

Table 25

**Expenditures to Meet Legislation Requirements**

U.K.	\$600M per year for marine environmental protection
Germany	\$2B per year for water/waste water pollution
Italy	\$60B to the year 2000 for all environment problems
Spain	\$1.4B to \$4.6B per year

**Undersea Defence Industry**

- Access to the defence industry market will likely not change much due to Europe 1992. No specific functional E.C. role has been established.
- France and the U.K. are the largest European exporters of defence equipment. With the exception of Spain, no E.C. countries are major importers of defence equipment.
- There is extensive collaboration in government R&D programs between NATO members of the E.C. focusing on, among other areas, mine countermeasures and sonar buoy and dipping systems.
- Areas of market growth are on-board export systems, long duration power supplies and surveillance systems.
- The E.C. countries with the largest naval equipment procurement budgets are the U.K., France, Germany and Italy in that order, with a total procurement in 1990 to 1991 of about \$12 billion.
- The defence markets are shrinking and, therefore, companies increasingly secure and protect their domestic niche markets. Basically, the undersea defence equipment needs of the E.C. countries are being met by national industry and will continue that way.

**Coastal Interface**

- Coastal interface projects in Europe are primarily to maintain the commercial viability of ports by means of channel dredging and conservancy works.
- The market opportunities include the provision of instrumentation, such as an innovative mud density measurement device which would measure the navigability of channels. Other opportunities lie in communication and recording systems.
- Procurement for coastal defence contracts are subject to the open tender rules laid out in the E.C. Public Works Directive.

**10.2 Elements of an Overall Canadian Strategy**

The most important element of an overall Canadian marketing strategy is Canadian innovation in products and techniques. The strategy should be built around Canadian-developed innovations, treating them as initial door-openers to new European markets, and to solidify and expand existing markets. The hard core money-making business would follow on the heels of the reputation-makers.

Canadian ocean industry companies are involved in a considerable variety of products and services. The product-oriented companies play roles, more or less, in all the aspects of the innovation chain — R&D, pre-production engineering, manufacturing, market assessment and strategy, marketing, and distribution/sales and services. The service-oriented companies, including engineering companies, have their own innovation chain usually starting with R&D and culminating in new scientific and engineering methodologies and analyses. In the course of developing new ideas, the ocean industry companies, in addition to their own in-house research capability, draw considerably on their relations with Canada's research infrastructure, composed of government research agencies, universities and non-profit research institutions.