

**Port of Cork Underwater Facility Inspection
Cork, Ireland
Port of Cork Company**

The Port of Cork is the second largest harbor in Ireland and critically important in the efficient and economic movement of commerce and people in Europe. In 2005, as the first step in a long-term strategic program to manage its waterfront infrastructure, the Port of Cork retained Collins to conduct underwater inspections of more than 4,500 linear meters of waterfront facilities. This project included the following:

- A comprehensive baseline survey of all facilities
- The development of an expedited schedule to minimize inconvenience to the Port and to meet budgeting deadlines
- The use of professional engineer-divers with experience with these types of structures in corrosive environments where accelerated low water corrosion (ALWC) may be present
- The development of an electronic structure asset management system to facilitate the Port's present and future program



The initial project phase consisted of building an electronic database customized for the Port of Cork's facilities and specific structural deficiencies. The program utilized criteria such as the facilities' structural importance, as well as a structural deterioration rating to help the Port prioritize the spending of funds on rehabilitation and repairs.

Two three-person crews, led by registered professional engineers, performed the inspections. The teams recorded deficiencies in a field book, which were then entered into the electronic database. All elements of the facilities located in the water were inspected with particular attention being paid to areas near the water line and the effects of ALWC. All underwater inspections were conducted using hardwired communications with EXO Masks.