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### \*\*\*I REPORT

on the proposal for a decision of the European Parliament and of the Council concerning the multiannual framework programme 2002-2006 of the European Community for research, technological development and demonstration activities aimed at contributing towards the creation of the European Research Area

Part 4: Opinions of other committees (see also Part 3)

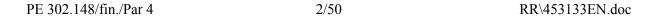
Committee on Industry, External Trade, Research and Energy

(COM(2001) 94 - C5-0087/2001 - 2001/0053(COD))

Rapporteur: Gérard Caudron

RR\453133EN.doc PE 302.148/fin./Par 4

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### OPINION OF THE COMMITTEE ON REGIONAL POLICY, TRANSPORT AND TOURISM

for the Committee on Industry, External Trade, Research and Energy

on the proposal for a European Parliament and Council Decision concerning the multiannual framework programme 2002-2006 of the European Community for research, technological development and demonstration activities aimed at contributing towards the creation of the European research area

(COM (2001) 94 – C5-0087/2001 – 2001/0053(COD)

Draftsman: Pierre Jonckheer

#### **PROCEDURE**

The Committee on Regional Policy, Transport and Tourism appointed Pierre Jonckheer draftsman at its meeting of 25 April 2001.

It considered the draft opinion at its meetings of 11 September and 9 October 2001.

At the latter meeting it adopted the following amendments unanimously.

The following were present for the vote: Konstantinos Hatzidakis, chairman; Helmuth Markov, vice-chairman; Emmanouil Mastorakis, vice-chairman; Rijk van Dam, vice-chairman; Pierre Jonckheer, draftsman; Emmanouil Bakopoulos, Rolf Berend, Theodorus J.J. Bouwman, Carmen Cerdeira Morterero, Luigi Cesaro, Luigi Cocilovo (for Francesco Musotto), Gerard Collins, Paolo Costa, Garrelt Duin, Giovanni Claudio Fava, Mathieu J.H. Grosch, Ewa Hedkvist Petersen, Mary Honeyball, Juan de Dios Izquierdo Collado, Georg Jarzembowski, Elisabeth Jeggle (for Karla M.H. Peijs), Karsten Knolle (for Sir Robert Atkins), Dieter-Lebrecht Koch, Carlos Lage, Giorgio Lisi, Sérgio Marques, Linda McAvan (for John Hume), Erik Meijer, Rosa Miguélez Ramos, James Nicholson (for Dana Rosemary Scallon), Juan Ojeda Sanz, Josu Ortuondo Larrea, Wilhelm Ernst Piecyk, Samuli Pohjamo, Alonso José Puerta, Reinhard Rack, Carlos Ripoll i Martínez Bedoya, Marieke Sanders-ten Holte, Gilles Savary, Ingo Schmitt, Brian Simpson, Renate Sommer, Ulrich Stockmann, Margie Sudre, Joaquim Vairinhos (for Danielle Darras pursuant to Rule 153(2)), Ari Vatanen, Demetrio Volcic, Christian Ulrik von Boetticher (for Jacqueline Foster) and Mark Francis Watts.

#### SHORT JUSTIFICATION

On 21 February 2001, following a lengthy debate prompted by the Commission's adoption in January 2000 of its Communication entitled 'Towards a European Research Area', the Commission adopted:

- (a) its proposal concerning the 2002-2006 multiannual framework programme for research, technological-development and demonstration activities, which is intended to help create the European research area (codecision between Parliament and the Council);
- (b) its proposal concerning the 2002-2006 nuclear energy multiannual framework programme (consultation).

#### 1. Substance of the Commission proposal

Pursuant to the above proposals, the Sixth Framework Programme will comprise three main blocks of activities designed to integrate research and to structure the European research area and strengthen its foundations.

In its proposal the Commission advocates seven (plus one) priority areas of research:

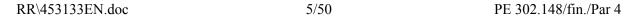
- Genomics and biotechnology for health;
- Information Society technologies;
- Nanotechnologies, intelligent materials and new production processes;
- Aeronautics and space;
- Food safety and health risks;
- Sustainable development and global change;
- Citizens and governance in the European knowledge-based society;
- Anticipating the EU's scientific and technological needs, including the activities of the JRC (Joint Research Centre).

#### 2. Research in the transport field

The purpose of the activities carried out in the third thematic area - 'Aeronautics and space' - is both to consolidate the European aerospace industry vis-à-vis its international competitors and to exploit Europe's research potential in the sector with a view to improving safety and environmental protection.

The aeronautics-related activities are designed to achieve the following objectives:

- a reduction in environmental pollution and burdens;
- an increase in aircraft safety in the context of a substantial rise in air traffic;
- an increase in the capacity and safety of the aviation system, in support of a 'Single European Sky'.



The space-related activities undertaken will focus on implementing:

- the Galileo satellite navigation project;
- the GMES platform for monitoring the environment and security.

The importance which the Commission attaches in the sixth thematic area (Sustainable development and global change) to transport-related considerations is to be welcomed. Of the activities envisaged in this area, attention should be drawn to:

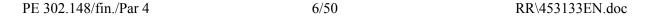
- the promotion of renewable energy sources, energy saving and energy efficiency, clean transport, the development of new vehicle concepts (in particular for road transport) and the development of alternative motor fuels;
- the promotion of intelligent transport in the form of technologies enabling a new balance to be struck between the various modes of transport, which can then be integrated and made increasingly interoperable.

Your draftsman considers that the subject of surface transport is not given sufficient prominence in the Commission proposal. The Fifth Framework Programme did at least incorporate very interesting key activities such as intermodality and sustainable mobility, and also maritime technologies and surface transport, under the heading of sustainable growth. Your draftsman therefore proposes bringing the research areas relating to transport together in a new priority thematic area entitled 'Sustainable mobility and surface transport'. The purpose of the activities undertaken in this area would be to support and strengthen European mobility and surface-transport systems which are better integrated from four points of view – namely, through the integration of **sustainable development**, the integration of the various modes (i.e. **intermodality**), the integration at European level of the individual Member States' transport systems (**interoperability**) and the integration of **safety and security**, in order to contribute to and bring about safer, more economic, more efficient, more socially relevant, more comfortable and more environmentally sound mobility and surface transport.

#### 3. Regional aspects of research

In its proposal the Commission establishes a link between regional policy and research policy in two thematic areas, namely 'Information Society technologies' and 'Citizens and governance in the European knowledge-based society'. The purpose of the activities undertaken in the first area is, amongst other things, to enable the general public in all EU regions to derive full benefit from the development of the knowledge-based society. In the second area the Commission envisages activities which will serve, amongst other things, to strengthen social cohesion, to ensure variety in the pace of the transition to the knowledge-based society at local, regional and national level, and to redefine areas of competence and responsibility.

The regional aspect of research is of major importance to Parliament which, in its resolution of 18 May 2000, calls on the Commission to ensure that Objective 1 regions employ at least 5% of the Structural Funds which they have not used in order to promote scientific research in various sectors, so as to reduce the technological gap between those regions and the rest of Europe and prevent unused Structural Funds from being withdrawn. In that same resolution, Parliament also calls for Structural Fund activities to be integrated with research programmes





so that the former provide research infrastructure in less-favoured regions and the latter provide the mechanisms and financial means for high-level scientific collaboration. Lastly, Parliament calls for interaction between research programmes and other Community policies, in particular the Structural Funds.

These are priorities which should be incorporated into the Sixth Framework Programme and which your draftsman endorses.

Lastly, inclusion in the Sixth Framework Programme of key activities such as 'Tomorrow's cities and cultural heritage' (which featured in the Fifth Framework Programme) should be requested.

#### **AMENDMENTS**

The Committee on Regional Policy, Transport and Tourism calls on the Committee on Industry, External Trade, Research and Energy, as the committee responsible, to incorporate the following amendments in its report:

Text proposed by the Commission<sup>1</sup>

Amendments by Parliament

#### Amendment 1 Recital 8

It is therefore necessary to adopt a framework programme for the period 2002-2006 capable of exercising a structuring effect on research and technological development in Europe and making a significant contribution to bringing about the European Research Area.

It is therefore necessary to adopt a framework programme for the period 2002-2006 capable of exercising a structuring *and integrating* effect on research and technological development in Europe and making a significant contribution to bringing about the European Research Area.

#### Justification

To achieve European integration, scientific policies must be not only structured but also integrated.

Amendment 2 Annex I, paragraph 2 a (new)

In setting the research priorities for the first target, account should be taken of the

<sup>1</sup> OJ C 180, 26.6.2001, p. 156.

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interests and capacities of all Member States, including the least developed. The second target will have a gradually increasing impact on the less developed regions and countries.

#### Justification

The objective of cohesion should be included under all the targets.

## Amendment 3 Annex I, Section 1.1.2, Heading 'Actions envisaged', paragraph 3, indent 1

- ambient intelligence systems offering access to the information society for all, whatever their age and situation, as well as interactive and intelligent systems for health, mobility, security, leisure, preservation of the cultural heritage and environmental monitoring;
- ambient intelligence systems offering access to the information society for all, whatever their age and situation, as well as interactive and intelligent systems for health, mobility, security, leisure *and tourism*, *rural development*, preservation of the cultural heritage and environmental monitoring;

#### Justification

Both tourism and rural development have a substantial impact on improving cohesion.

## Amendment 4 Annex I, Section 1.1.4, Heading 'Objective'

The aim of activities carried out in this area is *two*-fold: to consolidate, by integrating its research efforts, the position of the European aerospace industry vis-à-vis increasingly strong world competition; and to help exploit the potential of European research in this sector with a view to improving safety and environmental protection.

The aim of activities carried out in this area is *three*-fold: to consolidate, by integrating its research efforts, the position of the European aerospace industry *and of European industry in the field of short-distance intermodal systems and surface transport* vis-à-vis increasingly strong world competition; and to help exploit the potential of European research in this sector with a view to improving safety and environmental protection.

In the field of intermodality, congestion in the air-transport sector (with the effect that that has on safety and the environment) has become a major international problem. The transfer of short- haul domestic flights is one of the options contained in the Common Transport Policy and will depend on the success of air/surface intermodality systems. This will enable Europe to boost its exports of such integrated systems, for which there is increasing international demand.

## Amendment 5 Annex I, Section 1.1.4, Heading 'Justification of the effort and European added value', paragraph 1

The aerospace industry consists of two technologically and economically separate sectors but they are closely associated on account of their industrial and political implications and the stakeholders involved and they are examples of European economic and commercial success stories. However, US investment in aerospace is three to six times higher, depending on the sector.

The aerospace industry consists of two technologically and economically separate sectors but they are closely associated on account of their industrial and political implications and the stakeholders involved and they are examples of European economic and commercial success stories, rich in tradition and potential. The level of investment in other continents, such as in the USA and Japan, is significant.

#### Justification

The difference as regards investment in research exists not only between Europe and the USA but also between Europe and Japan.

## Amendment 6 Annex I, Section 1.1.4, Heading 'Actions envisaged', Sub-heading 'Aeronautics', second indent

- reduce environmental nuisances and loads (CO<sub>2</sub> *and* NO<sub>X</sub> emissions, *noise*);

- reduce environmental nuisances and loads (*noise*, CO<sub>2</sub>, NO<sub>X</sub> *and other* emissions);

The emissions mentioned by the Commission are not the only ones; there are others, such as SO<sub>2</sub> and VOCs.

Amendment 7
Annex I, Section 1.1.4, Heading 'Actions envisaged', Sub-heading 'Aeronautics', indent 4 a (new)

- strengthen innovative, integrated strategies and systems designed to encourage a switch from short-haul flights to trans-European high-speed rail services.

#### Justification

In the field of intermodality, congestion in the air-transport sector (with the effect that that has on safety and the environment) has become a major international problem. The transfer of short- haul domestic flights is one of the options contained in the Common Transport Policy and will depend on the success of air/surface intermodality systems. This will enable Europe to boost its exports of such integrated systems, for which there is increasing international demand.

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#### Amendment 8

Annex I, Section 1.1.4, Heading 'Actions envisaged', Sub-heading 'Aeronautics', indent 4 b (new)

- develop airport cooperation models as well as strategies for optimisation of airports as part of the integrated transport system.

#### Justification

Airport cooperation models are an important option with regard to more efficient use of airport infrastructure and scarce airspace. In addition, approaches must be developed which take due account of the importance of airports as integral elements of the integrated transport system.

#### Amendment 9

Annex I, Section 1.1.4, Heading 'Actions envisaged', Sub-heading 'Space', first indent

- the Galileo satellite navigation project;

- closer cost-effectiveness studies of the Galileo satellite navigation project with reference to the various modes of transport and mobility;

#### Justification

The cost-effectiveness aspect of the Galileo programme still needs to be explored, for which purpose the framework research programme provides a suitable opportunity.

Amendment 10 Annex I, Section 1.1.4 a (new)

1.1.4a Sustainable mobility in the transport sector

#### **Objective**

The activities carried out in this area are intended to optimise the European integrated transport system using basic and applied research, specially in the light of the Commission's White Paper on European transport policy by 2010 adopted on 12 September, namely through the

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integration of sustainable development and safety, the integration of the various modes (i.e. intermodality) and the integration at European level of the individual Member States' transport systems (interoperability) in order to contribute to and bring about more economic, efficient, socially relevant, comfortable, safe and environmentally sound mobility and transport.

### <u>Justification of the effort and European</u> added value

Emphasis will be placed on European rail systems (Single European Rail System) for both passengers and freight, combined with other connected sustainable modes including inland waterways and transport by sea, as stated in the European publictransport policy. The introduction of more sustainable mobility and transport systems will in particular be based on:

- the integration of sustainable development (see Article 6 of the Treaty): the reduction of noise and harmful gases (both local and regional) in the interests of the environment and human health by means of socio-economic techniques and approaches relating to mobility and transport in Europe, in order to prevent or reduce external environmental costs;
- intermodality: making the rail network and its intermodal connections in Europe (hard- and software techniques for connection and transfer hubs and points) more efficient for the general public, so as to provide a better alternative to more congested forms of mobility and transport;
- interoperability: increasing the effectiveness of cross-border mobility and transport links by contributing to new techniques which are more compatible and less costly to industries and operators and, ultimately, to European consumers. The European added value is obvious in this case because cross-border problems can be resolved only by joint action.

#### Actions envisaged

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#### Sustainable development

- avoidance and reduction of transport: new mobility management and transport logistics systems, study of the interplay between urban development, regional planning policy, housing policy and transport, decoupling transport growth from economic growth;
- develop fair and efficient transport charging for all transport modes (road, rail, water, air) to an application level, focussing on European interoperable charging, external costs and contractual/institutional aspects;
- carry out complete economic, environmental and social impact assessments for sustainable transport policies and plans, taking into account existing instruments and methodologies (e.g. developed within the TERM);
- more effective techniques for reducing gas and noise emissions, including costeffectiveness studies;
- manufacture of environment-friendly motor vehicles, railway coaches and other vehicles, as well as recycling of materials to be used in manufacture and refurbishment;
- study of the effects of E-commerce on transport, and in particular on means of transport and routes, changes in the volume of traffic, traffic concentration, transport management and new logistics approaches;
- development of new user-friendlier and more energy-efficient approaches to the sustainable development of towns and cities and urban areas.

Intermodality and interoperability

- development of systems approaches to promote and improve intermodality;
- strategies to link different modes of transport and national transport systems to form an integrated, sustainable, pan-European transport system;

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- systems for integrating information, reservations and pricing, better access and connections in urban areas and crossborder regions (train-tram-bus-car sharing-taxi-bicycle etc.);
- less expensive systems for combined (bimodal-horizontal) goods transport and the standardisation/harmonisation thereof within a trans-European network;
- intelligent traffic management and intelligent transport systems for all modes of transport, and in particular intelligent rail transport with a European telematics network to link rail transport management and innovative technologies to integrate different modes of transport (for passengers and goods, urban transport, etc.);
- new forms of intermodal interoperability (harmonised plane-train booking and ticketing, etc.);
- development of new approaches to cost reduction through the interoperability of passenger and goods transport signalling and electrification (etc.) systems.

#### Safety

- technical and socio-psychological research and developments relating to accident risks and improvements to the climate of safety in mobility systems;
- global safety analysis and harmonised validation system for safety assessment;
- development of automated systems to check speed, weight, journey time, etc., to enable the existing laws on these points to be enforced.

#### Justification

European surface transport is not dealt with in a sufficiently consistent fashion in the draft version of the Sixth Research and Development Framework Programme. Such forms of transport should therefore be brought together in a single section within the programme. In the new thematic area, research into all forms of transport will be given a higher profile (in terms of sustainable development, intermodality, interoperability and safety).

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#### Amendment 11

Annex I, Section 1.1.6, Heading 'Justification of the effort and European added value' first paragraph, second indent

- a better understanding of the mechanisms of global change, and in particular climate change and our related forecasting capacities.
- a better understanding of the mechanisms of global change, and in particular climate change and our related forecasting capacities, and more effective methods of calculating the external costs of climate change.

#### Justification

Research should also be carried out into the development of firm criteria for calculating the external costs of climate change in financial terms.

#### Amendment 12

Annex I, Section 1.1.6, Heading 'Actions envisaged', Sub-heading 'Technologies for sustainable development', paragraph 2, indent 3

- new concepts in solar photovoltaic technologies and advanced uses of biomass.
- new concepts in wind and solar photovoltaic technologies and advanced uses of biomass.

#### Justification

Further research into wind energy could help to make it a clean and directly competitive energy source.

#### Amendment 13

Annex I, Section 1.1.7, Heading 'Actions envisaged', Sub-heading 'Knowledge based society', indent 2

- options and choices for the development of a knowledge-based society serving the EU objectives set at the Lisbon and Nice European Councils, in particular as regards improving the quality of life, employment and labour market policies, life-long education and training, and strengthening
- options and choices for the development of a knowledge-based society serving the EU objectives set at the Lisbon and Nice European Councils, in particular as regards improving the quality of life, employment and labour market policies, life-long education and training, and strengthening

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social cohesion and sustainable development;

economic and social cohesion and sustainable development;

#### Justification

Economic and social cohesion should be treated as a single concept.

#### Amendment 14

Annex I, Section 1.1.7, Heading 'Actions envisaged', Sub-heading 'Citizenship, democracy and new forms of governance', indent 4 a (new)

- Tomorrow's cities and cultural heritage.

#### Justification

The purpose of this action, which has been taken from the Fifth Framework Programme, is the integrated development of urban living in accordance with comprehensive, innovatory and less expensive approaches which are environmentally sound, which are based on advanced organisational models and which reconcile in particular improvements to the quality of life, the re-establishment of social balances and the protection, conservation and enhancement of the cultural heritage with a view to ensuring that the socio-economic potential which it represents for employment and tourism can be exploited on a sustainable basis.

#### Amendment 15 Annex I, Section 1.2.2., paragraph 3

The JRC will carry out these activities in close cooperation and by networking with scientific circles, national research organisations and businesses in Europe.

The JRC will carry out these activities in close cooperation and by networking with scientific circles, national *and regional* research organisations and businesses in Europe.

#### Justification

Efforts should be made to include regional research structures.

#### Amendment 16

Annex I, Section 2.1., Headings 'Objective' and 'Justification of the effort and European added value'

2.1 Research and innovation

2.1 Research and innovation

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#### Objective

These activities are intended to stimulate technological innovation, utilisation of research results, transfer of knowledge and technologies and the setting up of technology businesses in the Community and in all its regions.

Justification of the effort and European added value

Europe's comparatively poor ability to transform the results of research work and scientific and technological breakthroughs into industrial, economic and commercial successes, is one of its most notable weaknesses. Actions to stimulate business innovation at European level can help to raise the overall level of Europe's performance and increase European capacities in this area, by helping businesses and innovators in their efforts to operate on a European scale and on international markets, and by giving stakeholders in all regions of the EU the benefit of the experience and knowledge acquired in other regions through initiatives undertaken at this level.

#### Objective

These activities are intended to stimulate technological innovation, utilisation of research results, transfer of knowledge and technologies and the setting up of technology businesses in the Community and in all its regions, *particularly the less developed ones*.

Justification of the effort and European added value

Europe's comparatively poor ability to transform the results of research work and scientific and technological breakthroughs into industrial, economic and commercial successes, is one of its most notable weaknesses. Actions to stimulate business innovation at European level can help to raise the overall level of Europe's performance and increase European capacities in this area, by helping businesses and innovators, in particular those located in the Objective 1 regions, in their efforts to operate on a European scale and on international markets, and by giving stakeholders in all regions of the EU the benefit of the experience and knowledge acquired in other regions through initiatives undertaken at this level.

#### Justification

This amendment stresses the great importance of the promotion of innovation and technologies for the less developed regions of the Union. The promotion of new technologies in those regions will contribute to reducing the disparities with more prosperous regions.

## Amendment 17 Annex I, Section 2.1., Heading 'Actions envisaged', paragraph 3, indent 2

- actions to encourage trans-regional cooperation regarding innovation and support for the setting-up of technology businesses, as well as for the preparation of regional strategies in this area; - actions to encourage trans-regional cooperation regarding innovation and support for the setting-up of technology businesses, as well as for the preparation of regional strategies in this area; special attention should be paid to support for creating technological enterprises in the less developed regions of the EU;

## Amendment 18 Annex I, Section 2.1., Heading 'Actions envisaged', paragraph 3

Some of these activities will be carried out in liaison with those of the EIB (in particular by means of the EIF) under its "Innovation 2000 Initiative" as well as the Structural Funds

Some of these activities will be carried out in liaison with those of the EIB (in particular by means of the EIF) under its "Innovation 2000 Initiative" as well as *in coordination* with Structural Funds measures in this field.

#### Justification

Structural Fund measures should be coordinated with actions under the framework programme rather than conducted separately.

## Amendment 19 Annex I, Section 3, Heading 'Actions envisaged', paragraph 1, indent 1

- To step up the coordination of research activities carried out in Europe, at both national and European level, financial support for:
- To step up the coordination of research activities carried out in Europe, at both national, *regional* and European level, financial support for:

#### Justification

Efforts should be made to include regional research structures.

# Amendment 20 Annex II : MAXIMUM OVERALL AMOUNT, RESPECTIVE SHARES AND INDICATIVE BREAKDOWN

1) Integrating	12 770	1) Integrating	12 770
research		research	
<ul> <li>Genomics and biotechnology for health</li> </ul>	2 000	<ul> <li>Genomics and biotechnology for health</li> </ul>	2 000
• Information Society technologies	3 600	• Information Society technologies	3 200
<ul> <li>Nanotechnologies, intelligent materials, new production processes</li> </ul>	1 300	<ul> <li>Nanotechnologies, intelligent materials, new production processes</li> </ul>	1 300

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• Aeronautics and space 1 000	<ul> <li>Aeronautics and space</li> <li>Sustainable mobility in the transport sector</li> </ul>
• Food safety and health risks 600	• Food safety and health risks 600
• Sustainable 1 700 development and global change	Sustainable 1 700 development and global change

Citizens and	225	<ul> <li>Citizens and</li> </ul>	225
governance in the		governance in the	
European		European	
knowledge-based		knowledge-based	
society		society	
Anticipating the	2 345	Anticipating the	2 345
EU's scientific and		EU's scientific and	
technological		technological	
needs		needs	
2) Structuring the	3 050	2) Structuring the	3 050
European Research		European Research	
Area		Area	
<ul> <li>Research and</li> </ul>	300	<ul> <li>Research and</li> </ul>	300
innovation		innovation	
Human resources	1 800	Human resources	1 800
• Research	900	• Research	900
infrastructures		infrastructures	
Science/society	50	Science/society	50
3) Strengthening the	450	3) Strengthening the	450
foundations of the		foundations of the	
European Research		European Research	
Area		Area	
• Support for the	400	• Support for the	400
coordination of		coordination of	
activities		activities	
Support for the	50	Support for the	50
coherent		coherent	
development of		development of	
policies		policies	
TOTAL	16 270	TOTAL	16 270
	16 270	i	10

The new thematic area corresponds to a priority field of CTP and needs a lot of research and development in the future, in order to boost and integrate 'sustainability' into the transport sector. As 'aeronautics and space' (1.1.4.) also concerns transport, RETT compensates within this transport field. Furthermore, information systems (1.1.2) for intermodality, interoperability, safety and security should be incorporated into mobility and surface transport (1.1.4a new) research and development and will therefore lighten the information systems' thematic area.

### OPINION OF THE COMMITTEE ON CULTURE, YOUTH, EDUCATION, THE MEDIA AND SPORT

for the Committee on Industry, External Trade, Research and Energy

on the proposal for a decision of the European Parliament and of the Council concerning the multiannual framework programme 2002-2006 of the European Community for research, technological development and demonstration activities aimed at contributing towards the creation of the European Research Area (COM(2001) 94 – C5-0087/2001 – 2001/0053(COD))

Draftsman: Geneviève Fraisse

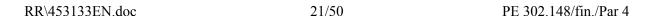
#### **PROCEDURE**

The Committee on Culture, Youth, Education, the Media and Sport appointed Geneviève Fraisse draftsman at its meeting of 22 March 2001.

It considered the draft opinion at its meetings of 19 June, 10 and 11 July and 17 September 2001.

At the last meeting it adopted the following amendments unanimously.

The following were present for the vote: Pedro Aparicio Sánchez (acting chairman), Geneviève Fraisse (draftsman), Ruth Hieronymi, Maria Martens, Barbara O'Toole, Doris Pack, Marieke Sanders-ten Holte, Kathleen Van Brempt, Sabine Zissener, Eva Klamt (for Theresa Zabell), The Earl of Stockton (for Roy Perry) and Myrsini Zorba (for Phillip Whitehead).



#### SHORT JUSTIFICATION

#### **AMENDMENTS**

The Committee on Culture, Youth, Education, the Media and Sport calls on the Committee on Industry, External Trade, Research and Energy, as the committee responsible, to incorporate the following amendments in its report:

Text proposed by the Commission<sup>1</sup>

Amendments by Parliament

# Amendment 1 Annex I, 1.1.2. Information Society technologies Actions envisaged

Integrating research into technological areas of priority interest for citizens and businesses

- ambient intelligence systems offering access to the information society for all, whatever their age and situation, as well as interactive and intelligent systems for health, mobility, security, leisure, preservation of the cultural heritage and environmental monitoring;
- ambient intelligence systems offering access to the information society for all, whatever their age and situation, in particular by bringing down the cost of terminals, as well as interactive and intelligent systems for health, mobility, security, leisure, preservation of the cultural heritage and environmental monitoring;

#### Justification

The difficulties surrounding use are not the only barrier to access to the new technologies, since the cost of equipment also plays a role. Research in new information and communication technologies ought to set out to promote technologies which provide access to these new tools for all. The average proportion of European homes with Internet access remains below 30%. Equipment and telecommunications costs are a barrier to large-scale Internet use and the development of a digital culture, and as such risk widening the gap between the 'haves' and the 'have-nots' where access to the new technologies is concerned.

# Amendment 2 Annex I, 1.1.2. Information Society technologies Actions envisaged

Integrating research into technological areas of priority interest for citizens and businesses

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<sup>&</sup>lt;sup>1</sup> OJ C 180E, 26.6.2001, p. 156.

- ambient intelligence systems offering access to the information society for all, whatever their age and situation, as well as interactive and intelligent systems for health, mobility, security, leisure, preservation of the cultural heritage and environmental monitoring;
- ambient intelligence systems offering access to the information society for all, whatever their age and situation, as well as interactive and intelligent systems for health, mobility, security, leisure, preservation of the cultural heritage, access to cultural resources and environmental monitoring;

Preservation of the cultural heritage and access to cultural resources - different actions that nonetheless complement one another - are both covered in the 'multimedia content and tools' key action in the fifth framework programme.

# Amendment 3 Annex I, 1.1.2. Information Society technologies Actions envisaged

Integrating research into technological areas of priority interest for citizens and businesses

- electronic and mobile commerce, as well as technologies for secure transactions and infrastructures, new tools and new methods of work, technologies for learning and systems for corporate knowledge management, for integrated business management and for *e*-government;
- electronic and mobile commerce, as well as technologies for secure transactions and infrastructures, new tools and new methods of work, technologies for learning and systems for corporate knowledge management, for integrated business management and for *e*-government;
- technologies and infrastructures to boost European capacity to digitise its data, creations and archives;

#### Justification

If it is to develop a knowledge-based society and enjoy economic vibrancy, Europe must be capable of building up infrastructures and techniques that can be used to produce digital content and digitise its archives with a view to exploiting their cultural, educational, economic and social potential. Such an aim is a matter of priority for citizens and undertakings alike.

# Amendment 4 Annex I, 1.1.2. Information Society technologies Actions envisaged

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#### Information management and interfaces

#### Knowledge and interface technologies

#### Justification

This title is better suited to the aims of this line of action. The knowledge-based society is not a matter of information alone. This title appears in the specific programme implementing the framework programme. This amendment seeks to ensure consistency between the framework programme and the specific programme 'Integrating and strengthening the European Research Area' that will contribute towards implementation of the former.

#### Amendment 5

Annex I, 1.1.3. Nanotechnologies, intelligent materials, and new production processes Actions envisaged

#### Nanotechnologies:

- long-term interdisciplinary research into understanding phenomena, mastering processes and developing research tools;
- supramolecular architectures and macromolecules;
- nano-biotechnologies;
- nanometre-scale engineering techniques to create materials and components;
- development of handling and control devices and instruments:
- applications in areas such as health, chemistry, energy, optics and the environment.

#### Nanotechnologies:

- long-term interdisciplinary research into understanding phenomena, mastering processes and developing research tools;
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- nano-biotechnologies;
- nanometre-scale engineering techniques to create materials and components;
- development of handling and control devices and instruments:
- applications in areas such as health, chemistry, energy, optics, *cultural heritage* and the environment.

#### Justification

The 'City of tomorrow and cultural heritage' key action of the fifth framework programme must be pursued and care must be taken to ensure that the material dimension of heritage is consistently taken into account in the sixth framework programme.

## Amendment 6 Annex I, 1.1.5. Food safety and health risks

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#### Justification of the effort and European added value

The same remarks apply to the various aspects of the problems associated with the health impact of environmental changes which are a source of growing concern for European citizens, and which often manifest themselves on an international scale. For all these reasons, but also in order to derive the benefit of the combination of the best sources of expertise available in complex areas, the research in question should be carried out at European level in such a way as to ensure genuine coordination of national activities.

The same remarks apply to the various aspects of the problems associated with the health impact of environmental changes and doping practices which are a source of growing concern for European citizens, and which often manifest themselves on an international scale. For all these reasons, but also in order to derive the benefit of the combination of the best sources of expertise available in complex areas, the research in question should be carried out at European level in such a way as to ensure genuine coordination of national activities.

#### Justification

The rapid development in doping practices in sport, the health risks involved and the sullied image of sport in the eyes of the European public justify the effort and European added value in this area.

#### Amendment 7 Annex I, 1.1.5. Food safety and health risks Actions envisaged

Community activities will cover research relating to various aspects of the control of health risks and links between health and food:

Community activities will cover research relating to various aspects *of the anti-doping campaign and* of the control of health risks and links between health and food:

- methods of analysis, detection and rehabilitation for doping practices;

#### Justification

The rapid development in doping practices in sport, the health risks involved and the sullied image of sport in the eyes of the European public justify the effort and European added value in sport.

#### Amendment 8

## Annex I, 1.1.6. Sustainable development and global change Justification of the effort and European added value, first indent

- the design, development and dissemination of technologies making it possible to ensure more rational use of natural resources, less waste production and a reduction in the impact of economic activity on the environment;
- the design, development of research into, and dissemination of technologies making it possible to ensure the conservation and more rational use of natural resources and of historical and cultural heritage as finite resources, less waste production and a reduction in the impact of economic activity on the environment;

#### Justification

# Amendment 9 Annex I, 1.1.6. Sustainable development and global change Actions envisaged Technologies for sustainable development, first indent

- renewable energy sources, energy savings and energy efficiency, especially in the urban environment, as well as clean transport, with the development of new vehicle concepts in particular for road transport, as well as the development of alternative motor fuels;
- renewable energy sources, energy savings and energy efficiency, especially in the urban environment, historical heritage and the natural environment, as well as clean transport, with the development of new vehicle concepts in particular for road transport, as well as the development of alternative motor fuels;

#### Justification

#### Annex I, 1.1.6. Sustainable development and global change Actions envisaged Global change, first indent

- impact and mechanisms of greenhouse gas emissions on climate and carbon sinks (oceans, forests and soil);
- impact and mechanisms of greenhouse gas emissions on climate, *cultural heritage*, *the quality of life in urban environments* and carbon sinks (oceans, forests and soil);

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Europe's desire to understand the effects of greenhouse gases must encompass man-made and natural resources to the same degree. Consequently, alongside research into ways of protecting forests - a matter of particular interest to the countries in the north of the European Union - scientific and technological research should be conducted into means of protecting cultural heritage, an issue of particular relevance to EU Member States in the south.

# Amendment 11 Annex I, 1.1.6. Sustainable development and global change Actions envisaged Global change, third indent

- biodiversity, protection of genetic resources, operation of terrestrial and marine ecosystems and interactions between human activities and *the latter*;
- biodiversity, protection of genetic resources, protection of genetic and cultural heritage in all areas, operation of terrestrial and marine ecosystems and interactions between human activities and every one of these aspects;

#### Justification

Europe must be willing to protect man-made and genetic resources to the same degree. Consequently, alongside research into protection in areas of global interest such as biodiversity and genetic resources, scientific and technological research should be conducted into means of protecting cultural heritage, an issue of particular relevance with a view to attaining an authentic and firmly rooted European identity, at a time when Europe needs to find common points of reference before it embarks upon enlargement. Moreover, interaction with human activities holds the key to understanding the trends in all of the aspects cited in the above indent and should not, therefore, relate solely to terrestrial and marine ecosystems.

## Amendment 12 Annex I, 1.1.7. Citizens and governance in the European knowledge-based society Objectives

The activities carried out in this area are intended to mobilise in a coherent effort, in all their wealth and diversity, European research capacities in economic, political, social and human sciences with a view to understanding and addressing issues related to the emergence of the knowledge-

The activities carried out in this area are intended to mobilise in a coherent effort, in all their wealth and diversity, European research capacities in economic, political, social and human sciences as disciplines in their own right that are required for the development of individuals and for

based society and new forms of relationships between its citizens and institutions. understanding European societies and European integration. They must be able to pinpoint the challenges facing society, and in particular those that relate to the emergence of the knowledge-based society and new forms of relationships between its citizens and institutions

#### Justification

The human and social sciences (history, philosophy, geography, sociology, psychology, linguistics, legal sciences, etc.) are a necessary part of political and cultural integration in a Europe which, besides being the home of industrial and technological innovation, is the place in which hundreds of millions of European citizens live, speak, interact and travel. These sciences should be included as fully-fledged disciplines under the sixth framework research programme and as a field of research with high added value in the process of establishing a European Research Area.

#### Amendment 13

Annex I, 1.1.7. Citizens and governance in the European knowledge-based society Justification of the effort and European added value

Europe's transition towards a knowledgebased economy and society, and its sustainable development in the interests of the quality of life of all citizens will be all the easier if it takes place in a way which is properly understood and managed. This requires a substantial research effort concerning the issues of integrated and sustainable economic and social progress based on the fundamental values of justice and solidarity which characterise the European model of society. In this respect, economic, political, social and human sciences research should more particularly help to ensure the harnessing and exploitation of an exponentially increasing quantity of information and knowledge and an understanding of the processes at work in this area.

Europe's transition towards a knowledgebased economy and society, and its sustainable development in the interests of the quality of life of all citizens will be all the easier if it takes place in a way which is properly understood and managed. This requires a substantial research effort concerning the issues of integrated and sustainable economic and social progress based on the fundamental values of justice and solidarity which characterise the European model of society. In this respect, economic, political, social and human sciences research should be supported as disciplines with their own areas of concern. They are a vital means of understanding and analysing our societies. They can help to ensure the harnessing and exploitation of an exponentially increasing quantity of information and knowledge and an understanding of the processes at work in this area.

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The human and social sciences are considered from the point of view of the contribution they can make to other disciplines, rather than as disciplines which should develop research in their own areas of concern. Building a European Research Area means giving full status to all of these disciplines, including where basic research is concerned. The contribution of geography, history, anthropology, legal and political science, sociology, economics, demographics, philosophy and linguistics, to name but a few, will be vital in achieving a better understanding of the world and charting future paths.

# Amendment 14 Annex I, 1.1.7. Citizens and governance in the European knowledge-based society Actions envisaged Knowledge-based society

- options and choices for the development of a knowledge-based society serving the EU objectives set at the Lisbon and Nice European Councils, in particular as regards improving the quality of life, employment and labour market policies, life-long education and training, and strengthening social cohesion and sustainable development;
- options and choices for the development of a knowledge-based society serving the EU objectives set at the Lisbon and Nice European Councils, in particular as regards improving the quality of life, employment and labour market policies, life-long education and training, *gender and inter-generational relations*, and strengthening social cohesion and sustainable development;

#### Justification

Gender relations, the role of young people and inter-generational relations hold the key to the development of a knowledge-based society serving the EU objectives set at the Lisbon European Council.

#### Amendment 15

Annex I, 1.1.7. Citizens and governance in the European knowledge-based society
Actions envisaged
Citizenship, democracy and new forms of governance

- consequences of European integration and enlargement of the EU for democracy, the concept of legitimacy, and the functioning of the institutions;
- consequences of European integration and enlargement of the EU for democracy, the concept of legitimacy, and the functioning of the institutions, *together* with an analysis of economic and social

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## change in society in the Member States and the applicant countries;

#### Justification

This amendment seeks to stimulate and support research into economic, social, demographic and cultural change in respect of enlargement and European integration.

# Amendment 16 Annex I, 1.1.7. Citizens and governance in the European knowledge-based society Actions envisaged Citizenship, democracy and new forms of governance

- emergence of new forms of citizenship and identities, forms and impact of cultural diversity in Europe.
- emergence of new forms of citizenship and identities, forms and impact of cultural diversity in Europe;
- consideration of the development of European identity.

#### Justification

Consideration of Europe's future should involve stimulating and supporting research into the many questions thrown up by the process of deepening the European Union and by economic, political, social and cultural change. Europe's history has not mirrored physical or geographical trends. In many ways European identity remains an especially resonant and complex idea.

# Amendment 17 Annex I, 1.1.7. Citizens and governance in the European knowledge-based society Actions envisaged Citizenship, democracy and new forms of governance

In operational terms, Community activities will focus on support for:

- transnational research and comparative studies and the coordinated development of statistics and qualitative and quantitative indicators;
- interdisciplinary research in support

In operational terms, Community activities will focus on support for:

- transnational research and comparative studies and the coordinated development of statistics and qualitative and quantitative indicators;
- disciplinary and inter-disciplinary seminars of academics and experts;
- interdisciplinary research in support

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of public policies;

- the establishment and exploitation on a European scale of research infrastructures and data and knowledge bases. of public policies;

- the establishment and exploitation on a European scale of research infrastructures and data and knowledge bases.

#### Justification

The insight shared by European academics and experts with regard to similar problem issues will mean that meetings between them result in joint approaches.

# Amendment 18 Annex I, 1.1.7. Citizens and governance in the European knowledge-based society Actions envisaged Citizenship, democracy and new forms of governance

In operational terms, Community activities will focus on support for:

- transnational research and comparative studies and the coordinated development of statistics and qualitative and quantitative indicators;
- interdisciplinary research in support of public policies;
- the establishment and exploitation on a European scale of research infrastructures and data and knowledge bases.

In operational terms, Community activities will focus on support for:

- transnational research and comparative studies and the coordinated development of statistics and qualitative and quantitative indicators;
- interdisciplinary research in support of public policies;
- the establishment and exploitation on a European scale of research infrastructures, *institutes* and *academic centres*, *as well as* data and knowledge bases.

#### Justification

Institutes and academic research centres have a key role to play in developing research, above all in the social sciences.

## Amendment 19 Annex I, 1.2.1. Activities carried out on the basis of calls for proposals

- research in support of the objectives set for the EU by the European Council, for example the objectives set by the Lisbon and Feira European Councils with regard
- research in support of the objectives set for the EU by the European Council, for example the objectives set by the Lisbon and Feira European Councils with regard

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to economic policy, Information Society and e-Europe, enterprise, social policy and employment, education and training, including the requisite statistical methods and tools; to economic policy, Information Society and e-Europe, enterprise, social policy and employment, education and training, *culture and audiovisual technology*, including the requisite statistical methods and tools:

#### Justification

Culture and audiovisual technology are established EU objectives, a fact pointed out in particular at the Lisbon and Feira European Councils. Given the developments in digital content, new audiovisual broadcast means and cyber cinema, both sectors are likely to be the stage for sweeping technological innovation that European research must plan for and/or keep pace with.

#### Amendment 20 Annex I, 1.2.2. Joint Research Centre activities

- Public security and combating fraud:

Detection of antipersonnel mines; prevention of natural and technological hazards; networks in support of cybersecurity in the EU; fraud control technologies.

- Public security and combating fraud:

Detection of antipersonnel mines; prevention of natural and technological hazards; networks in support of cybersecurity in the EU; fraud control technologies; protection and clearance of intellectual property rights.

#### Justification

At European level reliable, safe and internationally recognised automated procedures need to be developed with a view to ensuring that the rights of authors enjoy comprehensive guarantees, whilst at the same time enabling undertakings that produce multimedia programmes to manage them simply.

## Amendment 21 Annex I, 2.2. Human resources and mobility Justification of the effort and European added value

Promoting transnational mobility is a simple, particularly effective and powerful means of boosting European excellence as a whole, as well as its distribution in the different regions of the EU. It creates

Promoting transnational mobility is a simple, particularly effective and powerful means of boosting European excellence as a whole, as well as its distribution in the different regions of the EU. It creates

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opportunities for significantly improving the quality of the training of researchers, promotes the circulation and exploitation of knowledge, and helps to establish world-class centres of excellence that are attractive throughout Europe. EU level action in this area (as in human resources in general) leading to the attainment of critical mass will inevitably have a major impact.

opportunities for significantly improving the quality of the training of researchers, promotes the circulation and exploitation of knowledge, and helps to establish world-class centres of excellence that are attractive throughout Europe. EU level action in this area (as in human resources in general) leading to the attainment of critical mass will inevitably have a major impact.

#### Particular attention will be focused on:

- the involvement of women in all actions and appropriate measures geared towards achieving a fairer gender balance in research;
- the personal circumstances linked to mobility, especially family circumstances, the status of researchers and career development and recognition at European level;
- training in the languages and cultures of the countries concerned.

#### Justification

These aspects of human resources and mobility policy tie in with EU objectives.

# Amendment 22 Annex I, 2.2. Human resources and mobility Actions envisaged

- individual support measures for European researchers for the purposes of mobility to another European or a third country, and for top-class third-country researchers wishing to come to Europe;
- individual support measures, including language and cultural awareness training, for European researchers for the purposes of mobility to another European or a third country, and for top-class third-country researchers wishing to come to Europe;

#### Justification

Technical knowledge of a language that lacks an awareness of the culture in which that

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language is used limits the quality of exchanges. Knowledge of a language and the ability to communicate properly with native speakers of languages other than one's own go hand in hand with an understanding of the cultural background that determines identity. The success of mobility depends on these conditions being met.

#### Amendment 23 Annex I, Section 2, Paragraph 2.4, Subparagraph 1

#### **Objective**

The activities carried out under this heading are intended to encourage the development of harmonious relations between science and society and the opening-up of innovation in Europe as a result of the establishment of new relations and an informed dialogue between researchers, industrialists, political decision-makers and citizens.

#### Objective

The activities carried out under this heading are intended to encourage the development of harmonious relations between science and society and the opening-up of society to innovation in Europe, as well as contributing to critical thinking by scientists in response to concerns in society, as a result of the establishment of new relations and an informed dialogue between researchers, industrialists, political decision-makers, major social groups and citizens.

#### Justification

It is important that society should be open to innovation, but equally important that scientists should be responsive to public concern in a spirit of self-criticism. Major social groups should participate in the dialogue.

#### Amendment 24 Annex I, Section 2, Paragraph 2.4, Subparagraph 3 'Actions envisaged', second indent

Ensuring that use of scientific and technological progress takes place in a responsible fashion: risk; expertise; implementing the precautionary principle; European reference system; ethics;

Ensuring that use of scientific and technological progress takes place in an ethically responsible fashion: risk; expertise; European reference system;

#### Justification

The precautionary principle and ethics are major priorities of the European Parliament; therefore they should each be mentioned in a separate indent. The rapporteur's proposals are largely based on the proposals by the Commission for the specific research programme (cf. p. 114 of the specific programmes implementing the Framework Programme 2002-2006 for research, technological development and demonstration activities as a contribution to the European Research Area).

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# Amendment 25 Annex I, 2.3. Research infrastructures Actions envisaged

- carrying out feasibility studies and work in preparation for the creation of new European scale infrastructures;
- optimising of European infrastructures by providing limited support for the development of new infrastructures. This support may supplement contributions from the EIB or the Structural Funds to the funding of these infrastructures; the feasibility studies should systematically explore the possibilities of such a contribution
- carrying out feasibility studies and work in preparation for the creation of new European scale infrastructures;
- promoting a European digital campus to expand distance learning;
- optimising of European infrastructures by providing limited support for the development of new infrastructures. This support may supplement contributions from the EIB or the Structural Funds to the funding of these infrastructures; the feasibility studies should systematically explore the possibilities of such a contribution.

#### Justification

Virtual infrastructure, particularly in the field of training, is set to expand in the future.

Amendment 26 Annex I, 2.4. Science/society Objective

The activities carried out under this heading are intended to encourage the development of harmonious relations between science and society and the opening-up of innovation in Europe as a result of the establishment of new relations and an informed dialogue between researchers, industrialists, political decision-makers and citizens.

The activities carried out under this heading are intended to encourage the development of harmonious relations between science and society and the opening-up of innovation in Europe as a result of the establishment of new relations and an informed dialogue between researchers, industrialists, political decision-makers and citizens. Human sciences play a crucial role in considering ways of making science accessible to the general public.

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There is no simple means of making science more accessible to the public. The 'dialogue' referred to entails not only a debate, but also, most importantly, effective popularisation - a process that will not happen on its own, but rather requires thought and large-scale preparatory work so as to ensure that all sciences are made more accessible.

## Amendment 27 Annex I, 2.4. Science/society Actions envisaged

They will take the form of activities in support of:

- networking and establishment of structural links between the institutions and activities concerned at national, regional and European level;
- exchange of experience and good practice;
- carrying out specific research;
- high-profile awareness-raising initiatives such as prizes and competitions;
- establishing data and information bases and carrying out studies, in particular statistical and methodological studies, on the different themes.

They will take the form of activities in support of:

- networking and establishment of structural links between the institutions and activities concerned at national, regional and European level;
- exchange of experience and good practice;
- carrying out specific research;
- high-profile awareness-raising initiatives such as prizes and competitions;
- establishing data and information bases and carrying out studies, in particular statistical and methodological studies, on the different themes;
- setting up European houses of science in the capital cities of the Member States and in prominent places worldwide to disseminate European scientific and technological research.

#### Justification

If the European Union is to make its cultural and technological presence felt, its technological and scientific capabilities must be made known in the world's great capital cities as well as in the Member States themselves.

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#### Annex I, 2.4. Science/society Actions envisaged

They will take the form of activities in support of:

- networking and establishment of structural links between the institutions and activities concerned at national, regional and European level;
- exchange of experience and good practice;
- carrying out specific research;
- high-profile awareness-raising initiatives such as prizes and competitions;
- establishing data and information bases and carrying out studies, in particular statistical and methodological studies, on the different themes.

They will take the form of activities in support of:

- networking and establishment of structural links between the institutions and activities concerned at national, regional and European level;
- exchange of experience and good practice;
- carrying out specific research;
- high-profile awareness-raising initiatives such as prizes and competitions;
- establishing data and information bases and carrying out studies, in particular statistical and methodological studies, on the different themes;
- setting up a European electronic public library of science.

#### Justification

The potential afforded by the new technologies must be channelled into divulging the knowledge that they produce.

Amendment 29 Annex I, addition at the end of Annex I (new)

#### Fundamental ethical principles

In implementing this programme and carrying out research under it, certain fundamental ethical principles must be observed, such as the protection of human dignity, of data and privacy, and of animals and the environment. If appropriate, participants in research projects must obtain the approval of the competent ethics committee before beginning R&TD projects. In the case of proposals on sensitive subjects, systematic ethical reviews shall be conducted. In individual cases, the ethical review may also be

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### performed during the implementation of the project.

#### Justification

Unlike the 5<sup>th</sup> Framework Programme, the proposal for the 6<sup>th</sup> does not contain any comments on the ethical limits to research. Yet in its proposal for the specific programme to integrate and strengthen the European Research Area, the Commission has much to say on the subject. The rapporteur proposes incorporating its observations in the framework programme (see Explanatory Memorandum).

#### Amendment 30 Annex II, point 1, seventh indent

EUR million EUR million

Citizens and governance in the Citizens and governance in the

European knowledge-based society 225 European knowledge-based society 500

#### Justification

The seventh thematic research area ('Citizens and governance') and the 'Science/society' objective have rightly been assigned priority and declared pivotal elements of the sixth framework programme. They should, therefore, be allocated funding commensurate with the range of actions envisaged thereunder.

#### Amendment 31 Annex II, point 2, fourth indent

EUR million EUR million Science/society 50 Science/society 150

#### Justification

The seventh thematic research area ('Citizens and governance') and the 'Science/society' objective have rightly been assigned priority and declared pivotal elements of the sixth framework programme. They should, therefore, be allocated funding commensurate with the range of actions envisaged thereunder.

### Amendment 32 Annex III, Instruments and detailed rules for Community financial participation

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#### 1.1. Instruments to integrate research

#### 1.1.1. Networks of excellence

The programmes of activities, representing an order of magnitude of several millions of euros per annum, will be defined on the basis of precise research themes and topics, but not on the basis of pre-defined objectives or results. Implementing them will entail the gradual integration of the work programmes in the areas concerned, a precise breakdown of activities, a significant volume of exchanges of personnel, and intensive use of electronic information and communication networks and virtual and interactive working methods. These programmes will necessarily and in a verifiable manner involve activities to manage, transfer and exploit the knowledge produced.

The programmes of activities, representing an order of magnitude of several millions of euros per annum, will be defined on the basis of precise research themes and topics, but not on the basis of pre-defined objectives or results. Implementing them will entail the gradual integration of the work programmes in the areas concerned, a precise breakdown of activities, a significant volume of exchanges of personnel, and intensive use of electronic information and communication networks and virtual and interactive working methods. These programmes will necessarily and in a verifiable manner involve activities to manage, transfer, exploit and *publicise* the knowledge produced.

#### Justification

The knowledge produced by research financed from public funds must be made available to the entire research community.

Amendment 33
Annex III, Instruments and detailed rules for Community financial participation
1. Instruments
1.1.2 a., Stairway of excellence (new)

#### 1.1.2a. Stairway of excellence

In the priority thematic areas of research of the framework programme, financial contribution to projects falling within the scope of the stairway of excellence

If the European Research Area is to be brought into being, efforts will have to be pooled in the European policy for research and technological development. That being the case, European added value and much of the research conducted should be measured according to the three essential yardsticks of excellence, critical mass and

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the pioneering nature of the project (together with the quality of its findings). Efforts will focus on projects and forms of cooperation which, having satisfied all three criteria, offer the best prospects of success.

As well as focusing efforts in the manner described above, additional efforts will be made to identify subfields or research projects within the priority thematic areas and partners in the research community who deserve to be encouraged to rise to the requisite degrees of excellence, critical mass and utility which they have not yet attained. In cases of this kind, the other three new instruments will not always be possible or appropriate to apply directly. The means to be employed in such cases, where the need has been duly shown to exist, will therefore be the range of tools provided under the fifth framework programme for indirect research actions, subject to the same financial conditions for participation. These tools are: shared-cost projects, support affording access to research infrastructures, technologystimulation projects to encourage and facilitate SME participation in research and technological development activities, 'Marie Curie' training grants, support for networks, concerted research projects, and accompanying measures.

This instrument must be used flexibly and provide for arrangements to accommodate other small-scale participants with innovative research projects and the potential to meet the criteria with regard to critical mass and centres of excellence. Moreover, the stairway of excellence must be able to embrace: a) research centres not included in the networks of excellence, b) initiatives put forward by pre-competitive research teams, c) SMEs and d) projects which can form the basis for future networks, with a view to integrating regions with similar problems and the applicant countries into the European Research Area.

These projects must be sound and, where possible, connected with the main priority areas of the framework programme. The budget shall be limited to 20% of the overall budget. The Administration may call on the services of external bodies in cases that would prove beneficial in financial and administrative terms.

#### Justification

It is vital that work be conducted on a Europe-wide scale, given that small, high-quality research teams are common. Moreover, if SMEs and the applicant countries are to be accommodated, space within the programme must be sought to provide for small-scale, innovative, quality initiatives. This will also provide an opening for pre-competitive groups and centres which have hitherto not taken part in European programmes and thus afford new opportunities for them to join areas of excellence. Likewise, it would be worthwhile extending the opportunity of becoming involved in this programme to the research centres and teams spread across the EU as a whole as a means of offsetting the centralised management approach preferred by the other instruments.

# Amendment 34 Annex III, Instruments and detailed rules for Community financial participation 1.1. Instruments to integrate research 1.1.1. Networks of excellence (fourth paragraph)

The networks of excellence will be selected on the basis of calls for proposals.

The networks of excellence will be selected on the basis of calls for proposals, which will primarily require the inclusion of young European researchers and gender balance in the relevant project teams.

#### Justification

The choice of centres of excellence and the use of European funding must abide by the objectives of the sixth framework programme.

Amendment 35
Annex III, Instruments and detailed rules for Community financial participation 1.1. Instruments to integrate research 1.1.2. Integrated projects

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Carrying them out will necessarily and in a verifiable manner entail activities relating to dissemination, transfer and exploitation of knowledge as well as analysis and evaluation of the economic and social impact of the technologies concerned and the factors involved in their successful exploitation.

Carrying them out will necessarily and in a verifiable manner entail activities relating to dissemination, transfer, exploitation and *publication* of knowledge as well as analysis and evaluation of the economic and social impact of the technologies concerned and the factors involved in their successful exploitation.

#### Justification

The knowledge produced by research financed from public funds must be made available to the entire research community and developed to serve the general interest.

# Amendment 36 Annex III, Instruments and detailed rules for Community financial participation 1.1. Instruments to integrate research 1.1.2. Integrated projects

The integrated projects will be selected on the basis of calls for proposals. Participation in them will be open to third country organisations and organisations for European scientific cooperation. There will be specific measures to encourage SME participation.

The integrated projects will be selected on the basis of calls for proposals, which will primarily require the inclusion of young European researchers and gender balance in the relevant project teams. Participation in them will be open to third country organisations and organisations for European scientific cooperation. There will be specific measures to encourage SME participation.

#### Justification

The choice of centres of excellence and the use of European funding must abide by the objectives of the sixth framework programme.

Amendment 37
Annex III, Instruments and detailed rules for Community financial participation 1.1. Instruments to integrate research 1.1.2. Integrated projects

The networks of excellence and the

The networks of excellence and the

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integrated projects will be administered by the participants with a high level of autonomy. They *will* in particular *have the possibility*:

- *of associating* other partners with the activities that they undertake;
- *of defining* projects of limited scale as components of their programmes of activity and *launching* calls for proposals;
- *of adapting* the content of those programmes according to needs.

integrated projects will be administered by the participants with a high level of autonomy. They **should seek** in particular **to**:

- *associate* other partners with the activities that they undertake;
- *define* projects of limited scale as components of their programmes of activity and *launch* calls for proposals *targeted above all at small-scale research bodies*;
- *adapt* the content of those programmes according to needs.

#### Justification

If European research is to be diverse and flourish, it is vital that balance and coordination between centres of excellence and research as a whole be maintained. The fact is that small-scale research bodies lead the field in making the most unexpected and innovative discoveries.

### OPINION OF THE COMMITTEE ON WOMEN'S RIGHTS AND EQUAL OPPORTUNITIES

for the Committee on Industry, External Trade, Research and Energy

on the proposal for a decision of the European Parliament and of the Council concerning the multiannual framework programme 2002-2006 of the European Community for research, technological development and demonstration activities aimed at contributing towards the creation of the European Research Area (COM(2001) 94 – C5-0087/2001 – 2001/0053(COD))

Draftsperson: Lissy Gröner

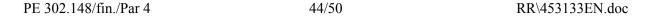
#### **PROCEDURE**

The Committee on Women's Rights and Equal Opportunities appointed Lissy Gröner draftsperson at its meeting of 10 April 2001.

It considered the draft opinion at its meeting of 11 September 2001.

At the latter meeting it adopted the following amendments unopposed, with one abstention.

The following were present for the vote: Maj Britt Theorin, chairperson; Jillian Evans, vice-chairperson; Lissy Gröner, draftsperson; María Antonia Avilés Perea, Fiorella Ghilardotti, Heidi Anneli Hautala, Anna Karamanou, Christa Klaß, Rodi Kratsa-Tsagaropoulou, Astrid Lulling, Maria Martens, Amalia Sartori, Patsy Sörensen, Joke Swiebel, Sabine Zissener, Ilda Figueiredo (for Marianne Eriksson) and Marie-Hélène Gillig (for Elena Ornella Paciotti).



#### SHORT JUSTIFICATION

#### **AMENDMENTS**

The Committee on Women's Rights and Equal Opportunities calls on the Committee on Industry, External Trade, Research and Energy, as the committee responsible, to incorporate the following amendments in its report:

Text proposed by the Commission<sup>1</sup>

Amendments by Parliament

## Amendment 1 Annex 1: Scientific and technological objectives and broad lines of the activities, paragraph 3

The activities carried out in order to achieve the last two targets are intended to structure various dimensions of the European Research Area that are closely connected with research and constitute its environment, as well as helping to establish or consolidate the foundations underpinning its operation. They will therefore be implemented across the whole field of science and technology.

- of participation of third country researchers and organisations in projects and networks in areas of particular interest to those countries

The activities carried out in order to achieve the last two targets are intended to structure various dimensions of the European Research Area that are closely connected with research and constitute its environment, as well as helping to establish or consolidate the foundations underpinning its operation. They will therefore be implemented across the whole field of science and technology and foster the development of human resources, and women in particular, by removing the barriers which women scientists are facing and enabling them to combine professional and family life, first of all by providing childcare facilities

#### Justification

At present too many women abandon scientific careers because they are unable to combine their roles as mothers and professionals, especially if they are single parents.

<sup>1</sup> OJ C 180E, 26.6.2001, p. 156.

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**EN** 

#### Amendment 2 Appendix I, eighth paragraph, fourth indent

- of participation of third country researchers and organisations in projects and networks in areas of particular interest to those countries. Does not apply to English version

#### Justification

[Translator's note: The German amendment seeks to include the feminine as well as the masculine form of the word 'researcher' in order to make the language of the Decision gender-neutral.]

## Amendment 3 Appendix I, point 1.1, second paragraph

Seven priority thematic areas have been selected.

Seven priority thematic areas have been selected, in which the new framework strategy on gender mainstreaming is applied.

#### Justification

With its decision of 7 June 2000 the Commission adopted the Framework Strategy on Gender Equality, which must be applied to the sixth framework programme.

## Amendment 4 1.1.7 Citizens and governance in the European knowledge-based society Actions envisaged Knowledge-based society

- options and choices for the development of a knowledge-based society serving the EU objectives set at the Lisbon and Nice European Councils, in particular as regards improving the quality of life, employment and labour market policies, life-long education and training, and strengthening social cohesion and sustainable
- options and choices for the development of a knowledge-based society serving the EU objectives set at the Lisbon and Nice European Councils, in particular as regards improving the quality of life, employment and labour market policies, life-long education and training, *and equality of the sexes*, and strengthening social cohesion and

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#### Justification

Equality of the sexes is a precondition for, inter alia, the development of a knowledge-based society serving the objectives the Union set itself at Lisbon.

## Amendment 5 Appendix I, point 1.1.7, third title, third subtitle, third indent

- the establishment and exploitation on a European scale of research infrastructures and data and knowledge bases.
- the establishment and exploitation on a European scale of research infrastructures and data and knowledge bases, and support for interdisciplinary and specific gender research by, for and about women.

#### Justification

This addition has been tabled by the EP's Committee on Women's Rights and Equal Opportunities because the need for gender research already became apparent in the Fifth Research Framework Programme, and was also referred to in Parliament's resolution A5-0082/1999 of 3 February 2000 on women and research.

## Amendment 6 Appendix I, point 1.2.1, third indent

- research in support of EU policy objectives such as, for example, those set out in the 6th Environment Programme<sup>33</sup> and the Green Paper "Towards a European Strategy for the Security of Energy Supply"<sup>34</sup>;

- research in support of EU policy objectives such as, for example, those set out in the 6th Environment Programme<sup>33</sup> and the Green Paper "Towards a European Strategy for the Security of Energy Supply"<sup>34</sup>, as well as in the Strategy on Gender Equality (2001-2005) and the related programme;

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<sup>&</sup>lt;sup>33</sup> COM(2001) 31.

<sup>&</sup>lt;sup>34</sup> COM(2000) 769.

<sup>&</sup>lt;sup>33</sup> COM(2001) 31.

<sup>&</sup>lt;sup>34</sup> COM(2000) 769.

#### Justification

This addition is necessary in order to strengthen the place and role of women in science and research in Europe.

#### Amendment 7 Appendix I, point 1.2.1, new indent after the eleventh indent

The activities should continue to pursue the initiatives begun in the Fifth Framework Programme with the aim of achieving gender balance with at least 40% of each gender;

#### Justification

The initial successes achieved in the Fifth Framework Programme must be pursued in succeeding programmes.

## Amendment 8 2.2 Human resources and mobility Justification of the effort and European added value

Promoting transnational mobility is a simple, particularly effective and powerful means of boosting European excellence as a whole, as well as its distribution in the different regions of the EU. It creates opportunities for significantly improving the quality of the training of researchers, promotes the circulation and exploitation of knowledge, and helps to establish world-class centres of excellence that are attractive throughout Europe. EU level action in this area (as in human resources in general) leading to the attainment of critical mass will inevitably have a major impact.

Promoting transnational mobility is a simple, particularly effective and powerful means of boosting European excellence as a whole, as well as its distribution in the different regions of the EU. It creates opportunities for significantly improving the quality of the training of researchers, promotes the circulation and exploitation of knowledge, and helps to establish world-class centres of excellence that are attractive throughout Europe. EU level action in this area (as in human resources in general) leading to the attainment of critical mass will inevitably have a major impact.

Particular attention will be paid to:

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- participation by women in all the initiatives and to the measures taken to promote gender balance in research
- personal circumstances relating to mobility, particularly as regards family life and the status of researchers

#### Justification

These items of human resource and mobility policy tie in with the objectives of the European Union and the Community framework strategy on equality of men and women.

#### Amendment 9 2.4 Science/Society Actions envisaged

They will take the form of activities in support of:

- networking and establishment of structural links between the institutions and activities concerned at national, regional and European level;
- exchange of experience and good practice;
- carrying out specific research;
- high-profile awareness-raising initiatives such as prizes and competitions;
- establishing data and information bases and carrying out studies, in particular statistical and methodological studies, on the different themes.

They will take the form of activities in support of:

- networking and establishment of structural links between the institutions and activities concerned at national, regional and European level;
- exchange of experience and good practice;
- carrying out specific, interdisciplinary research on the subject, inter alia, of gender and the sexes;
- high-profile awareness-raising initiatives such as prizes and competitions;
- establishing data and information bases and carrying out studies, in particular statistical and methodological studies, on the different themes, including participation by women in the various areas of research and in all bodies that take decisions on research.

#### Justification

The true extent to which women are underrepresented in scientific research will only be known when statistics are drawn up specifically to this end in all areas of research and in all the decision-making structures and bodies.

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#### Amendment 10 Appendix II, paragraph 2, point 4

Science/society 50 Science/society 200

#### Justification

The sum of Euro 50 million allocated to the activities under 'Science/society' is totally inadequate and must be considerably increased.