

Another future shared activity will be to collaborate on using the International Space Station. Here, Germany is the major project partner for the ISS's European laboratory module, now under construction. The US shuttle Endeavor already took Canada's contribution to the ISS on board in spring 2001. Canadarm-2, as it is known, is a robotic arm almost 20 metres long, equipped with several cameras, sensors and artificial grasping devices. This large-scale project, too, is an opportunity for German DLR robotics experts to collaborate with their Canadian partners from MD Robotics, Ontario. The CSA and the DLR are currently working together on a project to develop advanced technologies and methods for ground-based control of robotics systems on the space station.

Apart from providing the ISS with these modules, the CSA and the DLR in this initial stage were also already participating in the strategic planning groups on utilization of the space station. They are partners in selecting and coordinating experiments that will fill the ISS laboratories with purposeful activity, particularly in the biosciences and the materials sciences.

Major space research projects can usually be implemented only within the framework of multipartner international cooperation. However, it is when the project data and findings must subsequently be analyzed and utilized that we then see the strengths inherent in bilateral cooperation and thus specifically in our German-Canadian cooperation on S&T. This cooperation makes important individual contributions to international missions, in the form of new, purpose-built instruments or, through new methods for analyzing satellite data, makes it possible to provide governments with fundamental information for their planning and decision-making processes or to make basic data available for research projects in other disciplines. A cross-linking of research groups in Canada and Germany is producing at one and the same time the technical basis and the personal contacts for future joint projects and innovative concepts.

tiale, des groupes de planification stratégique pour l'utilisation de la station. Ils sélectionnent et coordonnent en commun les expériences (en sciences naturelles et en sciences matérielles, notamment) qui seront menées dans ses laboratoires.

Des projets d'une telle envergure ne peuvent être menés à bien que dans le cadre de partenariats internationaux. La coopération bilatérale – notamment, la coopération canado-allemande en S-T – est cependant essentielle pour l'évaluation et l'utilisation subsequentes des données et des résultats ainsi obtenus. Cette collaboration bilatérale fournit des apports importants aux missions internationales (sous forme de nouveaux instruments). En outre, les données satellitaires obtenues avec les nouvelles méthodes d'analyse donnent, aux gouvernements, des informations utiles à la prise de décisions et, aux chercheurs d'autres disciplines, les bases scientifiques dont ils ont besoin pour élaborer des projets de recherche dans leur secteur. L'enchevêtrement des liens entre groupes de chercheurs canadiens et allemands crée en outre, tant sur le plan scientifique que personnel, un cadre propice à la poursuite de nouvelles idées et de nouveaux projets de recherche.