

The Ministry of Research created 16 technological research and innovation networks (RRIT: Réseaux de Recherche et d'Innovation Technologique) to reinforce the research-industry linkage. These networks issue annual calls for proposals – financed (50%) by the FRT and the French Ministry of Economy, Finance and Industry – for research projects proposed (and 50% financed) by industry in association with one or more public research laboratories. The FRT has seen its funds increase by 150% in 5 years, to reach FF1000M (€152M) in 2002.

In 1997, large industrial groups constituted 44% of the beneficiaries of funding offered by the FRT, SME-SMIs 26%, and public bodies 26%. In 2000, the FRT beneficiaries were essentially SME-SMIs (51%) and public organizations (35%), while large industrial groups became the minority (8%). In the field of information and communication sciences and technologies (ICST) alone, for which there are 4 networks (RNRT, RNTL, RMNT and RIAM), more than 300 projects have been supported, representing a research and development effort of more than €530M.

Promotion of placement of young researchers in companies

Several arrangements have facilitated placement of young researchers (doctoral-level students) in firms, particularly by means of CIFRE scholarships. The number of CIFRE scholarships granted annually has increased by more than 36% since 1997. In total, 2,300 young doctoral candidates will receive CIFRE scholarships in 2002.

FUTURE ACTIONS

Entrepreneurship awareness

Although the 1999 law on Innovation and Research has led to a real change in the attitudes of public-system researchers, risk-taking on the part of students and researchers must be further encouraged. Entrepreneurship awareness activities are regularly conducted in universities by ANVAR under its partnership agreement with the Conférence des Présidents d'Université [conference of university chancellors]. An Observatoire national des pratiques pédagogiques en entrepreneuriat [national agency to monitor educational practices in entrepreneurship] was created in 2002. Its mission is to observe entrepreneurial educational practices and initiatives in the entire French education system, and to disseminate the best methods.

Assessment of researchers

In the assessment of public-service researchers and the awarding of internal funds, there is a need to better account for the application of the researchers' work and of their collaboration with industry, thus going beyond their contribution to scientific progress as measured by scientific publications. This will be an important and new point in the four-year contract of "corporate" objectives that is scheduled to be signed in March 2002 between the French government and the CNRS.

Use of public laboratory research

Special attention has been paid since the 1997 Guillaume report to facilitate the commercial applications of public laboratory research results. Public research bodies and universities must now develop an intellectual property charter. The aim of this charter would be to ensure better use of their work and define their partnerships with companies. Most have already drawn up such charters. It is necessary, however, to ensure general adoption of this practice, especially within the laboratories themselves.

Recently, at the end of January 2002, the Ministry of Research announced the establishment of Services d'Activités Industrielles et Commerciales (SAIC) [services for industrial and commercial activities] within French universities. These services will consolidate the management of (all) external commercial-type contracts with the university in order to identify research that could be readily commercialised. Public research organizations (CNRS, INSERM, INRA, etc.) are also to adopt similar services.