European Sediment Research Network
Acronym: SedNet
EC contract No.: EVK1-CT-2001-20002
Key action: 1.4.1 Abatement of water pollution from contaminated land, landfills and sediments

Report SedNet WP1 Workshop 2: Testing of the SedNet Guidance Document, September 9th and 10th, 2004, Utrecht, The Netherlands

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SEDNET WORK PACKAGE 1:
COORDINATION, SYNTHESIS, DISSEMINATION AND STAKEHOLDERS PANEL

Workshop 2:
Testing of the SedNet Guidance Document
9th and 10th of September 2004, Utrecht, The Netherlands

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Introduction

The European Sediment Research Network SedNet is a Thematic Network within the 5th Framework Research Program of the European Union (EC contract No. EVK1-CT-2001-20002). It deals with setting up a network for environmentally, socially and economically viable practices of sediment management at the river basin scale. The SedNet objective is to form on a European scale inter-disciplinary links and trans-disciplinary bridges between scientists, engineers, sediment managers and those responsible for developing and implementing sediment related policies.

The initial focus of SedNet is on understanding how contaminated sediment influences river system functioning and, from there, how contaminated sediment and dredged material can be managed. The SedNet objectives will, amongst others, be achieved through the organisation of workshops with scientists, regulators and stakeholders in order to identify and review the current state-of-art in knowledge as well as to identify, review research needs related to specific sediment management issues. Products of the SedNet network are workshops and their proceedings on various sediment research issues (see the website www.sednet.org for a complete overview). In addition four books will be published in 2005 giving the state-of-the-art of sediments research in Europe.

A special book/brochure (booklet) will be published by the end of 2004, which gives a summary of the major research findings of the network activities. This booklet is intended to be used as a guidance for policy and management and at the same time to be used to raise awareness of the sediment issue in European waterways.

Workhops aims

The specific goal of this workshop was to improve the quality/usability of the draft SedNet booklet by gaining insight in its usability. This was to be achieved by giving a selection of stakeholders the opportunity to comment on and/or make additions to the concept booklet. This is in accordance with the action “testing of 1st draft by stakeholders” as stated in the SedNet EVK1-CT-2001-20002 revised Description of Work.

The workshop was held on the 9th and 10th of September 2004 in Utrecht the Netherlands, and was organized by SedNet Work Package (WP) 1. Eighteen participants from four countries attended, representing sediment interests in policy, practice and research. In addition stakeholders who could not participate in the meeting were asked to make comments in writing.

The testing of the booklet in this workshop was to make sure that the document:
- is accessible/understandable and usable
- covers the information/knowledge needed by different stakeholders.

Workshop participants

The following people participated in the workshop:

Name	Affiliation	Country
Gijs Berger	Port of Rotterdam	The Netherlands
Helen Wilkinson	UK Environmental Agency	United Kingdom
Marc Braun	International Commission for the Protection of the Rhine	Germany
Jos Brils	TNO, Environment, Energy and Process Innovation	The Netherlands
Stevan Bruk	UNESCO International Sedimentation Initiative	France
Piet den Besten	RIZA	The Netherlands
Tony Edwards	UK Environmental Agency-regional	United Kingdom
Gerald Jan Ellen	TNO Strategy Technology and Policy	The Netherlands

Ulrich Förstner	Technical University of Hamburg-Harburg	Germany
Manfred Gengnagel	Wismut GmbH	Germany
Lasse Gerrits	TNO Strategy Technology and Policy/ University Rotterdam	The Netherlands
Harald Köthe	Federal Ministry of Transport	Germany
Polite Laboyrie	Ministry of Transport, Public Works and Water management	The Netherlands
Axel Netzband	City of Hamburg, River- and Harbour construction	Germany
Wim Salomons	Institute for Environmental Studies, University of Amsterdam	The Netherlands
Adriaan Slob	TNO Strategy Technology and Policy	The Netherlands
Bruce Unger	Shell Global Solutions (UK)	United Kingdom
Hilda van de Laar	Province of Gelderland, The Netherlands	The Netherlands
Gerard H. van Raalte	Hydronamic BV/Boskalis/CEDA	The Netherlands
Tiedo Vellinga	Port of Rotterdam	The Netherlands
Terry Walden	BP/Nicole	United Kingdom

The workshop

The workshop consisted of an evening programme, with the purpose to inform (recall) the participants about (updates in) the programme of the workshop, to answer the first most important questions and to get acquainted to each other. The second day of the workshop was used to discuss the document in more detail. The morning was spend on oral presentations of each of the participants (the group was divided in two subgroups for this purpose), to collect the comments of the participants. In the afternoon an electronic meeting was organised to obtain more detailed comments. The structure of this afternoon meeting, a digital discussion, allowed for anonymous input.

Outcome of the evening programme 9th of September

The evening programme (which only part of the participants could attend) started with a short introduction on the programme of the workshop and of a short round of introduction. After the short round of introduction Jos Brils, the SedNet coordinator, gave a presentation about SedNet, which sediment issues it addresses etc. In this presentation Jos Brils stressed the importance of SedNet and also the ongoing search of SedNet for external funding. Concerning the booklet, Jos Brils pointed out the contents of the document should deal with:

- recommendations and guidance to integrated, sustainable sediment management, from local to river basin scale;
- sustainable solutions for the management and treatment of contaminated sediment and dredged material;
- practical questions of sediment management practice/stakeholders, e.g. related to existing and upcoming legislation.

The following discussions touched on the anticipated readership of the document, which was discussed in more detail on the next day. With regard to the future of SedNet (beyond the EU contract) Jos Brills informed the participants on the current state and in particular on the promising contacts with UNESCO.

Outcome of the day programme 10th of September

Oral presentations

On the second day the participants were divided in two groups, to make sure that everybody had a possibility to give their presentation containing the most important comments on the draft document. The groups consisted of the following persons:

Group A	Group B
Gijs Berger	Wim Salomons
Marc Braun	Piet den Besten
Tony Edwards	Harald Köthe
Ulrich Förstner	Axel Netzband
Manfred Gengnagel	Bruce Unger
Jos Brils	Gerard van Raalte
Hilda van der Laar	Tiedo Vellinga
Helen Wilkinson	Terry Walden
	Stevan Bruk
	Polite Laboyrie
Adriaan Slob (Moderator)	Gerald Jan Ellen (Moderator)

Both groups used the presentations that were prepared as a basis for the discussion on the draft documents. The electronic presentations that were given can be found in Annex I (note: some presenters only gave an oral presentation, without electronic support).

The moderators wrote down the comments of the participants. Below an overview of the most important comments per subgroup are given.

Summary comments of group A

The overview of all the comments of group A that were written down has been handed over to the writers of the document. The most important comments of group A were:

- The target group of the document should be clear.
- The document should be short and simple, and less scientific.
- The structure of the document should be as follows:
    - All chapters should be balanced.
    - There should be a introduction in each chapter.
    - Pull out the “Key Messages”
- Include Practical Guidance/Examples from other countries, for instance the Rio-Tinto case.
- Publish the document in other languages.
- Be critical with the selection of cases and examples.
- Are all the appendices useful?

Summary comments of group B

The overview of all the comments of group B that were written down has been handed over to the writers of the document. The most important comments of group B were:

- It is not completely clear who the target group of the document is, for example, does it also include the new EU-countries?
- The message and the aim of the document should be mentioned in the introduction of the document, also linking it to EU-policy, this will put the document more in perspective.
- The document is sometimes a little bit too general and too scientific; including more concrete management actions would be an improvement of the document.
- Reduce the text of the document to 50 pages, or less.
- Reduce the level of detail of the document, this to improve the readability.
- Refer to existing documents, such as those composed by PIANC,ICOLD,ICID, IAIA for example.
- The document should make it clear that sediments are not a stand-alone issue, but that it is linked to water, soil, nature etc.

Plenary session

After an overview by the reporters on the comments that had been discussed in the two groups, it turned out that the question who the target group of the booklet should be was the most important issue. The discussion that followed is summarised in the following bullet-points:

- Policy makers should have the right information about sediments. This means that the booklet should change their current views on sediment (problem/obstacle/dirty).
- The booklet should create awareness among EU- and national policymakers and explain how SedNet contributes to that aim.
- The booklet should place contaminated sediments in a broader perspective. The booklet can inform middle and upper management and can help them to reflect on the reasons why it is making certain choices.
- The next step to take is to produce a very short overview on how sediment management should be approached. This would result in 3 levels of information:
  1) a very short leaflet/brochure (booklet management summary), aimed at the top-level of EU and National decision makers
  2) a booklet aimed at EU- and national policymakers (the people who are doing the work)
  3) the SedNet WP books for the scientific audience.
  Also communication to the general public was suggested, but the participants decided this should be skipped, because this is too complicated at this moment.

Because of the suggested modified approach (see the last bullet above) it was decided to focus on the key-issues which remained in the afternoon digital session. Before these key issues were identified, some important remarks were made:

- The titles of the chapters should really cover the content of the chapter (so possible the titles should be changed in some cases);
- State explicitly that the booklet is not for problem owners to solve sediment management issues (this to correctly manage expectations and not to create wrong expectations);
- Use *direct* reference to other relevant documents (for example from PIANC) in the text;
- Focus on what is coming in the next 10 years, both problems and solutions in the field of sediment management, so that policymakers can react to that.
- The scope of the booklet (already) is sediments, contaminated and clean, quantity and quality, from mountains via rivers to estuaries.

After this the following key issues that were to be discussed in the afternoon session were identified:

1. What are the problems and what are the challenges? At which level do these problems arrive?
2. What are the key-messages that need to be in the leaflet. Examples and reasons which case studies could be added to the key-messages?
3. What should the structure of the booklet be?
4. Which topics are missing in the booklet?

Digital discussion

After lunch the workshop continued. In the afternoon session the participants were given the opportunity to discuss the key issues. For this discussion a network of PCs is used, allowing the participants to type their input simultaneously. Due to the large input, the detailed structure of the booklet and the topics that were missing in the booklet were not discussed, although input for the latter was also given during the discussion of the first two key-issues. In a last round of input the participants were also given the opportunity to give their final recommendations to the writers of the booklet. Because the input of the participants is too much to show, a summary of the input for these three subjects can be found in Appendix II[1]. The most important issues that were touched upon in the discussion were:

[1] The complete input of all the participants was given to the writers of the booklet, so no comments or remarks that were typed have been lost.

- *The first key issue:* Problems/Challenges concerning perception of sediment, quantity- and quality issues, legislation/policy making, sediment management and costs/liability.
- *The second key issue*: Key-messages concerning quantity- and quality issues, sediment management issues, concerning legislation/policy making.
- *Final recommendations for the writing of the booklet*: recommendations concerning the next steps to take, recommendations concerning readability/structure *of the booklet and recommendations concerning references.*

Next steps to take in the writing process

After all the participants had finished their input, the next steps that would have to be taken to finish the booklet were discussed:

- Another draft will be made that will be sent around, approximately mid October. Readers will have two weeks to hand in their comments. This way the (second draft) booklet will be ready for the final SedNet conference in Venice (25/26th of November).
- Comments on the booklet that might be given during the final SedNet conference in Venice will be incorporated in the final version of the booklet. However, it might not be possible to include all the comments. The deadline for the final version of the booklet is the 31st of December 2004.
- Actions will be taken to collect autographs, for approval of the booklet, from different organisations (PIANC, ESPO, CEDA etc.).
- The content of the booklet will be checked with the content of the WP-books, to prevent any conflicts between these books and the booklet.
- The booklet is a document that has to be tested in real life, i.e. on one ore more river basin cases. A new booklet should then be made within three years, in which the practical experience will be integrated. Preferably then also more attention to sediment quantity management should be integrated.

Closing of the workshop

Jos Brils thanks everybody for their time and input, and asked the participants that had suggested case-studies that could be used in the booklet to send him relevant material (fact sheets etc.). Furthermore, he believes that sustainable sediment management is not an endpoint that can be achieved within a certain timeframe but rather an ongoing process that needs continuous attention and improvement. The booklet is no more than a tool that can support this process.

Annex I: Electronic presentations given by the participants

Attached as two separate documents:

- Document 1: electronic presentations group A:
  - Gijs Berger, Port of Rotterdam, NL
  - Manfred Gengnagel, Wismut GmbH, D
  - Marc Braun, International Commission for the Protection of the Rhine, D
  - Ulrich Förstner, Technical University of Hamburg-Harburg, D
- Document 2: electronic presentations group B:
  - Axel Netzband, City of Hamburg, River- and Harbour construction, D
  - Harald Köthe, Federal Ministry of Transport, D
  - Polite Laboyrie, Ministry of Transport, Public Works and Water Management, D
  - Terry Walden, BP/Nicole, United Kingdom

Annex II: Summary of the digital input of participants.

First key issue: problems and challenges concerning sustainable sediment management

Problems/Challenges concerning perception of sediment

- promote the fact that sediment has a beneficial use in environment and is not always a problem;
- negative public opinion on dredged materials, therefore it for example is very hard to actually realize a confined disposal facility;
- there is a different understanding of beneficial use of sediments in different EU countries, getting these understandings on one line is a challenge;
- getting sediment recognised as a media of concern in environmental management is a challenge.

Problems/Challenges concerning quantity- and quality issues

- raising awareness that sediment issues relate to both quality and quantity;
- there is no overview on contaminated sediments in the EU;
- the relation between water quality (as described in the WFD) and sediment quality is poorly understood, the challenge is to make this aspect part of water management.

Problems/Challenges concerning legislation/policy making

- sediment managers need to be able to meet the needs of various pieces of legislation which deal with sediment and which in many cases conflict with each other;
- embedding a risk-based approach into future policy decisions, particularly as it is difficult to quantify risks posed by sediments;
- to help EU-legislators and policymakers how to integrate sediment into the WFD;
- a challenge is to develop a common policy that cuts across the wide range of organisations managing the various aspects of sediment management;
- a challenge is to develop a clear practice-oriented guidance from EU-level (not a directive) which gives member countries the space to find their ways with sediment;
- a problem is that big differences between catchments are not well recognised. These differences ask for a more tailor-made solution on social, ecological and economical aspects;
- a challenge is to develop policy that leads to legislation that can then be utilized in a fair, effective and affordable way by environmental regulators/managers to gain real improvements for the environment and community.

Problems/Challenges concerning sediment management

- to come up with a transparent approach consisting of simple steps that help to evaluate the quality of sediments, expressed in "units of risk for a certain function";
- recognizing the consequences of one decision on the next step in the chain, for example recognizing that decision to dredge results in implications for disposal which results in decisions having to be made were this disposal will take place;
- the historic sediment contamination in EU river basins;
- decisions (e.g. to dredge) are often made on a local scale, without realizing the consequences on a larger scale (both for quantity and quality);
- dealing with the different states of development between 'old' and 'new' Europe?;
- the management of diffuse contamination sources in addition to point sources/ sites;
- developing sediment management on a river basin scale because the manifold factors and actors influencing the sediment in a river system are very complex. The existing and developing tool "Decision Support System" show this complexity and the difficulty to use it in for local projects.

Problems/Challenges concerning costs/liability

- dealing with the costs of upstream remediation if there is no specific "owner"?
- dealing with liability of upstream source polluter on downstream receptors, as well as liability for legacy problems (historical contaminations);
- thinking of incentives for polluters to manage/reduce contaminant sources;

Second key issue: key-messages

Key-messages concerning quantity- and quality issues

- sediment quality has an influence on water quality due to the sediment/water interface;
- sediment quality assessment should be based on a risk based approach;
- sediment is a valuable resource, for example as building material when carried by the river down in the valley;
- sediment is important for water quality and hence sediment management is integral part of water management. Thus, the Water Framework Directive should include sediment management as its essential component.

Key-messages concerning sediment management issues

- only remediate hot spots, which are too highly contaminated compared to the existing situation in the specific river system;
- facilitate effective source control (in terms of both quality and quantity) this can reduce the need for costly dredging/remediation activities;
- decisions on sediment management should be made on an holistic basis - decisions to remediate contaminated sediment through dredging for example can create further environmental problems through the need to dispose of the contaminated dredged material;
- sediment management should be applied at river basin scale. However, this does not mean that problems should not be addressed locally where necessary, especially if interventions are urgent locally one should not wait for the long-term effects of upstream measures;
- promote a philosophy of risk based management of contaminated sediments. We need to move away from prescriptive standards that do not take into account site specific factors that influence contaminant characteristics, transport and bioavailability of contaminants, and the sensitivity and abundance of potential receptors;
- make a cost/benefit analysis of excavating and cleaning or re-depositing contaminated sediments versus leaving them in-place, from both a scientific (risk-based) and societal (polluter pays) perspective;
- an important aspect of future management of sediments is the availability of a comprehensive database, accessible to all interested users of a river;
- sediment remediation is expensive so prevent pollution at the source and develop prioritized. programmes for remediation of historic contamination;
- effective sediment management requires effective communication between a range of disciplines and communication links should be developed;

Key-messages concerning legislation/policy making

- regulations for sediment management should be in line with the WFD, but has to be practical, realistic and flexible;
- sediment is a key part of the environment and therefore should be considered in environmental regulation;
- current legislation often does not consider sediment or if so is often conflicting - future legislation needs to consider sediment and also promote holistic sediment management;
- more exchange of knowledge is needed between countries but also between decision makers, technicians, scientist and also the public only when this is accomplished, realistic and cost effective decisions can be made.

Final recommendations for the writing of the booklet

Recommendations concerning the next steps to take

- make it a draft report and sent it around to the participants;
- let the booklet be read and revised by an external editor;
- in order for the booklet to become a real guidance for sediment management, feedback from the stakeholders and the professional community is needed. Therefore, the booklet should be circulated widely, and comments request from the readership, perhaps via a web site;

Recommendations concerning readability/structure of the booklet

- keep it short and sharp;
- give a readers guide in the introduction of the booklet, and also include the reason for the booklet and for whom it was written;
- do not have too many cases studies, just a few good ones that demonstrate important principles;

Recommendations concerning references

- make clear whether there are gaps in existing guidance documents, refer to those documents and identify their shortcomings;
- refer to the scientific SedNet books for further reading;
- add links to other information sources and networks (for example PIANC,ICOLD,ICID, IAIA);