

specialization that would require on the part of the STAs and the slowness of communications in both directions. Problems of confidentiality also make industries hesitate to get the STA systems involved. They are afraid not only that the information obtained may be leaked, but also that the very formulation of the request will betray the nature of their current projects. Furthermore, they are only moderately interested in information that is not exclusive enough to give them competitive advantages.

As for the type of information sought, what we have heard in Canada from users and potential users confirms what has been observed elsewhere, that it would be wise not to overestimate the potential users' interest in isolated items of information near the leading edge of research and development. What may be sought is information on the status of a technology, a production sector, a market, opportunities for co-operation, etc.

Channels of Communication

However, the speed with which an STA system, and particularly the home base, can channel and process information is still important. In that respect systems with only one home base (like the Swedish one) are superior to those with twin bases. Moreover, even the former are increasingly adopting a practice that permits and even encourages direct contacts between users and STAs in posts for technical questions. The success of that practice depends on the judgment of the STAs and on the ability of the home base to keep up to date, but we can scarcely conceive of a system in which the home base considered that all information must pass through its hands.

The Roles of Government and the Private/Semi-Private Sector

At first glance, the STA system of the Federal Republic of Germany seems clearly inadequate. It is of the "two-headed" type, in which direct contacts are encouraged for technical questions but all communications must pass through the Department of Foreign Affairs, and the role of the Department of Research and Technology (which receives 80% of the information) is essentially limited to distributing the information. Since it is relayed twice, the information is not seen as circulating very quickly. However, it would be a mistake to conclude that the German users - industries having a high scientific and technical content, but also research institutes, universities, etc. - are suffering from a lack of access to international information and contacts. They obtain them without going through the government. This is true not only for firms and institutions that are powerful enough to maintain their own access systems. The large industrial associations consider that organizing this access on the international level (information and contacts) is part of the services they provide to their members. The country's "ecostructure" - including the financial institutions - works in such a way as to ensure that there are many and varied links with foreign countries that completely bypass the government structures. As for the collection of scientific and technical information per se, some public and semi-public bodies that are independent of the departmental bureaucracies also provide