



Resolution 1075 (1996)¹

Scientific and technological co-operation with central and eastern European countries

Parliamentary Assembly

1. The international competitiveness of central and eastern European countries will depend on their capacity to innovate, based both on their own research and development efforts and on their successful adaptation of external technologies and know-how. If they succeed in establishing the crucial link between the knowledge infrastructure and different sectors of the economy, they could become successful competitors in the world markets.
2. Reform of the research and development systems of central and eastern European countries is therefore inevitable. The centralised, hierarchical, "top-down" organisation has to be replaced by a new "bottom-up" approach taking into consideration market demands. Reorganisation and restructuring efforts in the period 1990-95, albeit significant, have not yet led to the desirable degree of transformation in this area.
3. International co-operation has not yet attained an optimum point, although the number of public and private projects are ever increasing and have reached nearly 20% of all research and development activities in the countries concerned. They remain fragmentary and lack synergy. They also regularly come up against obstacles of a political and legislative nature, and suffer from insufficient diffusion of information. There is definitely a need for a "second generation" co-operation.
4. It was hoped that one natural consequence of transition would be to reorient science and technology activities in the area of defence towards civil production applications. The conversion process, so far, has been disappointing. If the potential of the military-industrial complex is not used for civil purposes, the temptation to search for military outlets will be great. This area undoubtedly deserves special attention in international co-operation programmes.
5. Despite substantial differences between countries, it can be said that the former system in central and eastern Europe was characterised by an oversized research and development sector, a university often cut off from research and above all the subordination of science and technology to ideological and political considerations. This was especially true with respect to human and social sciences. The Assembly thought it was urgent to point out this specific aspect in its [Recommendation 1264 \(1995\)](#) on the social sciences and the challenge of transition.
6. In an effort to further the reflection in this area a conference on scientific and technological co-operation with central and eastern European countries was organised (Prague, 5-7 June 1995) which brought together members of parliaments of all countries represented in the Parliamentary Assembly, as well as government officials, leading experts, representatives of international organisations and scientific institutions.
7. In the light of this conference, the Assembly invites all parties involved to pursue the following objectives in both the promotion of domestic reforms and international co-operation:
 - 7.1. to rebuild the science and technology infrastructure in central and eastern European countries by introducing synergies between research activities, universities and industry;
 - 7.2. to make more rational use of these countries' areas of excellence and human potential;

1. Assembly debate on 23 January 1996 (2nd Sitting) (see [Doc. 7451](#), report of the Committee on Science and Technology, rapporteur: Mrs Stiborová). Text adopted by the Assembly on 23 January 1996 (2nd Sitting).



7.3. to support conversion of military industries for civil use.

8. The Assembly recommends that the following principles and measures be implemented by the countries of central and eastern Europe: Institutional framework

8.1. to redefine the role of the state and the public sector in general in the research and development system;

8.2. to reduce progressively the number of excess staff, which is necessary in present economic circumstances in order to reallocate resources more rationally and to favour quality over numbers;

8.3. to introduce legislative reforms in order to enhance the role of universities in research;

8.4. to stimulate inter-institutional and inter-sectoral co-operation and mobility;

8.5. to reward merit; egalitarian treatment inhibits creativity and favours the brain drain;

8.6. to develop peer review mechanisms that are preferable to arbitrary decisions both in universities and research institutes;

8.7. to lay down proper criteria and rules for the privatisation of research and development bodies to avoid abuse and anarchy in this area;

8.8. to focus projects more precisely, particularly in the field of nuclear safety, by developing harmonised, extensive and structured co-operation; in addition, to promote co-operation and awareness with regard to health problems, especially Aids;

8.9. to develop governmental and parliamentary science and technology assessment schemes and consultation machinery in order to achieve a higher degree of transparency and democratic decision-making;

8.10. to encourage decentralised co-operation through local and regional authorities and organisations, and universities, within their respective fields of competence;

8.11. to set up a co-operation observatory to identify and assess co-operation by country or discipline; Technology and innovation

8.12. to stimulate research and development and innovation within companies and encourage co-operation between them, vertically in joint productions, or horizontally in the pre-competitive development of technology;

8.13. to remove barriers to the entry of foreign research and development projects by reducing customs duties on scientific equipment;

8.14. to facilitate technology transfer through joint ventures by improving corporate law, reinforcing industrial property rights, and imposing tax reductions and other financial incentives;

8.15. to elaborate new intellectual property laws and patenting systems, law enforcement remaining crucial in this area;

8.16. to stimulate research on the needs of the market in new technologies by creating special centres as catalysts between research and industry;

8.17. to make university research more flexible in its operations, by allowing contracts with companies, though within certain rules;

8.18. to introduce the dimension of the "quality of life" into the research and development activities, giving priority to problem areas such as the recycling of toxic waste, the rehabilitation of polluted sites, the processing of food stuffs, transport, the information and communication sectors, and health.

9. The Assembly calls on the governments of other Council of Europe member states, as well as on the European Union, OECD and other major partners of scientific and technological co-operation with central and eastern European countries:

9.1. to base their action on the fundamental principles that scientific and technological co-operation between East and West should be:

focused more on concrete achievements and less on advice;

modelled on relations usually practised between industrialised nations rather than on assistance procedures;

aimed at the mutual benefit and the medium-term development of the research and development effort of these countries;

- 9.2. to improve their dialogue with the authorities of the receiving country at all levels, an example of which are ministerial meetings at regular intervals, as suggested by the European Union;
- 9.3. to pursue the objective analysis of research and development infrastructure of the countries concerned, as is the case with country evaluation reports of OECD, which are indispensable for sound co-operation programmes, based on real needs;
- 9.4. to help the development of statistics on main science and technology indicators and databanks on existing institutions and their current capacities;
- 9.5. to introduce better targeted selection criteria for the financing of research projects;
- 9.6. to support "centres of excellence" or "reference", top quality research and technology institutes, training centres, and so on, whose performance would be regularly assessed and which are likely to play a role in bringing about change;
- 9.7. to orient the co-operation programmes towards high priority areas such as the conversion of military science and technology to civil purposes, the satisfaction of consumer needs, clean technologies and sustainable development, and the rational use of energy;
- 9.8. to design special collaborative arrangements that would help to reduce the brain drain, in the form of networks, twinning of laboratories, shared posts, European chairs, and so on, which would allow scientists abroad either to remain in permanent contact with their national institutes or urge them to spend part of the year in their home country.