

Introduction and programme

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INTRODUCTION :

The fixed link between Europe and Africa across the Strait of Gibraltar is an ambitious project which has attracted the attention of expert engineers for more than a century. As early as in 1928, a first commission was set up in Spain which carried out various geological and geophysical studies as well as a number of boreholes on both sides of the Strait.

In 1972, a new commission was created. This commission prepared a Preliminary Feasibility Study of the project which resulted in the Spanish - Moroccan Cooperation Agreements in 1979 and in the creation in 1980 of two state owned companies, SECEG in Spain and SNED in Morocco, whose object is the undertaking of the necessary studies for the design and construction of the link across the Strait.

The site of the project is located in the collision zone of two great tectonic plates, the Euroasiatic and African plates. This fact demands a careful study of the seismic activity and its possible influence on the project which is to be constructed. This study has been facilitated by the contribution of seismology and tectonic experts who consider the zone of scientific interest in itself because it constitutes a case of collision between continental plates of particular characteristics.

SECEG and SNED have analyzed the results of these studies and carried out their own complementary investigations during these last years. The first part of this Special Theme Session dealt with the description of these studies placing special emphasis on the problems which remain to be solved.

On the other hand, a project of the extent of the Fixed Link across the Strait of Gibraltar must necessarily take into consideration the experiences obtained from the design and construction of similar projects. The analysis of these experiences was the object of the second part of the Session.

The Session Programme, included hereafter, is followed by the papers presented in it.

PROGRAMME :

- I. SEISMICITY OF THE STRAIT OF GIBRALTAR DURING 1991
Aomar IBENBRAHIM, Idrissi DAFALI and Driss BENSARI
- II. SEISMIC BEHAVIOUR OF A BRIDGE ACROSS THE STRAIT OF GIBRALTAR
Miguel ANGEL ASTIZ
- III. SEISMIC EFFECTS ON A TUNNEL ACROSS THE STRAIT OF GIBRALTAR
Eliás GARCIA GONZALEZ
- IV. GOLDEN GATE SEISMIC RETROFIT PROJECT
A REFERENCE FOR APPROACHING THE SEISMIC ASPECTS OF THE GIBRALTAR STRAIT BRIDGE
Charles SEIM, Santiago RODRIGUEZ