SEDNET E-NEWSLETTER – DECEMBER 2006

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SedNet Round-Table discussion and Conference - Summary of Discussions

Submitted by S. Heise, editor of the Sediment Corner, SETAC Globe, authored by Piet den Besten (RIZA, the Netherlands) and Sabine Apitz (SEA Environmental Decisions Ltd, UK)

Sediments are an essential, integral and dynamic part of hydrologic systems, which provide connections between land, rivers, estuaries and the sea. Whilst for decades, many scientists have treated the complex and abundant biota in the vast soil and sediment ecosystems that cover this planet as 'black boxes', these millions of species are critical to the maintenance of essential ecosystem services such as carbon sequestration, nutrient cycling, soil and shoreline stabilization and water purification¹. The functioning and health of these ecosystems, and their ability to deliver services are intimately linked to sediment quality, quantity, and dynamic balance. It is clear that human activities, from the local to the global scale, are affecting biodiversity and functioning, and that sectoral management of soils and sediments in support of one ecosystem service, such as abstraction, dredging, forestry, etc., can negatively impact other services, either in that system, or in other connected systems. However, to what extent this is so is not clear, nor do most of our soil and sediment assessments address this issue².

Because of their ability to transport and accumulate contaminants, much of the regulatory attention related to sediments has been on their quality, and thus in the first three years of SedNet³ contaminated sediments in freshwater systems were the main focus. However, it is clear that sectoral management decisions such as the damming of rivers, dredging of waterways, abstraction and many other activities can have significant hydromorphological effects that can impact ecosystem functioning due to sediment excess or lack. Thus, to achieve the objectives of European ecosystem-based policy such as the Water Framework Directive (WFD), the Marine Strategy Directive (MSD), the Habitats Directive (HSD), Integrated Coastal Zone Management (ICZM) and others, it is essential that more attention is paid to the connecting role of sediments, from land to the sea. To achieve good ecological status or potential and to support the well-being

of the European economy at the same time, sustainable sediment management is important.

To continue to encourage integrated thinking on river basin management, the now self-funded SedNet held a round-table discussion entitled "Sediment Management - an Essential Part of River Basin Management Plans" form the 22nd to 23rd of November, 2006, in Venice, Italy. Immediately following, to address their new, expanded focus, SedNet organized an open scientific conference "Sediment key-issues between the river and the sea" from the 23rd to 24th of November. Both were hosted by UNESCO at the Palazzo Zorzi.





Footnotes:

- 1. Wall DH (ed) (2004): Sustaining Biodiversity and Ecosystem Services in Soils and Sediments. Island Press, Washington, DC, 275 p
- 2. S E Apitz (2006) Challenges in the INTERCOMP area. Journal of Soils and Sediments 6(4)
- 3. The EC Framework 6, demand-driven sediment research network; <u>www.sednet.org</u>.

Round-Table discussion:

Sediment Management - an Essential Part of River Basin Management Plans

The Round-Table session brought together invited river basin managers, user group representatives and scientists from four selected European river basins, Danube, Douro, Elbe and Humber, to discuss their interests, challenges, expectations and how to move forward in sediment management at the river basin scale. The WFD requires that River Basin Management Plans (RBMP) be produced and published by 2009. If SedNet's goal that sediment management (quality and quantity) becomes a part of these plans is to be achieved there is a need for scientific and practical guidance on how to consider sediment management issues. An objective of the round-table discussions, then, was to use real world examples to develop conceptual approaches on how to address sediment related issues based on legal requirements, the needs of users and scientific advice.

The 23 current member states of the EC have 96 River Basin Districts (RBDs), 27 of them crossing international boundaries. Other European countries that wish to adopt European Union approaches, and the proposed accession countries, bring dozens more RBDs into the equation. However, a recurring theme in discussions of the case studies was that each case was unique, for scientific, socioeconomic and political reasons, and there was great concern that a "one size fits all" European approach is not imposed upon all areas. Sediment quality (due to contaminants and nutrients) was a focus of concern in three of the case studies, and there was a recognition of the need for better understanding and control of current and historical sources of contaminants, even when this involved international and cross-regional cooperation. However, more discussion focused on issues of sediment balance. Often in the same river basin, different areas had opposite sediment quantity issues - activities such as dredging and reservoir flushing were causing ecological impacts such as smothering, habitat loss and light attenuation, whilst downstream sediment lack was causing erosion or loss of wetlands and other critical habitat or coastal protection. There was clear recognition that there is a need to better understand sediment sources, dynamics and their interactions with both human management and ecosystem functioning and services. At the same time, there was recognition that human intervention such as dredging could not cease, and that

solutions needed to be both ecologically and economically sustainable. In all the case studies, there was a recognition that this would require creative communication and collaboration between various sectors, and that, although not all objectives were achievable, win-win situations must be sought.

There is a need for wide recognition that the current "at risk" classification within the WFD is a screening level, which should trigger spatial discrimination, further study of effects and tests of the significance of impacts. This requires an evidence-based approach to link sediment state to impacts, and integrated thinking about rivers and transitional waters. There is a need to collate available data to identify knowledge gaps and enhance understanding, linking sediment management to environmental and climate change issues, without compromising the ability of the system to respond. This requires an adaptive management approach.



In summary, sediment was found to be an important issue in all of the four river basins (and in others discussed), but each river basin has specific characteristics; therefore sediment management will differ in each. Estuaries are different from rivers; there was a feeling from those who manage estuaries that the past river basin focus of SedNet resulted in too much 'fluvial' thinking thus far. Whilst many lessons learned will be of relevance, differences can be expected in coasts and estuaries, especially in terms of time scales, effectiveness of measures, and the closer linking of sediment management to environmental/climate change issues on the coast. It was agreed that integration of the requirements of different directives will be difficult for river basin managers and users, but that this is essential if their objectives are to be met.

Another discussion point was the development and use of sediment environmental quality standards (EQS). These should be regarded as high level screening values; the start of diagnostics (using tiered approaches). It is essential to use different lines of evidence, and to link sediment state to impacts, and thus a good understanding of the system is necessary. The role of EQS is different in upstream parts of the river basin to that in downstream parts (estuaries), and EQS may not be appropriate for sediments in highly variable situations where measurable state-impact links are not well understood. A further concern was that EU Policies may create conflicting ambitions, for instance between the environment, transport and health objectives.

Finally, the round-table concluded that achieving good ecological status requires a proper attention to sediment issues, with an awareness of natural variation and differences between catchments. Current WFD "at risk" classifications of water bodies require further spatial definition and a linkage of risk to impact. Those involved in transitional water management need better engagement with those involved with river management (and vice versa). There is a requirement to collate available data to identify knowledge gaps and enhance understanding. Finally, it was felt that the EU should not only fund problem identification, but also problem solving processes.

A complete summary of the Round-Table discussions, including details about the four case studies, will be available on the SedNet website by the end of January 2007.

The outcome of the Round-Table discussion will be presented at the seminar "Navigation and the EU Water Framework Directive" organised by PIANC on 31 January 2007 in Brussels.

SedNet Conference:

Sediment key-issues between the river and the sea

Not surprisingly, the scope of the scientific presentations invited for this conference reflected the complexity of issues described above. Whilst a number were on the distribution, sources and effects of contaminants in sediments (quality), a large number focused upon studies and tools to better understand the sources, transport, dynamics and effects of sediments (quantity) from land to estuaries and the sea. Sediment management talks addressed management strategies, decision frameworks, and conceptual and communication tools for better linking sediment science, policy and management. A unifying theme through many of the sessions was how sediment mediates intimate links between human activities and ecosystem functioning, using the concept of ecosystem services⁴ as the connection.

Whilst there was a general agreement about the important role of sediment in mediating ecosystem services, the emphasis on sediment as a problem or a resource (or both) differed depending upon the focus of various studies. It was recommended that the role of sediments in RBMPs could only be effectively addressed with a focus on the links between economic activities, ecosystem function and ecosystem services. Although implicitly required in European policy, a conclusion was that ecosystem-based, rather than standards-based management was currently not being carried out. A role of SedNet and its associated scientists, stakeholders and managers should be to identify essential ecosystem services, and then to manage human activities and sediments to protect and enhance the habitats that are essential to provide those services. Whilst some felt that the serious impacts caused by excess sediments should result in the consideration of suspended matter as a pollutant to be eliminated, others were more concerned with the impacts of sediment loss, and it was generally felt that science and policy should focus on a balance. Win-win situations are possible, and it is necessary to develop ways to meet economic and ecological objectives.

There was concern that whilst many of the processes controlling sediment dynamics responded on very long timescales to short timescale actions and decisions, there was a general feeling that we could learn from historical records and trends, but that decisions could not always wait for certainty, and that caution and adaptive management were necessary.

Hydrologic and sediment systems are not static, even under natural conditions. However, human intervention can change the rates and extents of those changes. Humans have and will continue to change these systems, but there is a growing need to understand and control the effects of these changes. Sediments are a critical link between many systems and activities, and thus their role must be understood and managed. It is clear, however, that the role of sediments is so diverse and far-reaching that a European Sediment Directive would not be the right approach, as there is no on-size-fits all solution to the issues. Rather, it is important to understand the role of sediments in various ecological and socioeconomic processes. SedNet seeks to provide a forum for sediment-related discussions linking the scientific, political and technical aspects of sediment and it impacts from land to the sea.

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Footnote 4:

1. UNEP (2006): Marine and coastal ecosystems and human wellbeing: A synthesis report based on the findings of the Millennium Ecosystem Assessment. United Nations Environment Programme, Nairobi, Kenya, 76 pp

SedNet Conference, 23-24 November 2006, Venice, Italy

"Sediment key-issues between the river and the sea"

An impression by Phil Owens, Cranfield University, UK

Sediment, along with water, provides a link between the fluvial, estuarine and marine environments. Thus it connects river catchments to the coastal zone. To date, however, it can be argued that work on sediment dynamics and management in freshwater river catchments has tended to be isolated from work on estuarine and marine areas, except at critical interfaces or where one provides input to the other. With the introduction of the Water Framework Directive and Marine Strategy, and associated research and policy requirements for these, there is a need to assess the role of sediment at the river-sea interface. In order to encourage this interaction, SedNet organized a conference on the 23-24th November 2006 entitled: *Sediment key-issues between the river and the sea*, which was hosted by UNESCO at Palazzo Zorzi in Venice, Italy.



The conference was attended by about 100 delegates from 15 countries. There were 16 oral and 23 poster presentations. On the afternoon and evening of the 23rd November, there was a reception at Palazzo Zorzi during which the posters were displayed and the SedNet book series was launched by Jürgen Büsing of the European Commission - DG Research. SedNet books 1 (Barceló and Petrovic, 2007) and 2 (Bortone and Palumbo, 2007) were officially handed to the EC in recognition of their financial support for the 3-year first phase of SedNet (2002-2004). Books 3 (Heise, 2007) and 4 (Owens, 2007) of the SedNet series are officially due out in early-mid 2007.

Day-2 of the conference started with welcoming presentations by Axel Netzband (Hamburg Port Authority, Germany, and Chairperson of SedNet) and Philippe Pypaert (UNESCO, Italy). This was followed by a summary by Piet den Besten (Ministry of Transport, Public Works and Watermanagement/RIZA, the Netherlands, and SedNet Steering Group) of a round-table workshop organized by SedNet at the same venue on 22-23 November. Piet presented the outcome of the discussions by regulators, scientific experts and stakeholders on sediment issues and management in four river basins: Danube, Douro, Elbe and Humber. One thing that became clear during the workshop was the fact that sediment was an important, and perhaps largely neglected, part of all four river basins, and that River Basin Management Plans as part of the WFD need to pay more attention to the role and functioning of sediments within water ecosystems.

The first key-note presentation was by Patrick Meire (University of Antwerp, Belgium) on *Estuaries: the transition zone between land and water.* This presentation described the temporal and spatial dynamics associated with water, sediment and chemical fluxes and how estuarine environments are sensitive to hydrodynamic and geomorphological changes. The following session was on *Sediment Contamination* and included presentations by Rosa Maria Bertolotto (Agenzia Regionale Protezione Ambiente Liguria, Italy), Slobodan Miko (Croatian Geological Survey, Coatia), Aud Helland (Norwegian Institute for Water Research, Norway), Aris Karageorgis (Hellenic Centre for Marine Research, Greece) and Michiel Kotterman (Wageningen-TNO Imares, The Netherlands). The presentations were concerned with understanding sediment-contaminant (metals, nutrients, POPs



etc) dynamics, in terms of sources, concentrations and fluxes, in transitional and coastal waters. They described different methodological approaches, issues and constraints to sediment assessment and evaluation.

The second session was on *Sediment Transport and Dynamics* and opened with a key-note presentation by Victor de Jonge (Groningen University, The Netherlands) on *Functions of mud in estuarine and coastal ecosystems*. Victor's presentation described the lessons that can be learnt from basic ecological theories for a wider understanding of sediment dynamics for improved

sediment management in estuarine and coastal environments. Other presentations in this session were by Paula Freire (National Civil Engineering Laboratory, Portugal), Larissa Naylor (Environment Agency, UK), Albert Rovira (IRTA, Spain), Rodney Stevens (Göteborg University, Sweden) and Jim Bogen (Norwegia Water Resources and Energy Directorate, Norway).

The last session focused more specifically on *Sediment Management* and included a pleasing mix of approaches. Lindsay Murray (CEFAS, UK) opened the session with a key note on *The benefits of the use of dredged material in the aquatic system* using case study examples to illustrate how the physical management of sediment in estuarine and coastal areas can result in societal and

ecological benefits. Alternative sediment management approaches and strategies were provided by Maria Jesus Belzunce (AZTI-Tecnalia, Spain), Sabine Apitz (SEA Environmental Decisions, UK) and Adriaan Slob (TNO, The Netherlands), which further highlighted the important role of sediment within environmental-, ecosystem- and policy-based decision-making.

As a summary, the three key-note speakers were asked to provide key statements that partly summarized their presentations as well as some of the others, and these were:

- Ecosystem-based management is essential and often not found in EU-legislation.
- Integration is necessary, not only with regards to sediments.
- Fundamental direct and indirect human activities should also be considered as pollutants.
- Let's be humble. There is a lot we still don't know. All river systems have their own characteristics.
- Solutions have to support both economy and ecology, one can't live without the other..
- Although there is a lot we still don't know, we must not stop to act.

As a general conclusion, Axel Netzband explained that while sediments are clearly important in all riverine, estuarine and marine systems, that there is not one simple management solution that fits all situations. SedNet can, however, play an important role through facilitating discussion between various interested parties and experts and via discussions with policy-makers including the EU.

The SedNet Steering Group would like to thank all of the attendees, the oral and poster presenters, session chairs, UNESCO for hosting the conference, and Consorzio Venezia Nuovo for helping organize the poster session. It is planned that selected presentations from the conference will be published in *Journal of Soils and Sediments* in late 2007. For further details contact Phil Owens: owensp@unbc.ca.

Abstracts and slides of the oral and poster presentations can be found on <u>www.SedNet.org</u>.

First SedNet-Elsevier books available and presented to the EC

The first books in the SedNet-Elsevier book series "Sustainable Management of Sediment Resources" have been published. In these books the book editors together with several top-level scientists from the SedNet network put in a remarkable and admirable amount of energy, and of their scarce time, to further shape their thoughts and ideas as shared in the many, European Commission (EC) funded workshops and conferences organised by SedNet between 2002 and 2004. On 23 November 2006, at the 4th SedNet conference in Venice, these first books were presented by Jos Brils (former SedNet coordinator), to Dr. Jürgen Büsing, (former EC scientific officer related to SedNet).



Dr. Büsing in his response praised SedNet. He mediated that less then 1% of the EC funded projects achieve what SedNet has achieved, hence SedNet can be regarded as a big success. SedNet to date has reached a level where the Commission is expecting SedNet to propose a European sediment research agenda. Key sediment research issues may thus find its way in future EC Framework Programme 7 calls.

The full text of the book presentation can be read at the SedNet website at: <u>http://www.Sednet.org/news/2006 12 17.htm</u>.





How to order SedNet-Elsevier books?

You can order the books from your bookseller or directly from Elsevier: books.elsevier.com

SedNet-Elsevier book series on "Sustainable Management of Sediment Resources":

Volume 1 - <u>Sediment Quality and Impact Assessment of Pollutants</u> Barceló, D. and Petrovic, M. (Eds) (2007). ISBN: 0-444-51962-9, 348 pages, Euro 107.00, USD 130.00, GBP 74.00

Volume 2 - <u>Sediment and Dredged Material Treatment</u> Bortone, G. and Palumbo, L. (Eds) (2007). ISBN: 0-444-51963-7, 222 pages, Euro 82.95, USD 99.50, GBP 57.99

Volume 3 - <u>Sediment Risk Management and Communication</u> Heise, S. (Ed.) (2007). ISBN: 0-444-51965-3, 300 pages, Euro 82.95, USD 99.50, GBP 57.99

Volume 4 - <u>Sediment Management at the River Basin Scale</u> Owens, P.N. (Ed.) (2007). ISBN: 0-444-51961-0, Euro 82.95, USD 99.50, GBP 57.99

SedNet Steering Group

Phil Owens of Cranfield University, UK, will change jobs by the end of 2006 and as a consequence move to Canada. Phil's position in the SedNet Steering Group will be taken over by Professor Sue White. Sue is Chair in Integrated Catchment Management within the Natural Resources Department at Cranfield University. She heads the <u>Integrated Earth System Sciences</u> <u>Institute</u> and has an interest in the management of sediment within integrated environmental management programmes. Sue has international experience of soil conservation, sediment delivery, sediment transport and sedimentation issues through a range of applied, monitoring and modelling studies. Within the UK sediment is an issue for many freshwater bodies in terms of intermittent high sediment concentrations, morphological change, associated sorbed pollutants, and dredging management. Together with Prof. Sabine Apitz, Sue coordinates a national sediment network, SedComUK, whose aim is to bring together a range of disciplines and stakeholders interested in sediment to improve management at the catchment scale.

The SedNet Steering Group wishes to thank Phil for his contributions and enthusiasm which helped SedNet become what it is today. Phil's new contact details are: Phil Owens Chair in Landscape Ecology Environmental Sciences Program University of Northern British Columbia Prince George British Columbia Canada – V2N 4Z9 Email: owensp@unbc.ca A warm welcome from the SedNet Steering Group to Sue White and also to Audun Hauge, another new Steering Group member who attended the SG meeting on 22 November. Audun works with the Norwegian Geotechnical Institute (NGI). NGI is involved in sediment management, with a specific interest to marine sediments and remediation options.



The 12th Magdeburg Seminar on Protection of Waters

The 12th Magdeburg Seminar was held from 10 to 13 October 2006 in Český Krumlov, Czech Republic. Like the previous Magdeburg conferences, this Seminar provided a platform for exchange of expertise between scientists, practitioners, and administrators in the fields of hydrology, water quality and aquatic ecology. Nearly 300 participants mainly from the Czech Republic and Germany, but also from other Eastern and Central European countries, discussed challenges of the further implementation process of the European Water Framework Directive in transboundary rivers, aspects of planning in river basin districts, and the impacts of extreme hydrological events against the background of the anticipated climate change. SedNet acted as one of the co-organisers of the conference and informed about its activities with an own information desk. One of the ten conference sessions was completely dedicated to the sediment issue. In this session, which was cochaired by Frantisek Pojer, Deputy Minister of the Environment of the Czech Republic, and Peter Heininger from the SedNet steering group, themes addressed included the hydraulic stability of old contaminated sediments in rivers, their risk assessment, the sediment management in the tidal Elbe, the information system 'Sedimentkataster' of the German Federal Institute of Hydrology (BfG), the natural retention of contaminants in floodplains and the agricultural use of floodplains (see also: <u>www.mgs.vltava.info</u>).

Working Group "Sediments and quality status of waters"

The Working Group "Sediments and quality status of waters" is a scientific board in the <u>Water</u> <u>Chemical Division</u> of the German Chemical Society (GDCh) with the aim to provide a platform of expertise exchange between universities, research institutions, governmental and administrative agencies, as well as technical associations and interest groups. At their regular meetings, the working-group members present and discuss recent results of pertinent research projects at national and international levels. The current focus of interest is on the topic "Mobility of sediments and suspended particulate matter (SPM) and their significance in the mass transport in river basins, with the example of the River Elbe and its tributaries". Besides the general assessment of the influences of flood events on the sediment budget of river systems, the following issues are currently under review:

- Study of early diagenic processes in fresh river sediments originating from suspended particulate matter;
- Quantification of event-related (flood-flow/low-flow and summer/winter) retention of material and contaminants or their release in the still-water zones of rivers (e.g. groyne fields, impoundments, harbour basins, scours) and in the actual floodplains;
- Balances of nutrient and contaminant deposits in groyne fields (being the primary stillwater zones in the Middle Elbe) over a longer river reach;
- Model-based coupling of data on event-related actual sedimentation, erosion-stability of sedimented SPM, and the long-term sediment accumulation in groyne fields;
- Changes in the bioavailability of sediment-bound contaminants under the impact of hydrological, chemical, and microbiological processes.

The contact person of the Working Group "Sediments and quality status of waters" is Dr René

Schwartz of the Institute of Environmental Technology and Energy Utilities of the Technical University Hamburg-Harburg (<u>schwartz@tu-harburg.de</u>).

Invitation to join 1st public General Assembly RISKBASE

RISKBASE is a recently started Coordination Action (CA) project under the 6th Framework Programme (FP) of the European Commission (EC). This CA aims to review and synthesise the outcome of EC RTD FP projects, and other major initiatives, related to integrated risk assessment-



based management of the water/sediment/soil system at the river-basin scale. The synthesis will lead to the delivery of: 1) An overarching concept, generic approach and guiding principles to integrated risk based management of river basins, 2) Recommendations towards evolution and implementation of risk based management in national and community policies and towards implementation in management, and 3) A proposal for the European research agenda related to risk based management.

The reviewing and synthesis will be done by leading European scientists and representatives of major, European stakeholder groups, amongst others in a series of public, thematic workshops and public General Assemblies.

The 1st public General Assembly (GA), entitled "Towards Risk-Based Management of European River Basins" will be held in Seville, Spain at 24-26 January 2007. This 1st GA aims to further set the scene for the activities in RISKBASE. The GA programme includes key-note presentations from the perspective of River Basin Management (ICPDR, EC WFD Pilot River Basin Network), European and national policy development and implementation (EC DG Environment and UK Environment Agency), NGO (WWF), Industry (Euro Copper) and several key-notes from top-level scientist (a.o. a keynote from the EC FP6 Integrated Project ModelKey) and many more.

The detailed GA programme as well as details on how to register (free of charge) and book your hotel are available in a dedicated flyer that is available through the recently launched RISKBASE website: <u>www.riskbase.info</u>. More information can also be obtained through the RISKBASE coordinator, Jos Brils, email: jos.brils@tno.nl.

Europe - Africa : 0 - 2

What is this all about? Well, we all know that football matches easily attract public and hence policy makers attention. How opposite is this to sediment management in Europe. The interest in sediment and its management is not a 'hot' issue in Europe. You will seldom see a top-level European politician or governmental representative participate in a sediment conference. Thus it maybe an eye-opener for Europe to take notice of the overwhelming attention for sediment management in Africa.

On 12-14 November 2006 the 1st UNESCO International Sediment Initiative (ISI) Conference was held in Khartoum, Sudan, with a focus on the sediment management issues at stake in the River Nile. The ISI conference opening session was addressed by the President (!) of the Republic of Sudan: Field Marshal Omer Al Bashir. Furthermore several concerned Ministers, a.o. of Water Resources, as well as other top governmental representatives of Sudan and other states along the Nile participated the conference.

The President of Sudan said in his opening presentation that "sediment is important in life, but it also has its drawbacks on social and economic aspects in our country. Our agricultural schemes and hydroelectric power sector are drastically affected by sediment. This costs us a lot of money which is needed for the rehabilitation of our infrastructure and the provision of basic services for the affected areas".

More than 300 experts and academicians from different parts of the world attended the conference which aimed at ensuring sustainable sediment management, in the context of sustainable water resources development at global scale. In the afternoon of November 14th, the conference wrapped up its sessions and issued the 'Khartoum Declaration'. It declares that the forum added a new dimension to the ongoing efforts of ISI and facilitated exchange of experiences in research and best practices. It also aimed at ensuring sustainable sediment management, in the context of sustainable water resources development at global scale. The ISI conference participants call upon national governments, regional and international organizations to allocate adequate funding and

give institutional support for sedimentation research, development and management, emphasizing on the socio-economic impacts of sedimentation and value sediment as a resource, cooperation among riparian countries on trans-boundary rivers for integrated river basin management including sediment issues for the mutual benefits of all stakeholders in a basin.

A more extended report on the ISI conference, including some pictures, can be found at the \underline{ISI} website. For more info on UNESCO ISI you may also contact Jos Brils, the SedNet representative in the ISI Steer Group, e-mail: <u>jos.brils@tno.nl</u>.

MAPO Enhancing Research and Development Projects to find Solutions to Struggle against various Marine Pollutions

MAPO is a Specific Support Action (SSA) funded by the EU Commission within the 6th Framework Programme and is implemented by a Consortium of 13 partners from 11 different European countries specialized in various marine pollution relevant fields, including National Contact Points (NCPs), maritime agencies, research institutions and consultants. Main goal of the project is to assist European SMEs and other actors to become integrated in ongoing or planned RTD projects, or to build new technological partnerships focusing on detection, treatment, warning and prevention of all types of marine pollution.

MAPO is developing a European market and technology driven cartography of SME-skills relevant for marine pollution, to help interested SMEs and current and future project coordinators to easily identify and find right skills and expertises as well as research partners and business opportunities, with the ultimate goal to protect the European marine environment.

MAPO also organises specific matchmaking events to introduce marine pollution relevant European RTD programmes, to identify and launch first ideas that could lead to project proposals, and to bring together SMEs and coordinators from current and planned projects.

In addition, a major European matchmaking conference will be organised when first calls for proposals of the 7th Framework Programme (2007-2013) are launched presumably at the end of December 2006, to bring together all relevant stakeholders in the field of marine pollutions, with bilateral meetings organized in advance by MAPO.

To facilitate matchmaking and networking between SMEs on the one side, and existing or prospective project or proposal coordinators on the other side, but also to gain a wider audience, a project homepage (<u>www.marine-pollutions.org</u>) has been installed and coupled with a mailing list, to introduce relevant SMEs, publish new project ideas, proposals and partner requests, but also to inform about relevant news and events on marine pollution (e. g. last calls for propsals, state-of-the-art research, SME-relevant instruments in this field).

MAPO partners seek also to find a wider public and so to impact and reach an audience far beyond science and industry. For this reason, the project is oriented towards all European citizens, as it deals not only with problems and obstacles encountered by SMEs (like improvement of technologies, market access and gains of new markets), but also by European people (like protection of coastal waters, marine ecosystems, cultural and natural heritages).

In this context, MAPO partners also hope that "environment defence organisations (NGOs)" will join the project to take concerns and expectations of European citizens into account, and consequently help to provide, thanks to future European projects, an answer to most urgent requests.

Full text of the MAPO article can be found on <u>www.SedNet.org</u>.

For more information, please contact the MAPO project coordinator Francoise Duprant, TPI, Brest, France (<u>francoise.duprat@tech-brest-iroise.fr</u>), or Dr. Rudolf Reuther, BfU, Germany (<u>rreuther@bfu-int.de</u>).

UK Defra releases tender for Developing a UK Strategy for managing contaminated marine sediments

The UK Department for Environment, Food and Rural Affairs recently released a tender for developing a UK strategy for managing contaminated marine sediments. Detailed information can be found at www.SedNet.org, there you will also find the template with guidance for applications (RUUD). Individuals, contractors or consultancies can tender for one or more of the tasks, however it is expected that more than one company will be undertaking the different tasks. The closing date for applications is the 12th January 2007.

Publications

Soil Erosion and Sediment Redistribution in River Catchments: Measurement, Modelling and Management

Editors: P.N. Owens, National Soil Resources Institute, Cranfield University, UK and A.J. Collins, Landcare Research, Palmerston North, New Zealand July 2006 – 352 pages – Hardback 978 0 85199 050 7

This book reviews the major achievements that have been made in soil erosion and sediment redistribution research and management. It presents work from key players in river basin soil erosion and sediment redistribution, from sources to sinks, from field to riverbank, and from academia to policy and industry. It examines the developments made in three themes – measurement, modelling and management – and covers a variety of scales (in both time and space) and geographical locations. The book concludes by identifying future requirements for river management policies.

For more info about the contents see the flyer on www.SedNet.org

Biological assessment guidance for dredged material

Report of EnviCom - WG 8, issued January 2006

This guidance describes the use of biological tests of dredged material to distinguish sediments that pose minimal hazards from those that will require special handling or treatment. Increasing interest in implementing environmentally sustainable practices for developing and maintaining navigation and port infrastructure has created a need for technical guidance on a range of management issues. Responsible management of dredged material is a key element of sustainable port management. The International Navigation Association (PIANC) has provided technical leadership in developing guidance on the management of dredged material. Guidance contained in "Management of Aquatic Disposal of Dredged Material" (PIANC 1998) and "Environmental Guidelines for Aquatic, Nearshore and Upland Confined Disposal Facilities for Contaminated Dredged Material" (PIANC 2002) provide detailed information concerning environmental and engineering aspects of managing clean and contaminated dredged material. The guidance provided herein is the product of EnviCom Working Group 8.

More info: www.PIANC-AIPCN.org

Call for Papers

23rd Annual International Conference on Soils, Sediments and Water Analysis, Site Assessment, Fate, Environmental and Human Risk Assessment, Remediation and Regulation University of Massachusetts Amherst October 15-18, 2007

On behalf of the conference directors you are invited to submit an abstract for consideration for presentation at the 23rd Annual International Conference on Contaminated Soils, Sediments and Water. Please submit a one page abstract containing: title, 300 word narrative; and for each author, name, degree, affiliation, complete address, telephone number and email address. Please indicate the presenting author and if this is a student presentation (see below). Email submissions are preferred. Hard copies must be accompanied by a disk and postmarked not later than February 8, 2006. Mail to Denise Leonard, Environmental Health Sciences, N344 Morrill Science Center, University of Massachusetts, Amherst, MA 01003. Faxed copies will not be accepted. General topics include: bioremediation, chemical analysis, cleanup standard setting, environmental fate and modeling, hazard exposure and risk assessment, heavy metals, hydrocarbon identification, innovative technologies, jet fuel contamination, regulatory programs and policies, sediments, site assessment/field sampling, soil chemistry, standard remedial technologies/corrective actions, and case studies on any of the above.

Special topics include: acid mine drainage, arsenic, biotechnology, chlorinated hydrocarbons, pesticides (PCBs, etc.), contamination at military installations, dioxin, ecological risk assessments, environmental forensics, MECs, MTBE, mercury, perchlorate, phytoremediaton, radionuclides, railroad sites, risk based cleanups (RBCA), state regulatory programs.

Student Presentation Award Program Through the generosity of Adventus Americas and with matching funds from the Annual International Conference on Soils, Sediments and Water, the annual Adventus Americas Award for the Best Student Presentations will be offered. A \$1000 cash award will be given to each of three students who, in the opinion of the judges, have made the best poster or platform presentations at this year's conference. The judges, made up of representatives from Adventus Americas and the Conference Science Advisory Board, will judge the

students on originality, organization of their presentation, how they communicate to the audience, their research techniques and the overall quality of the presentation. The awards will be presented to the winning students at this years Conference luncheon on Thursday, October 18, 2007. If you are a student presenter, please indicate on your submitted abstract. More information is available at <u>www.UMassSoils.com</u> or via Denise Leonard, Conference Coordinator, email dleonard@schoolph.umass.edu

Navigation and the EU Water Framework Directive

Seminar on 31 January 2007 in Brussels, organised by PIANC

Implementation of the EU Water Framework Directive (WFD) is now well-advanced and our understanding of its implications for the navigation sector is improving.

From 2007 the WFD implementation process will focus less on the production of guidance at EU level and more on action at river basin level – notably the preparation of river basin management plans and agreement on the programmes of measures required to meet "good status". 2007 may also bring some clarification with respect to the priority substances daughter directive, and possibly the links between the WFD and the Marine Strategy Directive. There are also questions, e.g. how will sediments be dealt with and what will be the implications of the WFD for new development proposals?

An important part of the conference on 31 January will be a trio of workshops dealing specifically with three of the most important WFD issues facing the navigation sector:

- The relationship between the WFD and EU Maritime Strategey
- The role of sediment management in river basin management planning, and
- The need for practical solutions to hydromorphological issues.

You can register via <u>www.pianc-aipcn.org/wfd2007</u>. Deadline for registration is 17th January 2007.

Conference on Water Status Monitoring under the European Water Framework Directive 12-14 March 2007, Lille, France

This conference will review chemical and ecological status monitoring of aquatic ecosystems in the context of the Water Framework Directive (WFD). There will be a policy session (covering ecological status and chemical monitoring of the Common Implementation Strategy of the WFD), a science session (with input from related EU-funded RTD projects), and an industry session (spreading the technology - perspectives on science and technology integration into WFD implementation).

In the light of the 2006-2007 milestone on water monitoring, this conference will bring together key actors from the water sector, with focus on science and policy interactions. The conference is timed to share information on science-policy interactions related to chemical/ecological water monitoring.

For more info: <u>www.WFDLille2007.org</u>.

More upcoming events

22-25 January 2007: 4th Annual International Conference on Remediation of Contaminated Sediments. Savannah, GA. Sponsored and organized by Battelle. The call for abstracts has been made, and submissions are due in June 2006. To request a brochure or get information about being an exhibitor or sponsor, send an e-mail to <u>info@confgroupinc.com</u> or call 800-783-6338. www.battelle.org/sedimentscon

24-26 January 2007: Towards Risk-Based Management of European River Basins, 1st public General Assembly of the RISKBASE project, in Seville, Spain. More info at www.riskbase.info. 31 January 2007: PIANC Conference: Navigating the Water Framework Directive. Brussels. More info at www.pianc-aipcn.org/wfd2007

12-14 March 2007: Conference on Water Status Monitoring under the European Framework Directive, Lille, France. More info at <u>www.wfdlille2007.org</u>

15-20 April 2007: There are three sessions on sediment within the Hydrological Sciences programme at this years European Geosciences Union (EGU) general assembly in Vienna, Austria:

- Session HS20: Technological potential for assessing soil erosion and sediment transport in ungauged river basins
- Conveners: J. Bathurst, D. Rickenmann and P. van Oevelen
- Session HS21: Harmonisation and standardisation of transboundary sediment activities Conveners: W. Summer, P.N. Owens and W. Zhang
- Session HS24: Sediment tracing and risk assessment for sediment management Conveners: E. Petticrew, P.N. Owens and B. Westrich

For further information and a call for abstracts, see this <u>link</u>. For further details on the EGU 2007 general assembly, see: <u>meetings.copernicus.org/egu2007/</u>

27 May - 1 June 2007: WODCON XVIII: Global Dredging - Congress and Exhibition Wyndham Palace Hotel, Disney World, Orlando, Florida, USA. weda@comcast.net / www.westerndredging.org

7-10 May 2007: 9th International In-Situ and On-Site Bioremediation Symposium, Baltimore, MD, sponsored and organized by Battelle. Abstracts due in summer 2006. To receive the call for abstracts, request other program information, and get information about being an exhibitor or sponsor, send an e-mail to <u>info@confgroupinc.com</u> or call 800-783-6338. www.battelle.org/biosymp

13-17 May 2007: Coastal Sediments 2007 in New Orleans, Louisiana. Conference theme: Coastal Engineering and Science in Cascading Spatial and Temporal Scales. Deadline for receipt of abstracts is May 15. <u>www.asce.org/conferences/cs07</u>

1-4 August 2007: 10th International Symposium on River Sedimentation. Moscow, Russia. <u>isrs10.hdro-msu.ru/en</u>

15-18 October 2007: 23rd Annual International Conference on Soils, Sediments and Water Analysis, Site Assessment, Fate, Environmental and Human Risk Assessment, Remediation and Regulation, University of Massachusetts, Amherst, USA. More info at <u>www.UMassSoils.com</u>

8-9 November 2007, CEDA Dredging Days, Conference and Exhibition Ahoy' Rotterdam, the Netherlands. Call for Papers will be issued in the fall of 2006. Contact: <u>ceda@dredging.org</u> <u>www.dredging.org</u>

Miscellaneous workshops throughout the year on Environmental Forensics, organized by the International Society of Environmental Forensics. See <u>www.environmentalforensics.org</u> for more info.

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