

## **GUIDELINES ON THE ELIGIBILITY OF DAMS UNDER THE COHESION FUND - 2000-2006 PROGRAMMING PERIOD**

### **I. Scope**

Under Article 3 of the Basic Regulation on the Cohesion Fund, it may provide financial assistance for environmental projects contributing to the achievement of the objectives of Article 174 of the Treaty.

Environmental projects must contribute to:

- protecting and improving the quality of the environment,
- protecting human health,
- prudent and rational utilisation of natural resources.

The construction and operation of dams affect, *a priori*, the natural hydrology, morphology and ecology of the catchment area of a river both upstream and downstream. The intensity of this impact depends on the characteristics and dimension of specific projects and the characteristics of the site and the dam itself. Given the hydrological situation in the southern EU countries - Spain, Greece and Portugal - as well as the specific effects of dams on the hydrological, morphological and ecological characteristics of rivers<sup>1</sup>, the approach to be adopted to assess the eligibility of dams under the "environment" component of the Cohesion Fund must conform to the guidelines set out below.

1. The construction of a dam, particularly a large one, usually has a number of objectives, the most important of which are generally the production of electricity and the provision of water for certain economic activities (agriculture, industry, tourism) or for drinking water supplies (domestic consumption).

A dam may also pursue, implicitly or explicitly, environmental objectives. It may, for example, contribute to more sustainable management of available water resources or the production of renewable, non-polluting energy. More specifically, the following environmental objectives may be identified:

- management of the quantity and quality of drinking water
- preservation and restoration of the water table (e.g. to combat salinisation or in the case of regeneration of wetlands)
- control of erosion and environmental damage caused by floods
- fight against desertification
- reduction of polluting emissions from the use of fossil fuels.

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<sup>1</sup> Warming of water, significant summer evaporation, growth of possibly toxic plankton algae both upstream and downstream, change in sedimentation patterns.

2. From the point of view of eligibility for the Cohesion Fund, dam projects can be classified in one of two categories as regards the objectives pursued:

- (a) Those which specifically pursue environmental objectives (this category can possibly be subdivided into two subcategories, depending on whether they pursue the environmental objectives concerned exclusively or predominantly).
- (b) Those which do not specifically pursue environmental objectives (this category can also be subdivided into two subcategories, depending on whether environmental objectives are of secondary importance or are not involved at all).

**Only the first category can be considered as potentially eligible. Dams which do not pursue specifically environmental objectives are excluded from co-financing from the Cohesion Fund. The project must have objectives and a purpose which are clearly environmental.**

3. Special attention will have to be paid to the needs of a coherent water policy based on the catchment area as established in the framework directive on water - Directive 2000/60/EC.<sup>2</sup> In the medium term, this involves an obligation to present analyses for all catchment areas, comprising an analysis of the natural characteristics of the river basin, a review of the impact of human activity on the aquatic environment and on interconnected ecosystems as well as an economic analysis of water use. These analyses must be drawn up by the Member States and made available by the end of 2004 at the latest.

It should be noted that Article 8 of Regulation (EC) No 1164/1994 lays down that projects cofinanced by the Fund must be in keeping with the provisions of the treaties, secondary legislation and Community policies, including those concerning environmental protection. In this respect, the provisions of Directive 2000/60/EC apply in respect of all projects for which an application for funding has been submitted since the date of entry into force of the Directive, i.e. 22 December 2000.

## **II. Appraisal of the environmental scope of the project**

With a view to eligibility, the **specific environmental benefit of the project must be explicit and result in particular from:**

- the fact that the project forms part of an overall national programme and/or an integrated programme specific to the area concerned. These programmes must in particular take account, in a fully quantified way, of the environmental objectives concerned and ensure that investments are made and that the necessary additional measures are taken to optimise the effectiveness of the project (checking the condition of piping, constructing wastewater treatment plants, etc.)
- the consideration given in the analysis justifying the project, to possible alternatives (better management of available resources, demand management with the aid of

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<sup>2</sup> OJ L 327, 22.12.2000, p.1

economic or fiscal instruments etc.). The analysis carried out must indicate, among other things, the reasons why the promoters have rejected existing alternative solutions.

Given that, regardless of the objectives concerned, the construction of a dam may have a significant negative impact on the ecological balance of the natural environment and consequences for individual species, **only dams whose environmental benefits significantly outweigh the negative impact are to be considered as possibly eligible.** A balance sheet of the environmental advantages and disadvantages must be based on a detailed analysis carried out by those submitting the project.

### **III. Financial contribution**

Dams are eligible for Community cofunding provided that they are intended for the production of drinking water, generation of hydroelectric power and/or the fight against erosion and desertification on the basis of specific criteria to be drawn up by a group of experts.

In the case of a multipurpose dam, cofunding is limited to a maximum of 85% for "drinking water" and "hydroelectric power" uses. The costs associated with the other uses (irrigation, etc.) are not eligible.

### **IV. Information required in order to evaluate the projects**

**The information required in order to evaluate the projects, which is set out below, stems from the need to take account of key Directives on water (Directives 85/337/EEC, as amended by Directive 97/11/EC, 79/409/EEC, 92/43/EC and 2000/60) and the requirements of the Cohesion Fund Regulation itself.**

#### **1. Context**

- existing water balance
- uses and pollution of waters (underground, surface)
- status of water services (connection of household/public services to drinking water distribution systems, treatment systems).

#### **2. Objectives of the dam**

- What are the environmental objectives?
  - drinking water supply
  - sustaining a minimum water level in rivers and regulation of river flow
  - raising of groundwater levels and restoration of wetlands
  - fight against desertification
  - control of erosion and damage caused by floods
  - reduction of pollution emissions linked to fossil fuels
- What are the public health/drinking water supply objectives?

- drinking water supply meeting public health requirements
- connecting new households/villages/towns
- distributing higher quality water to households/villages/towns

### 3. **The project**

- (a) Description of the dam, description of the environment and site
- (b) Compensatory measures (to respond to the environmental impact in accordance with Article 4(7) of Directive 2000/60/EEC).
  - What compensatory measures are proposed to limit the negative impact of the dam on surface water conditions?

For example, construction of a fish ladder to ensure river continuity, maximum/minimum flow rates acceptable for the ecology of the rivers downstream, landscaping, reforestation of the river basin affected, measures taken to avoid possible changes (impact etc.) to the river environment, basin and river ecosystems, measures taken in connection with management of the river basin, etc.)

- What is the environmental impact of these compensatory measures on the river in question?

For example, restoration of river continuity, compensation for the negative environmental effects of the construction of the dam, impact on morphology, sedimentation upstream, ecology (fauna, aquatic flora), water quality, flows downstream etc.

- (c) Accompanying measures (indicative)
  - where appropriate, demand management measures (incentive pricing, new technologies, new cultivation practices, information and public awareness campaigns),
  - management measures ensuring the effectiveness of the project,
  - accompanying water protection measures (e.g. construction of new treatment systems and plants if the project involves connecting new households to drinking water distribution systems),
  - drawing up of a development plan for the dam aimed at protecting surface waters (guarantee that activities likely to cause a deterioration in water quality are prohibited) to be presented before final payment.

### 4. **Environmental impact assessment**

Apart from the environmental impact assessment (non technical summary, the result of the public consultation and opinion of the competent environment authorities) presentation of a summary of the environmental impact of the project (for each element, define carefully the quantifiable indicators allowing a proper assessment to be made of the negative and positive impact of the dam).

- (a) Impact on the area directly affected by the work and associated infrastructures.

- (b) Indirect impact on the area upstream and downstream from the work;
- (c) Impact on water resources:
  - changes in physical and chemical quality (temperature and nutrients), hydrology, morphology, ecology of the water course upstream and downstream,
  - erosion of river banks and movement of sediment,
  - restoration of groundwater levels - wetlands,
  - river flows and regulation thereof,
  - wetlands.
- (d) Impact of economic activities
  - use of water by the various sectors
  - associated pollution
  - environmental impact of the development of new activities (for example, if the dam brings with it secondary tourist uses, the development of a tourist infrastructure or tourist activities can have a secondary impact on the environment, such as erosion, change of landscape, etc.).

## 5. **Financial and economic analysis**

(Already included in the funding application form. However, it must take account of the environmental costs and benefits and of the resource).

### (a) Financial arrangement

(Already including in the funding application form).

### (b) Application of the polluter pays principle and pricing

Evaluation of the impacts of the project on existing water prices.

Evaluation of the cost recovery achieved.

(Take the approach contained in the Commission communication on water pricing as a basis for this evaluation).<sup>3</sup>

## 6. **Selection criteria - comparison with alternative solutions (indicative and non-exhaustive lists**

- Improve the efficiency of the existing distribution systems
- Use of new technologies and practices
- Use of underground water instead of surface water
- Use of surface water instead of underground water.

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<sup>3</sup> COM(2000)577 final.

- In accordance with Article 4(7) of Directive 2000/60/EEC, the comparison with solutions providing the same service is based on the following tests: What alternatives exist which serve the same objectives?

E.g. widening rivers and moving existing dykes to reduce the risk of flooding.

- Is the impact of the dam on the overall environment less than that of the alternatives?

Compare the impacts of the various alternatives and of the dam on water, air, soil, biodiversity etc. (some effects can be evaluated in quantitative terms whereas others will be analysed in qualitative terms)

- Is the dam the least costly option enabling this objective to be achieved/this service to be provided?

Estimate of investment, operation and maintenance costs, capital interest of the various alternatives - comparison of the total cost of the dam with the total cost of each alternative.