



CoCom - WORKING GROUP 2

Best Practices for shoreline stabilization methods

1. Introduction

Many countries in transition face a growing pressure on their coastal system in terms of increase in potential for industry, tourism, recreation, fishery and shipping.

However, as human pressure rises on coastal areas, the natural dynamics of these systems continue to act, often providing conflicts between man and nature. Coastal erosion is a severe problem in many countries in transition, resulting in damage to or loss of houses, hotels, coastal structures, undermining of roads, disrupting fishing, navigation and recreation.

Within CoCom, the need was identified to set up a Working Group for Best Practices for shoreline stabilization, providing guidelines for these countries in transition that face severe erosion problems.

2. Objectives

The proposed task of the Working Group is as follows:

Identify Best Practices for shoreline stabilization for the use in countries in transition.

The Working Group should have a primary focus on the various coastal erosion problems that countries in transition have faced in the past and may face in future. Case studies shall be defined and discussed.

The inventory is to result in a report in which the following issues shall be addressed:

1. Identify typical coastal erosion problems (case studies);
2. Identify best practices in coastal monitoring;
3. Propose a practical decision methodology for shoreline stabilization methods;
4. Provide a complete overview of all available design codes and standards and make recommendations for practical use in design and cost estimating of shore line stabilization methods.

Re.1

The typical erosion problems in each country in transition need to be identified and where possible statistics are to be collected. The underlying erosion mechanisms need to be addressed, whatever their kind.

Special attention shall be paid to identification and mitigation of erosion problems which are related to development and improvement of port facilities and related infrastructure such as access channels, breakwaters, jetties etc.

Re.2

Attention shall be paid to monitoring of coastal dynamics, providing long-term knowledge of coastal genesis. Monitoring provides a sound basis for pro-active coastal management.

The following issues are to be addressed:

- Coastal survey programmes;
- Use of GIS applications in coastal monitoring.
- Provide an overview of today's coastal monitoring options, including latest IT and satellite technology and identify best practices in approaching these technologies;

Re. 3

A method to identify the most appropriate stabilization concept with a lowest risk to fail or highest chance to succeed shall be prepared for the typical situation that:

- Information on genesis of coastline and coastal processes are lacking or insufficient;
- Local experiences with concepts and structures are limited;
- Funds for further studies are not available;
- Time for further studies is not available due to high pressure of stakeholders;
- Funds for implementation are limited.

In addition to technical criteria for such a decision method, attention shall be paid to the non-technical issues (resource management and utilization, interest of stakeholders).

A decision methodology (for example a multi-criteria selection process) shall provide coastal engineers and managers a practical guideline to respond to the pressure of stakeholders to stabilize the coastline.

The findings of the Working Group are to be laid down in a report, of which the final draft will be reviewed by CoCom.

3. Organization and time schedule

The Working Group will operate under the responsibility of PIANC, Committee on International Co-operation (CoCom). It will consist of a group of members of PIANC, to be nominated and appointed by the National Sections. The Working Group may be assisted by experts from countries in transition.

The Working Group will aim to submit the final draft of its report within a period of 2 years after its official start.