment properties/characterization (stability, mobility, erodibility), development and imple-

mentation of monitoring techniques and strategies, data collection & handling (e.g., mapping), sampling & strategies (e.g. if and how mechanical properties of sediment must be quantified), harmonization of protocols, Toxicity Identification Evaluation (TIE), Bioassays, biomarkers, bioaccumulation, Sediment Quality Assessment (e.g., by using the Triad approach, i.e. a combination of chemical, bioassay and ecological assessment), lithographical mapping, sediment properties and cases and case studies.

Working Group 2: Contaminant behavior and fate in freshwater sediments and dredged material

Leader/contact: Damià Barceló (dbcqam@cid.csic.es)

Understanding of the behavior & fate of contaminants in sediment and dredged material including developments in knowledge on the possibilities of manipulating the behavior & fate and on the understanding of the availability of contaminants to aquatic, fresh water organisms (bioavailability).

Working Group 3: Sediment treatment

Leader/contact: Giuseppe Bortone (gbortone@regione.emilia-romagna.it)

Development and/or improvement and implementation of techniques and strategies to treat (clean up) contaminated sediment and dredged material. Developments in knowledge on in-situ as well as ex-situ treatment techniques: biological (bioremediation) as well as physical and chemical. Disposal of sediment in depots or pits in open (fresh) water is also included in the scope of this WG. Particular concern will be given to the evaluation of technologies and unit processes that have potential for use in a fast-track demonstration at a significant scale. The technologies will be evaluated according to the following criteria: sustainability, effectiveness, implementability, cost, full-scale suitability, potential for beneficial use of (post-treated) dredged material. There will also be specific attention in this WG for the profile and emerging priorities of future sediment remediation and/or reuse, in particular related to problems in catchments areas.

Working Group 4: Planning and decision-making

Leader/contact: Phil Owens (philip.owens@bbsrc.ac.uk)

Planning and decision making with respect to the management of sediment and sediment inputs. Specific issues are, for example: sources of sediment and sediment contamination in river basins; assessment techniques for sediment supply; the development of Decision Support or Management Tools & Systems modeling; planning to reduce sediment and sediment contamination inputs from local to basin scale; integrated sediment management – from source to disposal (excluding sea dumping). This will include attention to river basin level characterization of emission sources of contaminants, erosion, sediment-transport and deposition and chemical fate modeling approaches, and the prediction of the effects of technical or socio-economic measures and scenarios.

Working Group 5: Risk management and communication**Leader/contact:** Susanne Heise (s.heise@tu-harburg.de)

Methods of dealing with the risks of contaminated sediments and dredged material and communicating these risks. Examples of specific issues are: the development of Sediment Quality Criteria (chemical, ecological & bioassays, including the developments of a 'yard stick' for the results of bioassays), methods of deriving risk (the actual adverse effect of the contaminant) from hazard (the potential of a contaminant to cause harm). Furthermore, the scope of this WG is also on issues related to the communication with, and transparency to public and politicians (local, regional, national and international) by also focusing on education and dissemination of knowledge and risk assessment strategies.

Working Group 6: Financial and economic aspects**Leader/contact:** Martin O'Connor (Martin.OConnor@c3ed.uvsq.fr)

Development and validation of a framework of analysis and communication, that situates technical, chemical and environmental components of dredging and sediment management, in relation to economic, regulatory and financial components so as to establish an integrated perspective for decision making and sediment management including long-term goals for environmental quality and sustainable development. From this perspective, typical topics under the scope of this WG are: Analytical Evaluation Methods such as decision scenarios, multi-criteria decision support, cost-effectiveness and cost-benefit analyses, frameworks for problem owner concertation, integrating of formal evaluation methods with consultation and deliberation by problem owners.

2 Working Group Workshops

The **objective** of each SedNet workshop is to exchange knowledge regarding state of the art tools, technologies, and approaches related to sediment management. Related to the scope of the working group, the workshop will produce the output needed for the preparation of the sediment management guide (see above). Furthermore, the workshop output will be used to prepare a project overview of the most important current national and international research projects.

The workshops will also play a key role in the identification of the most urgent demands of problem-owners related to the management of sediment and dredged material. The results will be summarised in a 'cutting-edge, sediment management issues' catalogue.

WG1: Ecological (workshop 1) and biogeochemical (workshop 2) assessment methodologies for sediment quality. From freshwater to the coastal zone

6–8 November 2002, University of Antwerp, Antwerp, Belgium

These parallel SedNet workshops aim to make a first step toward a European harmonisation of assessment methodologies for sediment quality in both fresh and marine water. The purpose is to identify gaps, problems and successes in assessment methodologies used within research and monitoring programs.

More info: Eric de Deckere (eric.dedeckere@ua.ac.be) or Joop Bakker (j.f.bakker@rikz.rws.minvenw.nl) and SedNet website.**WG2: Chemical analysis and risk assessment of emerging contaminants in sediments and dredged material (workshop 1)**

28–30 November 2002, CSIC, Barcelona, Spain

The Workshop will focus on chemical analysis and risk assessment of emerging contaminants in freshwater sediments and

dredged material. Emphasis will be given to chemical analysis of emerging pollutants, like aromatic sulfonates, endocrine disrupting compounds and pharmaceuticals, isotopic speciation studies of organometallic compounds, to the movement of pollutants into river sediments, toxicity and risk assessment related issues and EU regulations. We hope that this Workshop will be a communication platform and will provide enhanced cooperation between problem owners, like river water and harbour authorities and problem solvers, lake universities and public and private research institutions.

More info: Damià Barceló (dbcqam@cid.csic.es) and SedNet website.**WG3: State of the art of sediment treatment – Discussion and definition of the treatment process units (workshop 1)**

28–29 October 2002, Rotterdam Municipal Port Management, Rotterdam, the Netherlands

The workshop aims to present the 'State of the art' on sediment Treatment (Ex-situ, In-situ and disposal) and the USEPA experience. The inventory of innovative technologies and of the ongoing research projects will be showed to the participants. The group will also discuss the criteria for the identification and selection of the applicable technologies. The definition of the data base process units and their attributes (efficiency, sustainability, investment and operational costs etc.) will be also defined.

More info: Giuseppe Bortone (gbortone@regione.emilia-romagna.it) and SedNet website.**WG4: Opportunities for river basin planning of sediment management: existing guidelines and the EU framework directives (workshop 1)**

28–29 October 2002, Cranfield University at Silsoe, Bedfordshire, United Kingdom

The aim of this workshop is to examine how the EC Water Framework Directive and other policies will impact on the way sediment is managed. We will discuss the Water Framework Directive and the problems its implementation may generate for sediment management as well as focusing on the opportunities it presents, the tools and techniques it will require, and the need for an independent sediment policy.

More info: Phil Owens (philip.owens@bbsrc.ac.uk) and SedNet website.**WG5: Problem formulation in Risk Management and Communication, Questions to Risk Assessment (workshop 1)**

26–27 September 2002, Technical University Hamburg-Harburg, Hamburg, Germany


This workshop will focus on the expectations from different perspectives connected with risk management of sediments and on the kind of information that will be required to meet these expectations. The WG will discuss the kind of data that risk management decisions need to be based upon in order to meet public risk perception or enhance public acceptance. We will discuss and communicate what information we need from other working groups, especially 1 and 2, and therewith make one step in the direction of an integrated approach of risk assessment and risk management processes.

More info: Susanne Heise (s.heise@tu-harburg.de) and SedNet website.

WG6: Methodological framework for the classification of sediment management issues (workshop 1)
2002, Paris, France

The location, date and specific aim of the first WG6 workshop will be announced as soon as possible via the SedNet website.

More info: Martin O'Connor (Martin.OConnor@c3ed.uvsq.fr) and SedNet website.

 **The Intermediate SedNet Conference, Venice 2003**
Monday 29 September to
Tuesday 30 September 2003 (end 5 p.m.)
Final SedNet Conference
The (preliminary) date and outline will be announced in due time

Conference Announcement, SETAC Europe 13th Annual Meeting, 27 April – 1 May 2003, Hamburg, Germany
Understanding the Complexity of Environmental Issues: A Way to Sustainability

<http://www.setaceu.org/hamburg.html>

Dr. Wolfgang Ahlf, Chair of the 13th SETAC Europe Annual Conference in Hamburg (ahlf@tu-harburg.de)
Dr. Susanne Heise, Organizing Committee (s.heise@tu-harburg.de)

SETAC (Society of Environmental Toxicology and Chemistry) is an independent non-profit professional society that provides a forum for individuals and institutions from academia, business and government, looking for multidisciplinary approaches to solving environmental problems.

The topic of the upcoming conference reflects the requirement to more fully integrate the multidisciplinary components of modern environmental science. Since many challenges to ecological and human welfare are found at the interface of disciplines, special emphasis will be given to the second part of the theme, i.e. to establish concepts for sustainable development including ecological, economic and social aspects. Other relevant science communities also define this specific problem and we encourage all interested persons to link their respective capacities. We are collaborating on this common goal with the German Association of the Club of Rome, which will support the SETAC Europe 13th Annual Meeting with high-level speakers and sessions. The Conference focuses on seven main topics:

1. Environmental Chemistry
2. Ecotoxicology: Methods and Effects
3. Marine Environment
4. Ecological Impacts and Human Health
5. Risk Assessment and Management
6. Managing Product Life Cycles
7. Science and Politics for a Sustainable Development

We will continue to provide students with seminars on professional development and emphasize the opportunities to interact with established environmental professionals from the private, public, and academic sectors. If you have any suggestions for an interesting platform, symposium, debate, or interactive poster session, please feel free to contact the Organizing Committee or the SETAC Europe Office. The Organizing Committee is also interested in recruiting volunteers for chairing sessions.

 **Conference on Remediation of Contaminated Sediments**
Venice, 30 September (start 6 p.m.) to 3 October 2003



To provide a forum for exploration of the problems of contaminated sediments and the potential solutions, the First International Conference on Remediation of Contaminated Sediments was held in Venice in October 2001; the meeting was attended by approximately 450 sediments and remediation experts from 40 countries around the world. They attended more than 200 platform and poster presentations dealing with characterization and ecological and human-health risk assessment; in situ treatment; dredging; beneficial reuse; natural recovery; and a variety of specialized treatment methods.

Because of the outstanding response to the first conference, the Second International Conference on Remediation of Contaminated Sediments will be held in Venice, 30 September – 3 October 2003. The city is an ideal setting for a conference on this topic because of the sediments remediation efforts being exerted there by the local, regional, and national governments.

As was the case in 2001, the 2003 Conference is being sponsored and organized by Battelle, a not-for-profit organization engaged in technology development and implementation, national laboratory management, and technology commercialization. The Italian Ministero dell'Ambiente e Tutela del Territorio is a co-sponsor of

the 2003 Conference. The cooperating organizations, which assist with distribution of information about the Conference, are:

- Agenzia Nazionale per la Protezione dell'Ambiente (ANPA)
- Autorità Portuale di Venezia
- Central Dredging Association (CEDA)
- DHI Water and Environment
- Environment Canada
- International Association of Ports and Harbors (IAPH)
- *Journal of Soils and Sediments*
- PIANC—International Navigation Association
- U.S. Army Corps of Engineers Center for Contaminated Sediments (CCS)
- U.S. Environmental Protection Agency

Information on abstract submission, registration, and the conference schedule can be found at www.battelle.org/sedimentscon. *Abstracts to be considered for the program will be due 10 January 2003.* To request a copy of the Call for Abstracts brochure, please send an e-mail with your complete name and postal address to sedimentscon@battelle.org. Inquiries about co-sponsoring or exhibiting at the conference should be directed to:

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