- "intelligence" that helps each country select which areas of investigation to pursue effectively, eliminating wasteful or inefficient duplication of efforts already well advanced elsewhere;
- cost-sharing opportunities for infrastructure resources too expensive for most countries, laboratories and companies to support individually; and
- access to vast pools of knowledge and new international business opportunities.

Taken together, these elements help all participating countries make S&T policy decisions that will maximize strengths and resources.

Canadians' bright idea changes international standards for paper brightness

Just how white is white? This is a question suppliers of bleached pulp products must be able to answer to assure customers that their products meet certain agreed-upon standards of brightness. Brightness is measured by reflectance, for which there are a number of metrological measurement techniques. International measurement methods required Canadian suppliers to add more bleach to their papers to increase their reflectance. Canadian researchers conducted extensive research and were eventually successful in convincing our international partners to accept the Canadian measurement method. The resulting international agreement has been estimated to create savings in the hundreds of millions of dollars, while protecting the environment.

S&T collaboration

For more information

See also Canada S&T programs specifically dedicated to international collaboration, page 15. For further information about Canada's federal S&T networks and partnership programs—and their sponsoring agencies—see pages 24 and 25.

"The Government will pursue a global strategy for Canadian S&T, supporting more collaborative international research at the frontiers of knowledge."

Canada's Governor General on opening Canada's 37th Parliament, January 2001

Canada puts ice know-how to work on world stage

Canada is known the world over as a land of snow and ice. Now our first-hand experience with ice is paying off on the international scene. In the summer of 1998, Canada's Department of Fisheries and Oceans (DFO) led a successful marine oceanographic program called the Joint Ocean Ice Studies (JOIS). Using two Canadian Coast Guard icebreakers, more than 50 scientists from Canada, the United States and Japan conducted research in climate change, contaminants and marine ecosystems. Some of the research work has become Canada's contribution to the Arctic Climate System Study (ACSys) of the World Climate Research Program and addresses the primary goals of this 10-year multinational science program. It also allows DFO scientists to engage in projects of much broader scope and larger scale than would otherwise be possible with the department's resources alone.

Collaboration the real star of International Space Station

That new star lighting up the evening sky is none other than the International Space Station, an unprecedented international collaboration on the most ambitious engineering project ever undertaken. Canada is working with 15 international partners, including the United States and Russia, to build this wonder of science and technology, located 400 kilometres above the Earth. To date, Canadian astronauts Julie Payette and Marc Garneau have flown on missions to assist in the assembly of the International Space Station. Canada's key contribution is the Mobile Servicing System, also called Canadarm2, which is key to constructing the station in orbit, as well as operating the station during its planned 10-year life.