



Resolution 1037 (1994)¹

Research and development in smaller countries

Parliamentary Assembly

1. The Parliamentary Assembly observes that smaller countries are ever more frequently confronted with difficulties concerning the research sector, and that they try on the whole to overcome them separately.
2. The difficulties are due to certain factors and processes, namely:
 - a. limited human, financial and material resources;
 - b. the vicious circle created by limitation of resources which makes it necessary to choose between research sectors and retards certain sectors by comparison with others, hence the need for technology imports;
 - c. the relations, often subordinative, which they maintain with multinationals usually based in the larger countries;
 - d. the brain drain, detected even in smaller countries with a high standard of research and development (R & D) such as Sweden or Switzerland, but now most alarming in the countries of central and eastern Europe.
3. The influence of governments operates at the level of basic research, but applied research has become almost entirely the preserve of private enterprise.
4. The countries of central and eastern Europe face specific R & D problems following the political changes which occurred a few years ago.
5. The Assembly accordingly invites the governments of Council of Europe member states:
 - 5.1. to lay the foundations for sound institutional co-ordination of leading-edge activity at local, regional and national levels, paying special attention to the sectors embracing disciplines which have an interface function: interdisciplinary sciences, generic technologies and transfer sciences (including engineering);
 - 5.2. to step up efforts to improve technology transfer to the countries of central and eastern Europe, in particular:
 - a. by organising advanced training programmes for researchers from the countries of central and eastern Europe;
 - b. by providing these countries with material and financial support as regards essential equipment and requisites that are less costly but nonetheless crucial, for example, payment of travel expenses for researchers taking part in colloquies or conferences abroad, and purchase of publications and periodicals in hard currency;
6. The Assembly is also aware that the large number of decision-making centres found in most OECD countries in the science and technology field - enabling each sector to be solely responsible for the aspects relating to its sphere of competence - also has adverse effects such as dispersal of efforts, duplication, poor co-ordination and multiplicity of advisory bodies;

1. See [Doc. 7081](#), report of the Committee on Science and Technology, Rapporteur: Mr Poças Santos. Text adopted by the Standing Committee, acting on behalf of the Assembly, on 18 May 1994.



7. It therefore invites the states concerned:

- 7.1. to improve co-ordination between the independent sectors of the science and technology complex and more generally between central government, universities, private enterprise, non-profit making institutions, etc. The network formed by their mutual relations should be managed and exploited or if necessary built up and developed. This aim is to be achieved essentially through co-operation on research projects as well as by other more specific means. These involve tax incentives to encourage recruitment of researchers by firms and foster the development of network "intersections" within the firms themselves (particularly small and medium-sized enterprises (SMEs));
- 7.2. to set goals and priorities for scientific research, having regard to two elements:
 - a. basic technologies in which each country has recognised know-how because of their general economic implications, and which are of special importance for sunrise industries;
 - b. other fields where countries already have competitive industries and/or comparative advantages;
- 7.3. to uphold the principle of researchers' freedom of initiative, while encouraging them to undertake research in fields having recognised priority in the light of the criteria set forth above;
- 7.4. to give R & D priority at the pre-marketing stage and emphasise generic technologies (in the EUREKA projects, for instance). This will make room for future co-operation by all countries in major technological programmes such as aeronautics, space programmes and high-speed trains;
- 7.5. to evolve a system of loans for research;
- 7.6. to encourage young people to take up research by enhancing its status and making it more attractive to them;

8. The Assembly particularly invites the countries of central and eastern Europe:

- 8.1. to state in precise terms, at the highest political level, the types of R & D activity deemed essential, and to allocate finance to them accordingly;
- 8.2. to promote, for the furtherance of international co-operation, measures such as language learning, travel facilities, evaluation of enterprises by foreign experts, joint programmes and projects, and pooling of resources;
- 8.3. to devise effective national accounting systems - or reform the existing ones - for the production of internationally compatible statistics;
- 8.4. to develop and maintain appropriate conditions and incentive measures, in particular tax incentives, so that firms may carry on their activities and self-finance the R & D which suits their corporate strategies;
- 8.5. to take whatever action will encourage firms to co-operate with each other and with universities in respect of industrial research;
- 8.6. to provide technological research institutes with infrastructures for technology transfer and joint development of these technologies;
- 8.7. to include in special public funding programmes any R & D activity projects which support official objectives such as improvement of the public health system, environment, better workplace safety and development and rational use of primary and renewable energy sources, objectives whose commercial viability is limited at present;
- 8.8. to open up increasingly to international co-operation in the R & D field, taking full advantage of the European programmes to which they have access.