
SCIENCE AND TECHNOLOGY PROGRAM - FRANCE

The newly created Edufrance agency has been mandated not only to promote training and educational and scientific exchanges, but to enhance the image of French universities abroad and co-ordinate French bids in response to international calls to tender. The agency is an association of the government, major schools, and university and engineering school presidents.

ANVAR, the national research development agency, which just celebrated its 20th anniversary, will continue to play a complementary role, supporting SMEs/SMIs. ANVAR was mandated by the government to work with laboratories on adopting a global approach to innovations, from the researcher's original idea in the laboratory to publicly traded companies.

Another significant change announced is the reduction in laboratory budget allocations for major scientific equipment. For example, a whopping 85% of the CNRS budget is taken up by staff costs, and only 15% goes to operating costs, at a time when major equipment accounts for 50% of the increase in research funding. In the future, all major equipment will be built by European multinationals, as was the case for the construction of the third generation 'Soleil' synchrotron, for which the Minister of Research opted for co-operation with the British foundation Wellcome Trust, rather than a strictly French solution, to the huge surprise of French researchers, who took to the streets in protest in the summer of 1999.

When he assumed his position in 1997, the colourful Minister for National Education, Research and Technology, Claude Allègre - himself a senior researcher - clearly stated his intended reforms for improving France's performance in technology innovation. He started by announcing the reorganization of public research agencies to improve their performance and effectiveness. The biggest challenge is a cumbersome and complex bureaucracy, characterized by Mr. Allègre when he became minister in 1997 as a "mammoth" from which he promised to "cut the fat." After two years of reform marked by confrontation, provocations by the Minister and demonstrations in the street, things have calmed down. Promoting multidisciplinary or creating links among France's numerous ultra-specialized laboratories is no easy task. Unable to reorganize the entire structure, Mr. Allègre opted for imposing change via financial levers, creating science and technology funds and networks, and joint incentive initiatives. The first sectors to benefit from those funds were genomics and information and education technologies.

A recent positive sign was the significant increase in risk capital investments and the number of innovative companies registered on the stock market. At the same time, R&D expenditures in major corporations have stagnated somewhat. According to a November 1998 OECD report on France's research and innovation policy, these are signs that SMEs are playing a greater role in the innovation system.

France already has all the features of a knowledge-based society, and if Mr. Allègre is successful in his plan to modernize and open the French system to the world, and make its R&D structure more flexible, France will be in a position to meet the needs of the new economy more quickly and thus confirm its place as a science and technology power.