opportunities offered by the particular international activity on the other. Thus surveys, studies and analyses have to be carried out and then reinforced by visits and meetings with prospective partners before choices can be made. Costs involved in these necessary preliminaries can be substantial, they are difficult to accurately predict and have, moreover, to be made on faith with no initial assurance of worthwhile returns.

- A key factor in assuring the effective and amicable development of a joint collaborative activity is the question of ensuring a "just return" for all participants. This can result in less than optimal solutions to such considerations as the need for a centralized location instead of a geographic splintering of sub-system developments. It can also lead to inefficiencies and difficulties where the technological capabilities of participating nations are widely different.

- Joint R&D projects between several nations are traditionally difficult to manage. They usually involve special complexity in staffing, planning and control. Different national sensitivities and interests have to be constantly borne in mind; there are usually language, monetary exchange and even legal (e.g., standards) difficulties. Extra travel costs are virtually certain.

- Because of political considerations, joint intergovernmental projects are difficult to terminate, a factor of some importance in view of the long term nature of research.

Future Prospects

It seems very probable that the future costs of research will mount as new and more complicated technological needs demand more sophisticated processes and equipment. Judiciously chosen international collaboration will be even more important if countries like Canada are to address simultaneously a wide number of national problems. For major programmes of the future, collaboration may in fact be the only means of access for smaller countries to new technologies. Future research on nuclear fusion is a case to point.

In the broader economic sphere it seems equally likely that economic difficulties will persist and will increasingly raise the spectres of market protectionism and technolo-