NEW ACTION: A case of Blue circular economy in MSP: supporting ports in reusing dredged materials on land.

Short description

The need to dredge is an ongoing requirement in ports. The aim is to ensure the continuity and safety of maritime transport. Adapting to the gigantic size of new ships has increased the need for dredging, particularly in ports that receive container ships. In France, blue circular economy including dredging is included in the scope of maritime spatial planning (MSP).

If we take France alone as an example, the annual volume of dredging can reach 25 million tons of dry material.

In some cases, making use of clean sediments from dredging is of greater economic and environmental benefit than simply resuspending them. This is the case for certain sand and for rock removal products, which may prove useful to certain local players.

However, as of now most of this sediment has to be put back into suspension in the environment for economic and ecological reasons (respect of hydrosedimental balance).
In some cases, the level of contamination is such that this operation has an impact on the environment. It is therefore necessary to bring this sediment ashore for treatment, storage and, in the best of cases, reuse. This reuse is possible when the sediments are not considered hazardous. This is the case in the very vast majority of cases. Furthermore, reclamation by storage in pits included in reclamation works is always possible if the standards for classified installations are respected.

In most cases, land-based disposal is very costly for the ports alone, which are the ultimate holders of the waste but do not have the capacity to cope with this burden on their own.
This new action proposes to examine challenges in the reusing of dredged materials and identify possible solutions, with a view to support future MSP cycles.

Project partner(s) responsible for the preparation of the new action

Cerema

Action typology

(v) Analysis

Topics addressed

E.3. Re-use, repair, upgrade, recycle

Geographical scope

The point of view is French, but is based on examples drawn from European practices, particularly in Germany and Italy.

The map below uses dots to show where sediment extraction has been authorised. The left-hand column shows the volumes involved.

Sectors/Activity involved

Multi-sector (maritime safety).

How does the new action support the Green Deal in MSP

This work must be carried out in compliance with environmental standards governing the protection of water bodies and landfill sites.

Technically, there are many viable applications for sediment in a wide variety of fields, including agriculture, maritime works and road construction. Sediments can also be used to make building materials, by being incorporated into concrete or bricks.
For each of these possible uses, each application for authorisation must be able to prove the environmental harmlessness of the project and its impact on health. Some areas still suffer from the absence of appropriate national standards. Project developers are not necessarily in a position to deploy the technical resources needed to resolve this on their own.

Similarly, given the volumes involved, and with the exception of cases where certain outlets are obvious and little treatment is required for recovery (beach nourishment by depositing sand), the economic model for recovery is difficult to find, particularly for small port structures that have little work scheduled.
The mobilisation of local players is necessary to build a reliable project, and this is often the major challenge for ports or their owners.

Some of the partners to be mobilised include materials manufacturers, who are faced with fairly conservative standards.
With the same or better technical qualities than existing standardised materials, it is sometimes difficult to obtain new certifications, and there are obstacles for various players in the value chain (manufacturers, insurers and developers in particular).

Governance context

In France, maritime spatial planning is coordinated by the Interregional Maritime Directorates (DIRM). Here is the list of contacts on the subject:

- ✓ Regional directorates responsible for the environment (DREAL)
- ✓ Ports
- ✓ Academics
- ✓ Local authorities in charge of development
- ✓ Local authorities responsible for "construction and public works waste" planning.
- ✓ Local authorities that own ports

Other stakeholders to be involved in the new action

Contacts has to be taken with

- ✓ Central or locals administrations, and above all, the authorities in charge of marine planning.
- ✓ Professional federations (ports, public works, agriculture) would be necessary to consolidate or modify the hypotheses drawn from the initial study.
- ✓ Port-owning entities

Description of the new action

To begin with, a benchmark will need to be drawn up of research transfer activities in Europe. What may pose a problem for some will not necessarily pose a problem for others, and we need to draw on these observations to find ways of removing certain barriers, simply by duplicating existing projects, particularly in cross-border areas where the economic and technical issues may be similar.
Another important point will be to study the various European

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technical projects that have been launched over the last twenty years. It seems that more and more projects (see the Interreg Sediterra project) are incorporating the 'feasibility' dimension into their operations. A summary of the progress made as a result of these projects is essential in order to assess the needs that are still not covered and possibly make new proposals within the framework of the EGD.

Possible challenges/risks related to the new action

Strictly speaking, there are no particular risks, other than that of making proposals that are too far removed from the practice and realities of the stakeholders of the field.

Gaps or elements that that the new action does not consider

Constitutional and administrative organisations are fundamentally different from one country to another. Certain differences in practices are directly linked to these specificities. This action can take this into account and make proposals adapted to these realities.

This problem is relevant only in the benchmark part of the action.