ADVANCEMENT NOTE NO. 4 – November 2004

Research needs on ‘dredging and environment’. A CEDA Perspective

Any dredging project has an impact on the environment. Even if not directly targeted at an improvement of environmental conditions, it will still certainly affect the environment. It is the responsibility of all involved to reduce negative effects to an absolute minimum, and to aim for optimisation of positive aspects. This is easier said than done. In order to achieve the best available practice, a thorough understanding of the relation between dredging and the environment is required.

It is acknowledged that despite many years of increased effort by numerous parties, this situation has not yet been reached. A reasonable understanding of the problem area has been reached: trends have been identified and there is a broader perception of the modes and extent of impacts. However, much of what is assumed is based on theory, with a lot of seemingly logical assumptions and tedious laboratory testing, and comparatively little field validation; consequently all this knowledge has enjoyed little practical application. Some of the available models can predict consequences of actions on specific environmental receptors, but these have a relatively low degree of accuracy.

When designing, planning or executing a dredging project in an environmentally sensitive area, all questions, requirements, specifications, permits, methods and measures come back to the same issue: how to balance the value of environment against other interests?

Various stakeholders have diverse interests, while even a single stakeholder might have different interests in successive stages of a project. Moreover, every aspect of each project must be considered, which complicates the development and use of generally applicable environmental standards. Despite this, results obtained in one situation should be made available to others since they may provide some guidance, even under different conditions.
In our global environment, we all have opinions about the quality of our environment. These days the public play an important role in the decision making process. But public opinion is often based on poor perception and little understanding of the complex processes, fuelled by adverse and ill-founded publicity. It is hard to blame the public for negative attitudes, which even specialists lack the knowledge to counter.

CEDA, and more specifically the Environmental Steering Committee, considers that it is our duty to stimulate an improvement of this situation. With a reasonable overview of ongoing research, a solid idea on research needs, and contacts with all stakeholders, CEDA aims to encourage research and to provide a platform for the dissemination of results.

By taking an impartial position and by inspiring the confidence of all parties concerned CEDA is in the process of identifying gaps in the understanding of the interaction between dredging and the environment, the broader aim being to ensure the continuation and intensification of relevant research as part of a common approach to the situation.