

COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 26.03.1996
COM(96) 120 final

Draft

COUNCIL RESOLUTION

relating to educational multimedia software in the fields of education and training

(presented by the Commission)

EXPLANATORY MEMORANDUM

Preparing the people of Europe for the information society has become a priority, particularly in education. Accordingly, a research/industry Task Force "Multimedia educational software" was set up in March 1995 by the Commission and provided an opportunity to take stock of the current situation as regards educational multimedia and to draft a tentative plan of action to strengthen the research effort in this field through the research and technological development actions of the fourth framework programme (1994-1998), to allow the users concerned to derive the best possible advantages from the new technologies in the context of education and training, to improve the effectiveness of European research, and to give a boost to the European educational multimedia industry.

A number of observations on the current situation emerged from this exercise.

Firstly, multimedia educational software offers vast potential for teaching and people in the education sector are key figures for the multimedia industry. Teachers and trainers are responsible for a whole range of tasks which cannot be taken over by machines. Teachers discuss and exchange ideas with their pupils. They stimulate, assess and adapt teaching routes. They analyse and select from among the resources available. The great advantage of multimedia is its interactivity whether for local or distance learning, and experiments in progress show that it offers additional dimensions. Multimedia permits an original presentation of knowledge and the creation of a virtual environment which gives students an idea of the effects of their actions. In combination with telematics networks, it provides a capacity for interpersonal communication, a collective tool which is essential to the learning process. Furthermore, multimedia offers fresh prospects for providing a growing percentage of the population with access to a good level of general education and to solid vocational training, and for renewing knowledge and skills in a context of increasing specialisation and complexity.

A second Task Force observation is that the European Union has to make the best possible use of expertise in this area and foster co-operation between all those in the Member States who are involved in these developments. A research and incentive drive is needed to turn the potential of multimedia educational software into tangible teaching benefits and achievement. This drive should focus in particular on better co-ordination of Community programmes, be they R & D programmes, programmes dealing with the production of multimedia contents or education and training programmes, in complementarity with national action. The Structural Funds and the resources allocated to the trans-European networks could also make a useful contribution to this drive.

The Task Force's stocktaking exercise also reveals a patchy and generally unsatisfactory situation at present as regards the provision of multimedia educational equipment and software in education and training establishments. There is even a serious risk that home equipment will overtake the level of equipment in educational establishments, meaning that the children from low-income families will be left on the fringes of developments. Wider access to the new information and training media in schools and in all places of learning is a challenge which has to be met if we are to avoid a two-tier society divided by unequal access to technologies.

These three broad observations prompt recommendations concerning:

- research and the choice of priorities in collaboration with consumers and industry
- the design of multimedia educational software
- the training of teachers and trainers
- the infrastructure of equipment and services for users, teachers or trainers, and the dissemination of best practice

Co-ordinated and targeted research on the teaching environment offered by multimedia technology should make it possible to better understand the teaching issues inherent in these developments and to tailor supply to demand.

User requirements should be taken into account in the design of multimedia tools, services and applications at the outset, so that software can be customised to the teaching process. Pupil and teacher must be at the heart of this process of designing multimedia applications and services.

The training of teachers and users in the broad sense is essential and due account has to be taken of the specific roles of the teacher, the trainer, the pupil and the student in the use of multimedia educational software, also paying attention to the fundamental contribution of initial and continuing teacher training structures. Multimedia technology could make dissemination of teaching and organisational innovation easier e.g. new patterns of organisation for school or outside school learning or teaching methods at all levels.

Infrastructures are essential. A good level of appropriate multimedia equipment is a precondition for the successful introduction of multimedia: at school, university and all places of education and training. This equipment should be defined as a function of its suitability to the teaching environment and the funding context. New ways of access to resources and funding should be devised. The establishment of multimedia and distance support centres, the development of co-operation networks, the development of forums of evaluation and demonstration would be a useful way to disseminate good practice.

The effectiveness of these measures presupposes synergy between all the players concerned: teachers, families, local authorities, heads of establishments, of associations and companies, pupils, students and employees, in arriving at a general consensus on the objectives to be attained at these different levels. Solid school-enterprise partnerships should be negotiated in the interests of mutually advantageous relationships under flexible and adaptable contracts. In particular, telecommunications operators and service providers should be encouraged to try out innovatory technological solutions and pricing structures, in conjunction with the education authorities, teachers, parents and students.

Specific measures are needed for children and students from disadvantaged environments, underachievers, disabled people, pupils or students in rural areas, the unemployed and the employees of small firms.

Specific actions could be envisaged, as part of international co-operation, under existing programmes and in relation with specific aid programmes for the countries of Central and

Eastern Europe, and the countries of the Mediterranean basin, as well as third countries, in the light of the experience gained during the PHARE programme in the field of Open and Distance learning.

Article 126 of the Treaty creating the European Community, which allows for encouragement of distance learning under the heading of the general objectives of co-operation in education, and respecting the principle of subsidiarity as regards the content and organisation of educational systems, does not allow the proposal of a legally binding text. This is why the Commission proposes the adoption of a resolution seeking to lay the foundations of profitable and lasting co-operation on questions are which are essential to the future of education systems in Europe. It also purports to encourage and support the education authorities in the Member States in any action they take in this area. Lastly, it seeks to achieve better co-ordination on these issues following the recommendations of the Task Force "Multimedia educational software".

Council resolution

of .....

relating to educational multimedia software in the fields of education and training

THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community,

Having regard to the draft resolution submitted by the European Commission,

Having regard to action to support the development of high quality education through co-operation between the Member States, while respecting their responsibilities in this area,

Having regard to Decision No 819/95/EC of the European Parliament and of the Council of 14 March 1995 establishing the Community action programme SOCRATES ([1])

Having regard to Council Decision 94/819/EC of 6 December 1994 establishing an action programme for the implementation of a European Community vocational training policy (LEONARDO DA VINCI) ([2]);

Having regard to Decision 818/95/CE of the European Parliament and the Council of 14 March 1995 regarding the adoption of the third phase of the "YOUTH FOR EUROPE" programme ([3]),

Whereas Decision No 1110/94/EC of the European Parliament and of the Council of 26 April 1994 concerning the fourth framework programme of the European Community activities in the field of research and technological development and demonstration (1994-1998), also makes provision for research in the area of the application of information and communication technologies in responding to common social needs ([4])

Whereas Commission communication COM (96) 12 final concerning the draft decision of the European Parliament and the Council regarding the second amendment to decision 1110/94/CE relating to the fourth framework programme for research, technological development and demonstration (1994-1998), makes provision for an increase in the global amount of the Community's financial contribution to the fourth framework programme, and the allocation of financial resources to activities relating to educational multimedia software,

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1 OJ No L 87 of 20.04.1995, p. 10

2 OJ No L 340 of 29.12.1994, p. 8

3 OJ No L 87 of 20.04.1995, p. 1

4 OJ No L 126 of 18.05.1994, p. 1

Having regard to Council Decision 94/802/EC of 23 November 1994 adopting a specific programme for research and technological development, including demonstration, in the field of information technologies (1994-1998) ([5])

Having regard to Council Decision 94/801/EC of 23 November 1994 adopting a specific programme for research and technological development, including demonstration, in the field of telematics applications of common interest (1994-1998) ([6])

Having regard to Council Decision 94/915/EEC of 15 December 1994 adopting a specific programme of research and technological development, including demonstration, in the field of targeted socio-economic research (1994-1998) ([7])

Having regard to the Commission proposal of 30 June 1995 for a Council Decision adopting a multi-annual Community programme to stimulate the development of a European multimedia content industry and to encourage the use of multimedia content in the emerging information society (INFO 2000) ([8])

Having regard to Council Decision 95/563/EC of 10 July 1995 on the adoption of the (MEDIA II -development and distribution) programme to encourage the development and the dissemination of European audio-visual works ([9]), and the Council decision 95/564/CE of 22 December 1995 on the adoption of a training programme for professionals in the European audio-visual industry (MEDIA II - training) ([10])

Having regard to Council resolution of 4 April 1995 on "culture and multimedia", which recognised the urgency of taking action to support the establishment and development of a market in cultural multimedia whilst respecting Europe's linguistic and cultural diversity ([11]),

Having regard to the Commission's White Paper *Growth, competitiveness and employment: the challenges and ways forward into the 21st century*, which stresses the importance of education and training as catalysts in a changing society ([12])

Having regard to the Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of the Regions "Towards the information society in Europe: a plan of action" ([13])

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5 OJ No L 334 of 22.12.1994, p. 24
6 OJ No L 334 of 22.12.1994, p.1
7 OJ No L 361 of 31.12.1994, p. 77
8 OJ No C 250 of 26.09.1995, p. 4
9 OJ No L 321 of 30.12.1995, p. 25
10 OJ No L 321 of 30.12.1995, p. 33
11 OJ No C 247 of 23.09.1995
12 COM (93) 700 final,05.12.1993
13 COM (94) 347 final, 19.07.1994

Taking note of the outcome of the G7 meeting in Brussels on 25-26 February 1995 on the information society and particularly the recommendations on pilot projects in the area of transcultural education and training;

Having regard to the potential offered by the use of educational multimedia for third countries in the interest of international co-operation, and in particular the countries of central and eastern Europe, the countries of the Mediterranean basin, and developing countries,

Taking note of the two reports of June and December 1995 from the advisory group on competitiveness forwarded to the President of the Commission and to the heads of state and government on the improvement of European competitiveness;

Taking note of the report of the Task Force "Multimedia educational software", which takes stock of the situation as regards this software in Europe and proposes a plan of action in this area;

Having regard to the White Paper *Teaching and learning: towards the learning society* ([14]) which recommends *inter alia* measures to encourage the development of multimedia instruments conducive to the acquisition of new knowledge by:

- launching co-ordinated calls for proposals across the Community programmes concerned;
- establishing a system to exploit to the full and label European educational software and European education and training products in order to boost the dissemination of these products;

Having regard to the Communication from the Commission to the Council the European Parliament, the Economic and Social Committee and the Committee of the Regions on a methodology for the use of Community resources in implementing information society applications and on the need for effective co-ordination between research and educational programmes ([15])

Having regard to the advantages of joint action for the use of educational multimedia software in services in schools and training establishments in order to:

- improve the quality and effectiveness of education and training systems, *inter alia* by introducing new patterns of teaching;

- strengthen social cohesion by giving every person and every company, particularly those of the less-favoured regions and the small and medium size enterprises, the means to be an active part of the information society;

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14 COM(95) 590 final, 29.11.1995

15 COM (95) 224, 31.05.1995

- make teachers and students aware of the use of these new instruments and provide appropriate training;

- instigate a solid partnership between educational establishments and the suppliers of hardware, software and services with a view to creating a big market in multimedia applications and services truly adapted to teaching needs:

Whereas the use of software and multimedia educational services requires the active participation of local authorities, schools and training establishments, teachers, trainers, and the business sector so that the best teaching methods can be tested and used;

Having regard to the contribution of multimedia telematics networks in linking up education and training establishments, teachers, pupils, and the outside world in order to provide access to information, exchange and compare ideas and teaching experience;

Taking note of the results obtained within Community programmes, and of the richness and diversity of actions in progress, and of experience acquired by the Member States in the development and exchange of methods relating to the use of information and communication technology for educational and training systems,

CALLS UPON THE MEMBER STATES TO:

- develop the use of the new information and communication technologies in education and training systems as part of an enhanced approach to teaching methods which take full account of the teacher's role, give the student a more active and participative role, customise learning, encourage a cross-curricular slant, and secure co-operation between teachers in defining teaching projects and in responding to specific needs,

- step up the training of teachers and trainers in using multimedia software and on-line services and their use as tools to better prepare their teaching activities; special attention should be paid to the analysis and understanding of the role of teachers and trainers, to providing teachers with the results of research on the introduction of multimedia into teaching, to campaigns to show the benefits of multimedia, to support and promotion of teachers' initiatives, and to co-operation between teachers and the business sector on trial runs using multimedia products and services;

- encourage research activity, the creation and design of multimedia educational software in Europe, particularly under partnerships between the education world, editors and multimedia companies, for:

    - the development of methods for the design of multimedia teaching material,
    - structures to support the development and adaptation of educational multimedia software, involving teachers and trainers in the design of these products;
    - the definition of appropriate software licensing systems and the development of new ways to share resources;

- ways of opening up access to multimedia libraries for schools and training establishments while safeguarding intellectual property;
- the definition of quality criteria and labels or appropriate means of recognition, *inter alia* in order to secure synergy with multimedia intended for the home market and a satisfactory level of consumer protection;

- setting up the appropriate infrastructures to guarantee to the greatest possible number of users access to hardware, software and on-line multimedia services of good quality, as well as to the appropriate training and back-up. This should be achieved by installing this equipment at the places concerned, i.e. nursery, primary and secondary schools, universities, public libraries, businesses, resource centres, socio-educational centres for young people and families, associations, etc. Special attention should be paid to developing multimedia support centres and to communication between teachers and education partners; and to training in its broadest sense.

- take specific steps to:

  - introduce multimedia as a means of testing and encouraging flexible patterns of school or university organisation, in order to increase the effectiveness and dissemination of such instruments,
  - favour the use of, and access to educational multimedia software in particular in catering for the needs of young people, and areas which are disadvantaged, peripheral or suffering from industrial decline;

- encourage the dissemination of best teaching practice based on the use of multimedia educational software and services, and consider the establishment or consolidation of demonstration and promotion forums on this basis;

- seek out the most efficient management methods for joint action at European level between cultural, educational and training programmes and research programmes; taking account of the possibilities offered by the Structural Funds,

- produce regular progress reports on the implementation of multimedia educational software in their education systems.

CALLS UPON THE COMMISSION TO

- undertake a comparative analysis and follow up of the most advanced pilot experiments on the use of multimedia educational products and services in Europe and in the world, and disseminate the results of this analysis to the Member States;

- take account of the fields of education and training in the context of its overall initiatives on the information society;

- use all the potential offered by multimedia software and services in implementing Commission-driven actions in the areas of education, training and culture, including

international co-operation, particularly with the countries of Central and Eastern Europe and the Mediterranean countries;

- identify and encourage common services which could be developed at European level, including information on products and their evaluation, the establishment of links between producers, users and managers of education and training systems in order to secure good quality in the products and their use;

- establish a co-ordinated approach for action in the field of multimedia educational software under the different Community programmes concerned and also under the Structural Funds and initiatives to develop trans-European telecommunications networks, around converging objectives and pooling of budgetary resources, while respecting the procedures applicable;

- pay special attention to the external visibility and implementation of this co-ordinated approach in order to improve the quality and effectiveness of education and training systems, research and access to the employment market

- encourage full use and dissemination at European level of best teaching practice based on the use of multimedia software and services; making as much use as possible of existing structures at all levels;

- submit no later than 31 December 1997 a report on progress achieved, obstacles encountered and additional action needed for the implementation of these actions looking ahead to the year 2000.

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DOCUMENTS

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