Table 10

E.C. Coastal States

Member State	Coastline (km)	EEZ Area (000 km^2)
Belgium	64	2.7
Denmark	3,379	68.6
France	3,427	341.2
Germany	2,389	50.4
Greece	13,676	505.1
Ireland	1,448	380.3
Italy	4,996	552.1
The Netherlands	451	84.7
Portugal	1,793	1774.2
Spain	4,964	1219.4
U.K.	12,429	2336.5
EEC	49,016	7315.2

4.4   Trends and Opportunities in R&D Spending

Introduction

The total coastline of the E.C. Member States exceeds 49,000 km with a potential Exclusive Economic Zone (EEZ), excluding overseas territories, of 7,352,000 km^2 (Canada: 4,698,000.) Eleven of the 12 members are coastal states.

In the marine environmental and ocean sciences sectors, the areas of greatest market potential relate to the protection and understanding of the marine environment. These include monitoring and control instrumentation for industrial and offshore oil platform discharges and the monitoring of water quality in estuarine, coastal sea regions. The driving force for this relatively recent requirement has been the number of E.C. Directives, International Conventions such as the ones in Oslo and Paris, the International Ministerial Conference on the North

Sea and the resulting formation of the North Sea Task Force and, most importantly, the enactment of legislation with regards to water and marine pollution and the implementation of the polluter-pays principle.

Unlike the above, which is legislation-driven, a longer-term market will be technology-driven. This relates to measurement of the physical/ chemical/ biological characteristics of the oceans by autonomous underwater vehicles. The U.K. NERCs AUTOSUB program demonstrates the interest in and need for such vehicles to support the WOCE.

There is difficulty in quantifying these markets as no market statistics presently exist for the equipment and services that will be required. This, therefore, has to be inferred or broadly estimated from other information in the public domain. At present, most of the expenditure in this area is undertaken by government bodies through R&D in support of policy, to develop a better understanding of the