COMMISSION OF THE EUROPEAN COMMUNITIES



Brussels, 20.06.2001 COM(2001) 331 final

COMMUNICATION FROM THE COMMISSION TO THE COUNCIL AND THE EUROPEAN PARLIAMENT

A MOBILITY STRATEGY FOR THE EUROPEAN RESEARCH AREA

1. BACKGROUND

In January 2000, the Commission adopted a Communication proposing the creation of a European Research Area $(ERA)^1$. It emphasised, among other things, the need for more abundant and more mobile human resources. Attention was drawn, especially, to making more use in the future, both at national and at European level, of mobility as an instrument for the transfer of scientific knowledge. This included introducing a European dimension to scientific careers, making Europe more attractive to researchers from the rest of the world, encouraging the return of those who have left to complete their training or pursue careers abroad; and bringing together the scientific communities, companies and researchers of Western and Eastern Europe.

The Lisbon European Council on 23-24 March 2000 endorsed the ERA project and set a series of objectives as well as a timetable. In particular, the European Council asked the Council and the Commission, together with the Member States where appropriate, to take the necessary steps to remove obstacles to the mobility of researchers in Europe by 2002 and to attract and retain high-quality research talent in Europe.

In a Resolution² of 15 June 2000, the Research Council invited the Member States and the Commission to co-operate in order to identify and take action with a view of removing present obstacles to the mobility of researchers in order to facilitate the creation of a genuine European scientific community.

Following the Research Council, the Commission set up a High-Level Expert Group on Improving Mobility of Researchers (HLG), composed of national experts appointed by the Member States, to help prepare an analysis with a view to the Commission presenting proposals by June 2001. After detailed preparatory work by the Commission services, the HLG held four meetings and presented a report in April 2001.

The regional dimension of mobility was specifically emphasised in the Commission Communication "Realising the European Research Area: Guidelines for the Actions of the Union in the field of Research 2002-2006".³ This importance was further stressed by the Research Council in its Resolution of November 2000, which underlined "the importance of promoting the scientific and technological performance of all regions of the Member States".

The area of research, innovation and enterprise was also identified as one of the key areas for policy action at the Stockholm European Council of 23-24 March 2001, which emphasised, among other points, the skills gap and problems of mobility. The European Council invited the Council "to examine a specific strategy for mobility within the European Research Area on the basis of the proposal announced by the Commission". Furthermore, in order to examine the driving forces, characteristics and barriers within the European labour market, a high level skills and mobility task force was set up by the Commission. This task force will contribute to the Action Plan, which the Commission will present for the spring 2002 European Council on developing and opening up new European labour markets.

¹ COM(2000) 6 final.

² OJ C 205, 19.7.2000, p. 1.

³ COM(2000) 612 final of 4.10.2000.

This Communication presents a strategy to create a favourable environment for the mobility of researchers in the ERA, in order to develop, attract and retain appropriate human resources in research and to promote innovation. It aims at building up the research competence and excellence within the ERA by launching immediate actions for implementation, creating the dynamics for increased development of the abovementioned environment and identifying ways of financial support by the different actors involved. Special attention will be devoted to the encouragement of inter-sectoral mobility, i.a. between business and academia and vice-versa. The same applies to interregional mobility in order to avoid a "brain drain" in less developed regions by actively promoting mobility both to and from these regions. In designing its mobility strategy for researchers in the ERA, the present Communication takes into account the approach towards researchers from candidate countries developed in the Commission decision on the negotiation mandates for enlargement⁴, as well as the approach towards third country nationals developed within the Commission's amended proposals for a "Directive of the European Parliament and of the Council on the posting of workers who are third-country nationals for the provision of cross-border services"⁵, and a "Council Directive extending the freedom to provide cross-border services to third-country nationals established within the Community".⁶ Finally, in the framework of the present Communication, the Commission is fully aware of the challenges and opportunities presented in the research area by the forthcoming enlargement of the EU. The candidate countries have undoubtedly an important contribution to make in enhancing excellence and mobility opportunities in Europe, thanks to the quality of their human resources in the field of science and research.

2. WHY A SPECIAL APPROACH FOR THE MOBILITY OF RESEARCHERS?

The European Research Area aims at a better total organisation of research in Europe. Research is a powerful driving force for economic growth. Compared to its main competitors, the situation of human resources in R&D in Europe over recent years raises a series of concerns:

- The workforce in R&D is relatively low, as researchers account for only 5.1 in every thousand of the workforce in Europe, against 7.4 in the US and 8.9 in Japan.⁷
- This difference is even more marked if one considers only the number of researchers employed in industry: 2.5 in every thousand in Europe, against 7.0 in the US and 6.3 in Japan.⁸

⁴ Doc. SEC(2001) 538/7 of 11 April 2001, "Essential Elements for the Draft Common Positions concerning Freedom of Movement of Persons".

⁵ OJ C 311 E/197 of 31.10.2000, p. 187.

⁶ OJ C 311 E/197 of 31.10.2000, p. 197.

⁷ "Towards a European Research Area. Science, technology and innovation key figures 2000". European Commission, Research DG and Eurostat, EUR 19396, 2000, p. 36. The figure for EU refers to 1997, US to 1993 and Japan to 1998.

⁸ "Towards a European Research Area. Science, technology and innovation key figures 2000". European Commission, Research DG and Eurostat, EUR 19396, 2000, p. 36. The figures for EU refers to 1997, US and Japan to 1998.

- Europe also seems to face a brain drain to the US of young scientific and technological personnel⁹. Even though statistics are incomplete, especially concerning researchers coming to Europe, it has been shown that half of foreign students with temporary visas who receive US science and engineering doctorates are still found working in the US five years later. This stay rate varies by field of degree, ranging from 32% in the social sciences to 61% in the physical sciences and mathematics.¹⁰
- The number of young people attracted to careers in science and research is decreasing. In the EU, 23% of people aged 20 to 29 years are in higher education, compared to 39% in the USA.¹¹
- Finally, there is presently in Europe an underused potential of women in scientific careers. Notwithstanding the fact that half of all university graduates are women, they represent less than 10% of full professors. As an example, a recent study focusing on the chemical sector in the UK indicates that the proportion of women in this specific sector represents 16% of all academic staff, i.e. 22% of researchers, 13% of teachers, 4% of senior lecturers and less than 1% of professors.¹²

This situation calls for urgent action, in order to maintain and increase Europe's competitive position. The continuous supply of a skilled workforce, both quantitatively and qualitatively, is of paramount importance to optimise research in a knowledge-based society, and to fulfil the goals of the European Research Area. Europe, in this respect, needs to radically increase its numbers of researchers, by attracting more young people to research, by making better use of the potential of women in science and by attracting high quality third country researchers in order to take full advantage of global knowledge. The Commission's Communication on Innovation in a knowledge-driven economy¹³ called for encouragement of geographic and intersectoral mobility of researchers, through explicit pathways.

Mobility, a well-known and effective way of training skilled workers and disseminating knowledge, is a core element in research development, which has not yet been fully exploited in Europe. Unlike other fields, where mobility periods are usually short and often restricted to certain career stages, the mobility of researchers concerns all ages and steps in a researcher's career path. It permits the creation and operation of multi-national teams and networks of researchers, which enhance Europe's competitiveness and prospective exploitation of results. Increased physical mobility of researchers, whether transnational (movement between countries) interregional or intersectorial (movement between academia and industry is therefore essential in order to take a maximum advantage of available resources.

Mobility, however, is not an end in itself, but an instrument by which research results can be optimised. It creates European added value by:

 improving the quantity and quality of research training, by offering the best available opportunities regardless of where this expertise is situated;

⁹ S. Mahroum: "Skilled labour – Competing for the highly skilled: Europe in perspective." Science and Public Policy Vol. 26 No. 1, February 1998, p. 17-25.

¹⁰ M. G. Finn: "Stay rates of foreign doctorate recipients from U.S. universities," Oak Ridge Institute for Science and Education, 1999.

¹¹ "Towards a European Research Area. Science, technology and innovation key figures 2000". European Commission, Research DG and Eurostat, EUR 19396, 2000, p. 39.

¹² Ea, Study of the Factors affecting the Career Choices of Chemistry Graduates, London, 2000, p. 10.

¹³ COM(2000) 567.

- fostering research collaboration internationally, with different regions and between the academic and business worlds (networking);
- enhancing the transfer of knowledge and technology between the different actors of the European research and innovation system, including industry (the mobility of business managers to the scientific sector and academia should be duly taken into consideration);
- raising the scientific excellence of individual researchers and furthering the creation of internationally renowned centres of excellence attractive to researchers from all over the world;
- furthering the distribution of research excellence in the different regions of Europe, including the less-favoured regions of the EU and in the candidate countries;
- making the research work more efficient by pooling together competence and experience, providing better dissemination of research results, as well as optimising the use of research infrastructure and research funding opportunities;
- demonstrating, with its mere existence, the openness of the European Research Area.

This is why the mobility of researchers must be considered as a priority.

The impact of mobility differs depending on the individuals concerned, the organisations involved, the research world itself as well as the society at large. Mobility must be encouraged, when it is beneficial to all concerned.

3. THE WAY FORWARD – A COMMON STRATEGY FOR INTERVENTION PRIORITY AREAS

The strategy outlined in the present document takes into account the work of the HLG as well as ongoing work at Community level on mobility in the areas of education¹⁴, employment (High Level Task Force on Skills and Mobility) and public administration¹⁵. It builds on previous work, most notably the Green Paper on Obstacles to Transnational Mobility (1996)¹⁶ and the report of the High Level Panel on the free movement of persons chaired by Mrs Simone Veil (1997)¹⁷. It also finds a place in the new strategy currently promoted by the Commission for ensuring New European Labour Markets open and accessible to all by 2005¹⁸. It goes, however, a step further by incorporating both the specificity of research and the challenge of the ERA. It encompasses all fields of research, in both the public and the private sectors as well as all age categories and stages of a researcher's career (PhD student, early-stage, mid-career or senior researcher).

¹⁴ The Commission's amended proposal for a Recommendation of the European Parliament and of the Council on mobility within the Community for students, persons undergoing training, young volunteers, teachers and trainers, COM (2000) 723 final, and the Action Plan for Mobility, OJ C 371, of 23.12.2000, p. 4.

¹⁵ The Directors-General for public administration has an *ad hoc* Mobility Group on free movement within the public service. A report on legal obstacles to mobility was submitted for the Directors-General's meeting of 9-10.11.2000.

¹⁶ COM(1996) 462 final.

¹⁷ The high-level panel report, as well as other information on the free movement of persons is available on the Internet at http://europa.eu.int/comm/internal_market/en/people/index.htm.

¹⁸ See the Communication "New European Labour Markets, Open to All, with Access to All", COM(2001) 116 final.

The rationale behind the mobility strategy for the ERA is an *improved research system*. In order to achieve this, a *more favourable environment for transnational and intersectorial mobility* throughout the research career must be created. This includes improvement of European research funding and research infrastructure, as well as removal of obstacles to mobility and further financial incentives to increase mobility.

By making mobility a central element throughout the different stages of the research career, the present strategy aims at:

- making Europe more attractive for researchers. This includes retaining researchers in Europe, attracting third country researchers to the EU, and encouraging researchers based outside the EU to return;
- enhancing the transnational mobility of researchers and strengthening the European dimension of research careers;
- stimulating increased mobility between academia and industry and a better exploitation of research results.

In making Europe more attractive for researchers, special attention needs to be paid to prevent new forms of 'brain drain' from third countries with less developed research capacity. Rather, the present strategy should strengthen and develop a symbiotic collaboration with these countries, thus encouraging them to build up their own research capacity.

Within the Union regional cohesion will be pursued by taking due account of the necessity for less developed regions to attract researchers in order to allow for their own RTD-driven long-term development strategies and to avoid that less-developed regions suffer from the increased competition for highly qualified researchers.

In determining its overall objective for increasing the mobility of researchers, the Commission has benefited considerably from the work undertaken by the HLG. Some key elements have been identified by the Group:

First, the obstacles encountered by researchers and their families depend very much on the duration of the stay (short-term of typically a few months to a year; medium-term of about 2-5 years; or long-term) and the stage of the career in which the mobility is undertaken. The HLG noted in their report that there appeared to be a concentration of obstacles for mid-career researchers in medium term stays. The legal situation is also distinctly different for third country researchers than for EU citizens.

Secondly, only some obstacles are particular to researchers, but as researchers are, on the average, more mobile than the total workforce, the remaining general obstacles to mobility of workers and students affect them considerably. These barriers are social, cultural and linguistic, but also economic, often due to a lack of recognition of qualification and of relevant social and economic information.¹⁹

Thirdly, differences can be observed between the text of regulations and their implementation in practice, for even if the rules may appear clear, there can be problems with their application in practical cases.

¹⁹ For an analysis of the latter barriers, see the above-mentioned Commission's Communication "New European Labour Markets, Open to All, with Access to All".

The provision of reliable and up-to-date information is vital for determining the true situation encountered by mobile researchers. In this respect, it should also be mentioned that there is a striking lack of comprehensive statistics about mobility of researchers in the majority of Member States, even in countries with regular collection of information and nation-wide registers. This concerns both incoming and outgoing researchers. The information available is often dispersed and incomplete. For instance, labour force surveys are not particularly helpful, because researchers are not identified as a distinct group. Complementary work is needed, in particular by the Member States, in order to obtain the relevant statistics and to identify with greater precision the existing mobility patterns and the difficulties encountered at different stages of the researcher's career.

Nevertheless, the strategy to create a more favourable environment for the mobility of researchers in Europe must be articulated around the following priority interventions, which have been defined with the help of the HLG:

- Return and career development: Mobility is often not sufficiently appreciated. For researchers without a permanent position, there is a fear of being left 'out of the system' if they go abroad. Researchers who have been away from their national research system for some years have often difficulties to obtain a position on returning home. For more established researchers, leave of absence can be of disadvantage to the career advancement. The research undertaken abroad or in the other sector may not be adequately appreciated. Researchers who move with the intention of a long-term stay in another country have often to 'start from the beginning' in the new country: they may lose the recognition and social status they have had.
- *Financial issues:* Mobility is hindered by inadequate funding. Insufficient numbers of opportunities exist to obtain positions, fellowships, return and or re-integration grants etc, especially at mid-career and senior researcher level. Difficulties to cover financial replacements often occur in countries, which have sabbaticals for academic researchers.
- Admission to the country and access to employment: Immigration restrictions may hinder third country researchers from contributing to the European Research Area. Third country family members of EU/EEA researchers continue to face problems linked to visa, residence permit and work permit requirements. Even the 'green card' systems developed to attract highly skilled workforce from abroad are temporary in nature: after the stipulated time, the worker normally has to leave the country²⁰. Free movement of third country researchers is also at present restricted. Thus difficulties are encountered by such researchers in the EU who wish to travel to non-Schengen countries for use of special research infrastructures or for scientific conferences.
- Social security rights and fiscal issues: Differences in the social security systems and levels of taxation among Member States may make mobility unattractive. Mobile persons often have to pay contributions for benefits they cannot enjoy, nor receive compensation for. This concerns, e.g. unemployment benefits. In some countries, civil servants have specific pension systems with restrictions that make it difficult to move without loss to another country or to the private sector. Third country nationals, who are obliged to leave the country at the end of their planned stay, may lose their pension contributions, if there is no bilateral social security agreement covering the situation. Bilateral taxation agreements are missing with some relevant countries, in particular countries outside of the EU,

²⁰

Five years in the German 'IT-specialists Temporary Relief Program'.

introducing a risk of double taxation. Likewise, there is a risk of double taxation of pensions, due to different treatment of pension contributions and benefits.

- *Intellectual property rights (IPR):* These matters, especially for intersectorial mobility, are widely perceived as a complex issue and a potential barrier.
- Recruitment conditions and methods: Research positions are often still not advertised internationally, the application submission time is too short and there are difficulties related with the recognition of diplomas from other countries. For positions in the public sector, researchers may still face restrictions imposed by the civil service status, for instance in relation to language requirements.
- *Family issues:* These need to be emphasised, as researchers normally either move with their family or need to keep close contact with the family remaining in the home country, depending on the duration of the stay. Less favourable maternity leave and benefits in a host country or inadequate day-care for children may deter, for instance, young researchers from moving to another country. Particular attention should also be given in this respect to the dual career problem: the partner often has difficulties to find a job in the new country or to take a leave from his or her present job.
- *Gender:* Finally, specific attention needs to be paid to the gender aspect of mobility. Generally speaking, as highlighted in the ETAN report on Women and Science, women researchers continue to face more serious obstacles to career progression than men do. Specific obstacles arising from the structures, procedures and criteria governing mobility schemes need to be addressed to ensure mobility equality for women scientists.

4. ACTIONS

In implementing its strategy for a more favourable environment for the mobility of researchers, the Commission, in close co-operation with the Member States, intends to develop two types of actions:

- the first aims at establishing the dynamics required to set up and develop a favourable environment for mobile researchers throughout their career;
- the second refers to the financial measures required in order to reach a critical mass of mobile researchers within the European Research Area.

For the reasons recalled in section 1, candidate countries will be fully integrated in the proposed initiatives.

The financing of the actions described in the present chapter is entirely covered by the Fifth Framework programme for Research (1998-2002) and the proposal for the New Framework Programme (2002-2006).

4.1. Actions aimed at establishing the dynamics to improve the environment for mobile researchers

This first type of actions, based on medium-term perspectives, aims at improving the practical environment of researchers in Europe, and to set up a dynamics for enhancing the conditions enabling mobility to be more effective. These actions will be developed in synergy with other initiatives developed by the Commission, and in particular those put forward in the framework of the Recommendation of the Council and the European Parliament on mobility within the Community for students, persons undergoing training, young volunteers, teachers and trainers; the Action Plan for Mobility; and the Communication on the New European Labour Markets.

4.1.1. Improving the information on mobility

The Commission will launch a series of immediate actions in order to provide a better comprehensive vision of mobility opportunities in Europe and to encourage researchers to undertake mobility experiences. Based on the recommendations of the HLG, they aim at providing an overall framework in which the mobility strategy will develop.

Information to researchers and better dissemination of vacancies: The Commission proposes to set up an Internet portal linking national and Commission Internet sites by providing a common entry point for researchers to national and Community level information. In this respect, the Commission will encourage the development, within each Member State, of comprehensive national Internet sites for EU and foreign researchers, detailing national regulations and procedures, providing practical information, and listing job vacancies and funding opportunities. The sites will particularly aim at providing references to funding opportunities for researchers wishing to go abroad or to return to their home country. In implementing this initiative, the Commission will pay due attention to the ongoing work aiming at the development, in the context of the New European Labour Markets, of a one-stop European mobility information site, and the setting up of a Europe-wide jobs and learning database²¹. In developing the present initiative, the Commission will also encourage all regions, and particularly the less-developed ones, to assure that vacancies are comprehensively disseminated through the Community and national web sites. For actors in the research area of the less developed regions, it is of utmost importance that regional advantages and specificities are taken into account when competing to attract researchers.

Statistics: In order to develop the above-mentioned actions, the Commission intends to significantly improve, in close co-operation with national statistics agencies and/or the statistics departments of Research Ministries, a more reliable and comprehensive collection of statistical data and studies on the mobility of researchers, with specific reference to the gender dimension. Starting with fact-finding initiatives, the objective is to create a dynamics in support of the overall mobility strategy.

²¹ The conclusions of the Stockholm European Council specify in this context that "the Commission will work with national and other relevant actors, to assess before the end of [2001], the feasibility of establishing a one-stop European mobility information site".

4.1.2. Improving the provision of practical assistance to researchers

Mobility Centres : The Commission will encourage the creation of Mobility Centres, which will assist national and foreign researchers in dealing with legal and administrative matters and provide training facilities to officials dealing with mobility, particularly within universities. Among their tasks, the Mobility Centres will deliver practical information on accommodation, day-care or education for children and give advice on job opportunities for the accompanying partner. The Centres will not replace existing structures, but provide necessary means for a better co-operation and networking between existing and newly created structures.²²

Ombudsmen: In addition to the creation of Mobility Centres, the Commission will encourage the setting up of a network of national Ombudsmen responsible for handling practical complaints from researchers.

Recruitment methods: The Commission will encourage Member States, regions and other actors in the research area (academia, research centres etc.) to take initiatives to better advertise research positions internationally. Proposals will be put forward in order to remove remaining barriers, which prevent foreign researchers from participating in selection and evaluation committees. Based on the successful experiences conducted in several Member States, the Commission will encourage the inclusion of a minimum ratio of foreign researchers in such committees, as well as a proper gender balance. In the implementation of the present action, synergy will be ensured with existing networks operating in this area, such as EURES.

4.1.3. Qualitative issues

Inter-ministerial meetings on mobility: The Commission will encourage, where appropriate, the organisation, within Member States, of inter-ministerial meetings on current obstacles of direct concern to the European Research Area. These meetings will help to raise awareness about the necessity to develop integrated strategies for the mobility of researchers by liasing with appropriate structures at national or regional level. Based on the results of these meetings, the Commission will assist interested Member States in organising global high-level meetings on Research at national level.

Exchange of best practice: Based on the recommendations of the HLG, the Commission will set up, in collaboration with the Member States, a series of workshops on the exchange of best practice, on themes of common interest. The French scientific visa procedure, which received considerable interest in the HLG, would be a possible theme for the first workshop.

Benchmarking: In order to enhance the development of mobility opportunities, a benchmarking exercise on mobility issues will be established. Based on preliminary actions in relation to the exchange of best practice, the initiative will focus on the improvement of mobility opportunities (e.g. the Quality Charter) and support mechanisms for mobility at national and Community level. The possibility of identifying common criteria for the improvement of the professional situation of the researcher at European level, e.g. by fostering administrative co-ordination, might also be envisaged in this context. The implementation of the present benchmarking initiative will take fully into account the work

²² In implementing this initiative, specific attention will be paid to measures 1f on the Recommendation on the Mobility of students, persons undergoing training, young volunteers, teachers and trainers, and measures 111 and 113 of the Action Plan for Mobility.

carried out by the High Level Group on Benchmarking, which was set up by the Lisbon European Council of 23 and 24 March 2000. The Commission intends to publish and disseminate widely the results of the benchmarking exercise.

'Quality charter': Finally, based on the benchmarking exercise, the Commission will prepare a 'quality charter' for the reception of foreign researchers. The charter will guarantee a minimum level of assistance to foreign researchers from the institutions involved. This assistance will include support for integration into the working and social environment of the host country, including taxation and intellectual property rights. The objective is to encourage host organisations to take more responsibility for their foreign staff and visiting researchers.²³

4.1.4. Legal improvements

Admission, access to employment, social security and taxation: The Commission has already initiated a series of steps in order to improve the legal situation affecting mobility beyond the specific area of research. However, in the preparation and discussion of these measures, the Commission, the Member States and the Parliament need to ensure that the specificity of researchers is duly taken in consideration. The proposed measures will include i.a. a directive proposal for family reunification presently under discussion²⁴, a proposed directive for a status for third country nationals that are long-term residents in an EU Member State, and a number of proposals to further facilitate the free movement of EU citizens. In addition to these general measures, the Commission will investigate the possibility of an 'EC researcher card' or scientific visa, which will allow third country researchers to enter the EU more easily, especially when they are participating in public funded research. This would also allow free movement within the EU, once the foreign researcher is granted residence in a Member State. In the social security area, the Stockholm Council of 23 and 24 March 2001 endorsed the Commission's proposal to simplify Regulation 1408/71²⁵, which would extend the coordination of social security between Member States to third country nationals legally resident in the European Union. For the right to receive unemployment benefits, this would include an extension from three to six months of the permitted time spent abroad searching for work. The Commission will present before the end of 2001 a proposal on the portability of supplementary pensions²⁶. The Commission will also encourage Member States to continue to conclude bilateral social security agreements with non-EU states. Similarly, Member States will be encouraged to complete the network of bilateral tax agreements²⁷ in order to include all countries participating in the Framework Programme.

²³ In implementing this action, due attention will be paid to measure 321 of the Action Plan for Mobility.

²⁴ The Commission's amended proposal, COM(2000) 624.

²⁵ The Commission's proposal, COM(1998) 779 final and OJ C 38, 12.2.1999, p. 10.

²⁶ The problem of cross border pension schemes has been already addressed in the document COM(2001) 214 final, Communication from the Commission to the Council, the European Parliament and the Economic and Social Committee on "The elimination of tax obstacles to the cross-border provision of occupational pensions". In its conclusions, it states that the Commission invites the Council, the European Parliament and the Economic and Social Committee to examine the measures necessary to eliminate unjustified obstacles to the free movement of workers resulting from the diversity of Member States' occupational pension taxation systems, in particular from double taxation".

²⁷ See, however, the work already accomplished in this area described in document SEC(1992) 1118 final, Commission Communication to the Council and the European Parliament subsequent to the conclusions of the Ruding Committee indicating guidelines on company taxation linked to the further development of the Internal Market. Paragraph 34 of the Communication reads: "The Commission also agrees with the recommendations regarding bilateral tax treaties. This applies both to the call for Member States to complete the network of treaties within the Community and to increase their scope and to the definition of a common policy towards double taxation agreements with non-member countries".

4.2. Actions aimed at providing appropriate financial support for developing a critical mass of mobile researchers in Europe

The creation of a favourable environment for the mobility of researchers is necessary but not always sufficient in itself. It must be complemented by a system of financial incentives at local, regional, national or Community level, adapted to the different stages and forms of mobility and the characteristics of the countries and researchers concerned.

In defining these incentives, it is of paramount importance that the financial mechanisms go beyond the mere financing of fellowships. They need to take systematically into consideration such issues as the return and re-integration of researchers to and within Europe, the situation of families and the financial compensation for obstacles linked to mobility issues.

At the same time, the overall success of the strategy is closely linked to the opening of national programmes to nationals from other countries.

On this basis, the Commission has developed in its proposal for a new framework programme for research $(2002-2006)^{28}$ (NFP) an unprecedented effort to enhance the Human Resource dimension in Science, and more particularly the values of mobility.

In conceiving its proposal, the Commission has pursued the following objectives:

- an opening and broadening of the existing instruments in order to encourage researchers to undertake mobility experiences throughout their professional career, notwithstanding their age, gender, experience or country of origin, with the objective of encouraging training in and for research, the transfer of knowledge, the networking of centres of excellence and the optimal use of research infrastructures of the highest level throughout the EU;
- a significant increase and diversification in the availability of funding opportunities, in
 order to enhance, through the provision of global instruments, a dynamic perspective for
 researchers in Europe. In this context, particular attention has been paid to the development
 of global instruments with a view to permit an easier access to research careers;
- the introduction of systematic mechanisms for the return and professional integration or reintegration of researchers to and within Europe, and in particular those who have established themselves in other parts of the world²⁹;
- the stimulation and promotion, through financial incentives, of excellence in European research, in order to improve its visibility and attractiveness. These measures aim particularly at promoting European research teams, especially in new and/or emerging areas of research, and at highlighting personal achievements of European researchers, with a view to supporting their further development and international recognition;
- the provision of more open and systematic access to funding for researchers from third countries, as well as for European researchers wishing to acquire an experience abroad;

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 final/2 of 1 March 2001.

²⁹ Particular attention will be paid in this respect to researchers returning to less developed regions of the Union. In the case of emerging economies and developing countries, the scheme may include provision to assist researchers to return to their country of origin.

- finally, a larger access to funding, through appropriate mechanisms, of national or regional mobility programmes, which will be open to researchers from other European countries. In doing so, the Commission has seeked to encourage Member States to make research project funding more dependent on mobility aspects by taking transnational and intersectorial mobility more systematically into consideration in selection criteria and promotion schemes.

5. POLICY ASSESSMENT

In order to implement and monitor the actions listed above, the Commission intends to set up with the Member States a *scoreboard* in order to follow the development of the abovementioned actions at national and Community level. This initiative is closely related to the benchmarking exercise explained in Section 4. In general, the Commission will monitor the actions launched in section 4, and disseminate widely the progress reports on the implementation of the present strategy for mobility in the ERA. The scoreboard, which will be updated annually, will monitor progress on the actions initiated by the present Communication and enable the identification of possible needs for further Community actions.