

LOCATION AND DATE

The Congress will take place in Zaragoza, with one week's duration in the month of September 2010.

ORGANIZATION AND ADDITIONAL INFORMATION

For any enquiry regarding the Congress please contact, indicating the reference "II International Congress on Dam Maintenance and Rehabilitation":

SEPREM
Pº de la Castellana, 175 - 1º Dcha.
28046 Madrid
Spain

Tel. / Fax: +34 91 570 27 24

www.seprem.es



II INTERNATIONAL CONGRESS ON DAM MAINTENANCE AND REHABILITATION



ZARAGOZA 2010

Draft Outline

www.seprem.es

PRESENTATION

In October of 2002, SEPREM (*Sociedad Española de Presas y Embalses*, or Spanish Society of Dams and Reservoirs), in collaboration with the *Dirección General del Agua del Ministerio de Medio Ambiente y Medio Rural y Marino* (Water Directorate of the Ministry of the Environment), organized in Madrid (Spain) the First International Congress on Dam Maintenance and Rehabilitation. The bulleting which announced the Congress stated the following:

“Dams, like every human artifact immersed in Nature, are originally conceived to stand against a number of actions. After their construction, dams are subject to a series of external agents and processes which tend to deteriorate the qualities with which they were originally conceived to stand against these actions. Deterioration processes may affect the foundation on which the dam rests, the materials with which it was built, or result in deterioration of the outlet works. Reservoir sedimentation or water quality issues within the reservoir also give raise to problems that must be addressed. In addition to the previous issues, it will be necessary in many cases to respond to increased safety standards, either in the structural or hydrological fields.

Criteria to establish how dams and reservoirs deteriorate and the magnitude of this deterioration vary from country to country, but it is clear anyhow that works of maintenance, rehabilitation, retrofit and decommissioning constitute more and more an important field of activity in every country which has in place a system of dams of certain age, among which Spain is notorious. Dam Owners will necessarily have to increase their budget allocation to keep their facilities in proper order. A substantial number of scientists and engineers, as well as consulting and contracting companies will be involved in these activities”.

The time passed since the Congress, far from making these words less valid, has only made them more evident and pressing, making some related concepts more obvious such as the incidence of climatic change in the management of water resources, and the need for sustainability.

In view of all this, SEPREM, again in collaboration with the *Dirección General del Agua del Ministerio de Medio Ambiente y Medio Rural y Marino* announces and has the pleasure to invite you to attend the Second International Congress on Dam Maintenance and Rehabilitation, to take place in Zaragoza (Spain) during September 2010.

This Congress will serve as a forum, not only to exchange knowledge and debate experiences of the diverse and complex field of dam maintenance and rehabilitation, but also to share the techniques and preventive activities which may prevent or delay the need for major capital maintenance. The Congress will also serve to convey the experience of the Spanish practitioners and companies to the international community of professionals in this field.

CONTENTS

Section 1. PREVENTIVE AND PERIODIC MAINTENANCE to include:

- Legislation applicable
- Survey
- Inspection and diagnosis works
- Risk evaluation and capital investment priorities
- Maintenance and conservation
- Regular maintenance activities at the watershed
- Reservoir and dam level

Section 2. IMPROVEMENT OF RESERVOIR CAPACITY AND OUTLET WORK PERFORMANCE, to include:

- Siltation process
- Sediment dredging and disposal
- Reservoir sedimentation management
- Outlet work rehabilitation and hydraulic performance improvement
- Outlet work capacity increase
- Retrofitting to allow crest overspill
- Dam heighthening

Section 3. IMPROVEMENTS OF THE STRUCTURAL STABILITY AND IMPERVIOUSNESS, to include:

- Stability assessment of old dams
- Long term behaviour of dams
- Old dams strengthening
- Retrofitting of dams
- Seismic retrofitting
- Improvements of embankment dam safety
- Evolutive deterioration processes
- Reservoir works
- Foundation works