We have used our established position in Canada as a springboard into the North American market. Canadian government policy to encourage high technology and long-term industries continues to be an important factor in our plans. Such support could position us to compete globally.

> **Jim Lightfoot**, Managing Director Dowty Aerospace Division, Dowty Group PLC

A WELL-NETWORKED RESEARCH COMMUNITY

A number of R&D consortia have been established in various industries by pooling resources among industry, government and the university community. The growth in these consortia has been particularly rapid since 1980.

The Networks of Centres of Excellence bring together over 500 of Canada's foremost researchers from all sectors, with the overall aim of increasing research excellence and improving Canadian industrial competitiveness. This cooperation heralds a new era of networking and interaction across the country, as laboratories and industry are brought together to boost research, develop scientists' skills and increase technical knowledge.

For example, through the University-Industry Program, the Natural Sciences and Engineering Research Council (NSERC) provides universities with research grants to conduct a wide range of R&D projects in collaboration with industry. The industrial partner must contribute an appropriate amount of its own resources to the project, consistent with the risk and reward involved. An example is a Collaborative Research and Development Grant shared by Abitibi-Price and two researchers at the University of Québec at Chicoutimi, which demonstrates how industry/university partnerships can help companies position themselves at the scientific forefront of their industry while benefitting the industry as a whole. The research partners expect to perfect efficient, low-cost regeneration methods that will minimize the impact of forest exploration on the environment. NSERC's contribution to the project was matched by Abitibi-Price through contribution of funds and research support.

Another example is the funding of Industrial Research Chairs at universities. This Chairs Program provides an overall and complete financial support of the research initiative including funding for infrastructure, equipment and general research expenses, in addition to a component of the salary of a distinguished researcher.

Threshold technologies are increasingly more complex and more integrated. This requires research across a wide range of disciplines. The critical components to success are a collaborative atmosphere among researchers in universities and industry and a supportive environment where government, industry and qualified personnel are willing to undertake high-risk ventures. Canada's technology infrastructure includes these components and forms an ideal base for R&D or manufacturing investment.

The importance of R&D to the country's economic prospects is highly appreciated. Thanks to the conducive tax environment for R&D activity and a growing number of graduates in the sciences, engineering and mathematics, Canada's R&D infrastructure is rapidly improving.

Section 4 provides more information on R&D opportunities and infrastructure as it relates to each sector.

