

General Studies Programme of the European Space Agency and participates in two optional programmes. The first is a preparatory programme for the study and preliminary development of systems intended for ERS-1 and ERS-2, future European remote sensing satellites scheduled for launching later this decade. Among the potential applications of remote sensing technology are crop inventory and yield forecasts, soil and arable land use, ice reconnaissance, the exploitation of mineral and petroleum resources, and the surveillance of shore and coastal areas. ESA, like Canada, has become increasingly conscious of the importance of efficient management and conservation of the earth's resources, and of the vital role that satellite remote sensing can play in this endeavour. The primary objective of the preparatory programme, in which both Canadian scientists and Canadian industry are participating, is the detailed definition and pre-development of the key sensor elements for proposed ocean monitoring and future land applications satellite systems.

The second optional programme in which Canada participates is the Large Telecommunications Satellite (L-SAT) project. In July 1979, seven of ESA's eleven member states embarked on a plan to develop a multi-purpose large platform, capable of carrying a wide range of communications payloads, including such future services as direct broadcasting of television and radio programming. The project is also designed to advance European technology and to demonstrate to a community of potential users in Europe the advantages of these new communications services. Canada joined the programme in December 1979, and Canadian industry will be developing one of the platform's six major subsystems. Spar Aerospace Limited of Toronto is the contractor for L-SAT's solar array component. The satellite is scheduled to be launched in 1984.

Through research and industrial cooperation, Canada and ESA pursue complementary goals. Canadians and Europeans are becoming increasingly dependent on satellites for improved communications, navigation, detection and monitoring. Satellites play an ever more important role in the planning of new services, from data transmission and computer communications to pollution surveillance and improved weather prediction. In a market dominated by US technology, Canadians and Europeans are well aware of the need to maintain a competitive industry, and to generate the innovation and technical development which are the motive forces for growth.

#### LE CANADA MISE SUR LA RECHERCHE ET LE DEVELOPPEMENT TECHNOLOGIQUE

Le Gouvernement canadien aura dépensé en 1980 \$2.1 milliards en activités scientifiques de toutes sortes, dont \$1.2 milliard pour la recherche et le développement technologique (R-D). De ces sommes, \$230 millions auront été consacrés au soutien direct de la R-D industrielle, ceci s'ajoutant à des concessions fiscales estimées à plus de \$100 millions.

Le Gouvernement canadien est déterminé à poursuivre des politiques susceptibles d'augmenter les dépenses brutes de recherche et de développement au Canada. L'objectif qu'il s'est assigné est d'atteindre 1.5 pour cent du P.N.B. d'ici le milieu des années 80 en dépenses brutes de R-D.

Toutes les études des dernières années ont démontré la nécessité