

## PROJECT OBJECTIVES

Five main objectives have been defined in the trans-national context of this project, with a view to improving both the durability and the optimisation of maintenance methodologies applicable to the transport infrastructure in the Atlantic Area. These objectives will stimulate cooperation between the different stakeholders, as well as encourage the development of new R&D fields leading to more sustainable construction and maintenance.

To accomplish the main goals of the project and to achieve useful and practical results **five specific objectives** have been defined:

1- To produce **guidelines on the durability requirements of concrete and steel infrastructure**, the inspection and diagnosis of damage, the repair of materials and on methodologies for optimising maintenance.

2- To create **new competences in infrastructure design, construction and management** through the creation of knowledge dissemination actions and the organisation of courses and workshops for owners, managers, contractors and repair materials producers. This will represent a new opportunity to help the development of new skills in SME maintenance and repair companies and repair, and will contribute to the creation of new SMEs with employment in the Atlantic Area.

3- To stimulate the application of **harmonised European standards** for repair and to identify the requirement for applied research, in particular research topics concerning the **quality control of new repair products and the rehabilitation processes** resulting from their application.

4- To promote the development and use of **“green and smart” structural materials and repair products** incorporating **recycled materials and by-products**, with **reduced energy needs** during production and application and with increased **long-life performance** without being hazardous for application technicians or users. This will be facilitated through the creation of a new Atlantic Area Cluster “Green and Smart Materials”. This objective addresses new challenges and research areas in innovative products for construction and repair using new technologies in materials production such as nanotechnologies. The development and use of this kind of products will be essential to promote and strengthen synergies between environmental protection and economic growth within the area of repair and rehabilitation of transport infrastructure.

5- To create **DURATINET web-tools (the DURATINET website and the DB-DURATI database)** to facilitate the exchange of information within the project and with the **wider technical and scientific community**. The web-platform will help to generate and disseminate knowledge on the performance of materials, on the diagnosis of damage, on service life prediction and on the ageing of repair materials. The database (DB-DURATI) will be created to store information on the performance of materials from real structures. This kind of data does not exist yet in an open, consistent and reliable form. This can be considered as an **innovative initiative** in the project. The information will be very useful for the benchmarking of service life models and for aiding decision-making relating to the selection of reliable structural maintenance and repair strategies in marine environments. On completion of the project, the website and all technical publications will be available for public access.