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COMMISSION STAFF WORKING PAPER

**Second Implementation Report on
“A Mobility Strategy for the European Research Area”**

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COMMISSION STAFF WORKING PAPER

Second Implementation Report on A Mobility Strategy for the European Research Area”

EXECUTIVE SUMMARY

Abundant and mobile human resources in R&D are largely recognised as one of the main pillars for the implementation of the European Research Area. Adopted in June 2001, the *Mobility Strategy for the European Research Area*¹ foresees a number of actions designed to create a more favourable environment for researchers in Europe by means of a joint effort by the Commission and countries participating in the Sixth Framework Programme for Research, Technological Development and Demonstration².

While the first implementation report published in February 2003³ focused on activities initiated by the Commission, the second report illustrates the manifold achievements both at Community and national level to attain the common goal.

The report contains a comprehensive survey of initiatives undertaken at national level in all areas of direct concern to researchers, and more particularly taxation, social security, statistics and the mobility between industry and academia. These opportunities will be analysed further in the framework of the Open Method of Coordination (OMC).

Significant progress was achieved in the removal of legal and administrative obstacles to the mobility of researchers. Based on good practise in several Member States, a package of legal instruments to improve the admission of third country researchers was elaborated, providing for fast track procedures to obtain special residence permits for researchers. Similar developments have been initiated on the social security issue.

As one of the instruments to improve access to information for researchers a pilot version of the Pan-European Researcher’s Mobility Web Portal went online in July 2003⁴. The Portal provides access to a wide range of web resources covering information about research fellowships and grants, job opportunities as well as practical information relevant for settling in a European country.

As a complement to the services of the Portal, the European Network of Mobility Centres (ERA-MORE) is designed to give proximity assistance to researchers and their families in all matters relating to their professional and daily life. Mobility Centres are currently established in 30 European countries and the first ones became operational in 2003.

The issue of the researchers profession and the researchers career has been tackled in the Communication “*Researchers in the ERA: one profession, multiple careers*” adopted by the Commission in July⁵. It analyses in particular the factors that condition and shape the career of researchers and suggests measures to enhance the career perspectives for researchers in Europe.

¹ Communication from the Commission « A Mobility Strategy for the European Research Area »: COM(2001)331 final of 20.06.2001 and Council Resolution 2001/C367/01

² Decision No 1513/2002/EC of the European Parliament and of the Council of 27 June 2002 concerning the sixth framework programme of the European Community for research, technological development and demonstration activities, contributing to the creation of the European Research Area and to innovation (2002 to 2006)

³ SEC(2003)146 of 04.02.2003

⁴ http://europa.eu.int/eracareers/index_en.cfm

⁵ COM(2003)436final of 18.07.2003

1. Introduction

Rooted in the Lisbon objectives and the ambition to create a European Research Area (ERA), the *Mobility Strategy for the ERA*⁶ has, since its adoption in 2001, been the source of many concrete actions aimed at improving the environment of mobile researchers, both at Community and at national level in Europe. The present document, which constitutes the second annual report on the achievements of the mobility strategy, reflects good cooperation between the European Commission, Member States, Acceding Countries, Candidate Countries and Associated States.

The first implementation report⁷ was published in February 2003 and covered mainly activities carried out by the Commission in close cooperation with Member States and Associated Countries between June 2001 and December 2002.

This second report is broader in its scope because it also takes into account achievements at national level. To this end, the members of the Steering Group for the Implementation of the Mobility Strategy⁸ were asked to complete a questionnaire covering the different action lines of the *Mobility Strategy*. 28 countries⁹ provided input. The present report consequently contains information on activities implemented by the Commission in 2003 as well as actions and initiatives undertaken at national level covering the period from June 2001 to December 2003.

2003 was also a year in which the policy setting of the *Mobility Strategy* was enriched and fortified, through two important European developments. The first is the adoption by the Commission of a Communication on the careers of researchers in the ERA,¹⁰ which addresses for the first time at European level the issues of the researcher profession and the researcher's career. The second is the adoption of the 3% Investment Action Plan,¹¹ which contains a series of concrete actions concerning human resources and mobility in R&D, aimed at supporting the necessary increase in the number of researchers in Europe. The Council adopted Resolutions on both the researcher's career communication¹² and the 3% Investment Action Plan¹³ in 2003.

Finally, it should be mentioned that, within the framework of the present report, due reference will be made to achievements and ongoing work at Community level on mobility in the areas of education,¹⁴ employment¹⁵ and public administration.

⁶ COM(2001)331 final of 20.06.2001

⁷ SEC(2003)146 of 04.02.2003

⁸ Hereinafter referred to as 'the Mobility Steering Group'

⁹ Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Israel, Ireland, Italy, Hungary, Lithuania, Latvia, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, United Kingdom

¹⁰ COM(2003)436 final of 18.07.2003 "Researchers in the European Research Area: one profession, multiple careers"

¹¹ COM(2003)226 final of 30.04.2003

¹² Council Resolution of 10.11.2003, OJ C 282, 10.11.2003

¹³ Council Resolution of 22.09.2003, OJ C 250, 15.10.2003

¹⁴ Particular reference is made here to the following : the work programme "Education and training 2010" which as part of the Lisbon strategy sets 13 shared objectives in education and training including the need to increase mobility (Objective 3.5), the Council/Commission Joint interim report on the

2. Working method in the implementation of the Mobility Strategy

In its Resolution concerning the reinforcement of the Mobility Strategy within the ERA,¹⁶ the Council endorsed the ongoing cooperation between the Commission and the Member States and invited the Commission to fully associate the Candidate Countries in the implementation of the *Mobility Strategy*.

This led in January 2002 to the creation of a Steering Group for the Implementation of the *Mobility Strategy* composed of representatives of the Member States and the Candidate Countries. Its members, appointed by the Research Ministers, have as their main tasks to monitor the implementation of the activities foreseen by the *Mobility Strategy* in close cooperation with the Commission and to improve coordination, whenever applicable, at national level with the relevant stakeholders. The Members of the Steering Group played an active role in the dissemination of activities undertaken at national level as a basis for exchange of good practice.

As announced in the first implementation report, the five countries associated in the 6th framework programme for research, technological development and demonstration activities (FP6),¹⁷ namely Norway, Liechtenstein, Iceland, Switzerland and Israel, were invited to participate in this coordination process. The representatives from these countries joined the Mobility Steering Group at the beginning of 2003.

Three meetings of the Mobility Steering Group were convened in 2003. An additional meeting was held together with the members of the Migration and Asylum Committee of the Commission's Directorate-General for Justice and Home Affairs to discuss the issue of entry conditions of researchers from third countries.¹⁸

Against the enriched policy setting for the *Mobility Strategy*, as mentioned in above, it was decided to widen the scope of the Mobility Steering Group, in order to include, from 2004 onwards, the actions stemming from the new policy initiatives in the areas of researchers' careers and the "3 % objective". In implementing their tasks, the members of this new "Steering Group on Human Resources and Mobility (HRM) in the ERA" will be guided by the principles of the Open Method of Coordination (OMC). A formal decision to apply the OMC in the research policy area, with explicit reference to issues of human resources and mobility, was taken at the Brussels Spring European Council of March 2003.

implementation of these objectives; one of the priorities for the next years is the definition of coherent national mobility strategies, over and above the EU mobility programmes (COM(2003) 685 final) of 11.11.2003.- Report on the follow-up to the Recommendation of the European Parliament and the Council of 10 July 2001 on mobility within the Community of students, persons undergoing training, volunteers and teachers and trainers (COM(2004)21 final of 23.01.2004), and the ERASMUS Mundus programme (2004-2008) adopted on 5 December 2003 (Decision N°2317/2003/EC, OJ of 21.12.2003).

¹⁵ COM(2004)66 final – Report on the implementation of the Commission's Action Plan for Skills and Mobility

¹⁶ 2001/C367/01

¹⁷ Decision No 1513/2002/EC of the European Parliament and of the Council of 27 June 2002 concerning the sixth framework programme of the European Community for research, technological development and demonstration activities, contributing to the creation of the European Research Area and to innovation (2002 to 2006)

¹⁸ see chapter 4.1.1 of this report

3. National Policies to enhance the mobility of researchers

Several countries (Estonia, Finland, France, Germany, Greece, Portugal) have included the creation of more favourable conditions for the mobility of researchers in their national research policy objectives, sometimes with the focus on particular objectives: the attraction of young scientists for junior professorships in Germany; the fight against brain drain and the return of researchers to the home country in Greece; or the opening up of public research positions in Portugal.

Other countries have established particular action plans, platforms or other instruments to encompass in their broader policies the issue of human resources and mobility of researchers:

Austria – In 2002 the Austrian Council for Research and Technological Development presented its National Research and Innovation Plan (NRIP)¹⁹ that contains suggestions concerning “Human Resources and Mobility”. It targets political decision makers at national and regional level, institutions performing research, RTD-funding organisations and other relevant representatives of the national innovation system.

Denmark - An Action Plan was launched in 2003, comprising a broad range of initiatives aimed at enhancing the interplay between knowledge institutions and industry.²⁰

Ireland - An Expert Group was established on future needs to develop national strategies to tackle the issue of skill needs, manpower estimates, training for business and education in Ireland.²¹ A sub-committee on Research Mobility was set up by the Expert Group to examine the issues involved in attracting and retaining the best scientific researchers to Ireland. A report of the sub-committee - “Attracting and Retaining Researchers in Ireland” - highlights a number of measures with the aim of enhancing mobility in the country.

Malta - A Research and Mobility Action Plan is being drawn up which focuses on capacity-building in research and innovation on a number of levels through the development of targeted mobility programmes.

Netherlands - An Innovation platform was set up including, among others, recommendations on the removal of obstacles to the mobility of researchers and on ways to promote the mobility of S&T personnel, with particular emphasis on researchers in industry and in research organisations. A “White paper on a highly skilled labour force with a strong focus on scientific and technological staff”, prepared jointly by several ministries, was adopted by the government in December 2003.

Poland - Two new strategic documents are being prepared: the Science funding act, where a specific article sets out to create a more favourable environment for human resources, and a “Knowledge-Information-Competitiveness” Action Plan, which includes a specific action line devoted to the development of human resources.

Slovakia - In 2003 a specific State Programme for Young Researchers “Personality and Talent Development of young Researchers and doctoral Candidates below 35 years” was set up, one of its aims being to support the mobility of researchers, particularly via research projects based on bilateral and multilateral intergovernmental agreements on science and technology.

¹⁹ http://www.rat-fte.at/files/NFIP_20021203_eng.pdf

²⁰ http://www.videnskabsministeriet.dk/cgi-bin/doc-show.cgi?doc_id=184970&leftm

²¹ “Benchmarking mechanisms and Strategies to attract Researchers to Ireland” (2001):
http://www.forfas.ie/futureskills/reports/benchmarking_01/benchmarking_01.pdf

United Kingdom - Researcher mobility plays a major role in the objectives in the International Science and Technology field. These objectives were set out in the Government's 2001 White Paper "Excellence and Opportunity: a Science and Innovation Policy for the 21st Century"²² and referred to in the Government's 2002 strategy document "Investing in Innovation; a Strategy for Engineering, Science and Technology".²³

More detailed information about the implementation of national mobility policies in particular areas of the *Mobility Strategy* can be found in the following chapter.

4. Assessing progress in the implementation of the Mobility Strategy

The actions planned in the *Mobility Strategy* are aimed at providing favourable conditions for the mobility and career development of researchers in order to create a critical mass of human resources in research for the European Research Area.

Two action lines were defined in order to meet this objective:

- The first relates to the dynamics required to set up and develop a more favourable environment for mobile researchers throughout their career. The tasks include:
 - legal improvements (admission, access to employment, social security and taxation),
 - improvements regarding information on mobility (information to researchers, better dissemination of vacancies, statistics),
 - improvements in the provision of practical assistance to researchers (creation of a network of mobility centres, better advertisement of research positions, setting up of a network of ombudsmen for complaints), and
 - improvements of a qualitative nature (exchange of best practice, benchmarking, inter-ministerial meetings, quality charter for the reception of researchers).
- The second action line refers to financial incentives at local, regional, national and European level to enhance the attractiveness of research and create the necessary qualified human resources.

In its Resolution of 21 December 2001,²⁴ the Council reaffirms the importance of researchers' mobility and confirms the key messages of the *Mobility Strategy*. In particular, it endorses efforts to improve information on mobility to researchers (by the creation of a dedicated internet portal, the setting up of a network of mobility centres and a better dissemination of vacancies) and examines qualitative issues regarding the exchange of good practice and benchmarking.

²² <http://www.ost.gov.uk/enterprise/dtiwhite/index.html> and Implementation Plan - http://www.ost.gov.uk/enterprise/implement_plan/index.htm

²³ http://www.ost.gov.uk/policy/science_strategy.pdf

²⁴ OJ C 367, 21.12.2001

This chapter lists the achievements at national and European level with regard to the above-mentioned objectives and action lines.

4.1. Improvement of the legislative, regulatory and administrative environment of researchers' mobility

4.1.1. Improvement in conditions of entry of third country researchers to Europe

Background and rationale

In its Resolution of 15 June 2000²⁵ on establishing the ERA, the Council invited the Member States and the Commission “to take appropriate action to make the European Area of Research and Innovation attractive to non-Member States” and “welcomed the Commission’s intention to present further contributions on the opening of the European Research Area to the rest of the world”.

The High Level Expert Group on Improving Mobility of Researchers, which was set up after the Lisbon European Council of March 2000, pointed out that legal measures or administrative practices were among the most serious obstacles to the entry and residence of third country researchers and their families in Europe.

In its Communication "The European Research Area: providing new momentum, strengthening, reorienting, opening up new perspectives",²⁶ the Commission stresses that the mobility of third country nationals is not yet organised at EU level. In 2002 only two Member States (France and the United Kingdom) had specific rules regarding the entry of researchers from third countries. The Council welcomed the Communication and, in its conclusions of 26 November 2002, invited “the Member States, in collaboration with the Commission, to strengthen the actions being undertaken to develop the European Research Area, in particular by facilitating or continuing to facilitate entry and residence for researchers from third countries”

Activities undertaken at national level

Improvement of the regulatory framework for the admission of researchers, both at legislative and at administrative level, has become a matter of general concern.

Several countries have introduced fast-track procedures for obtaining visa and/or work permits in order to facilitate the admission of researchers:

Denmark - A fast-track procedure has been established for researchers who are offered a research position in a university: the University fills out a specific form and sends it to the Immigration Service together with evidence that salary and employment conditions are in accordance with Danish standards.

Germany – The Immigration service no longer needs to approve the visa procedure for scientists who are granted a public funded scholarship for a scientific activity by a German science organisation or for guest scientists (and their families) appointed by a university or other public research institutions. This leads in general to a substantial

²⁵ See in particular points 10 and 12, OJ C 205, 19.7.2000

²⁶ COM(2002)565 final of 16.10.2002

acceleration of the visa procedure.

Hungary – Accelerated admission procedures are provided if the Office of Immigration and Nationality is duly provided with a certificate issued by higher-education institutions or institutes of the Hungarian Academy of Sciences concerning the enrolment of researchers.

Netherlands - Recommendations on the removal of obstacles regarding visa and work permits have been approved by the Dutch Parliament and are now in the implementation phase. The recommendations provide for the acceleration and simplification of procedures for visas and work permits by means of the installation of an office for work immigrants (one office for visas and one for work permits). Other provisions deal specifically with the removal of obstacles for researchers and their families in order to encourage them to stay and work in the Netherlands. The new one-office policy provides for a procedure in which visa and working permit can be obtained within nine weeks.

United Kingdom - The Academic Visitor concession was amended in respect of sponsored research entrants in June 2003. Work Permits UK (WPUK) aim to improve processing times by deciding on 90% of complete applications containing the required information within one day of receipt and 90% of all applications within one week.

Ireland, Greece, Norway, Spain - Accelerated procedures for delivering work permits have been installed.

In some countries researchers under certain conditions do not even need a work permit:

Austria and France - Researchers are exempted from the obligation of having a work permit.

Belgium – Post-doctoral fellows who undertake a period of mobility of maximum three years in a Belgian university are exempted from the obligation of obtaining a work permit.

Poland - If the activities of a foreign researcher fall within the framework of international scientific agreements and certification is provided, the researcher does not have to obtain a work permit.

Estonia - A researcher can work without a work permit for up to 6 months for the purpose of scientific research or for employment as a lecturer in an educational institution which has an education licence for operation in Estonia, provided (s)he has appropriate professional training or experience.

Activities undertaken by the Commission and prospects

The broad range of measures taken at national level to facilitate entry conditions for researchers from third countries has provided input for legislative initiatives at European level. Based on the close inter-service cooperation already established between the Directorates-General responsible, respectively, for Research and Justice and Home Affairs, the conclusions of a joint seminar in December 2001 and the subsequent drafting of a questionnaire on the conditions of entry for researchers undertaking international mobility, cooperation with Member States and Candidate Countries was pursued with the aim of analysing examples of good practice and improving admission procedures for mobile researchers and their families. A joint meeting between the representatives of the Migration and Asylum Committee and the Mobility Steering Group was organised in June 2003, with the objective of exchanging views with regard to the planned Communication on the

conditions of entry and residence of third country researchers, which was included in the Commission legislative and work programme for 2003.²⁷

As a consequence, a package of instruments on the admission of third country researchers comprising a proposal for a Directive and two Recommendations was drawn up in 2003 and adopted by the Commission on 16 March 2004.²⁸

The Directive provides for a fast-track procedure for the admission of researchers. The main concept is to create a specific residence permit for third country researchers independently of their contractual status. Accredited research organisations will play a major role in this process, as they will have to certify the status of the researchers in a hosting agreement which will acknowledge the existence of a valid research project, as well as the possession by the researcher of the scientific skills, financial means and health insurance.

On the basis of this hosting agreement the migration authorities of the host country will deliver the residence permit. Once a residence permit is granted to a researcher, (s)he will be free to move within all EU Member States for the purpose of the scientific project.

In addition to the much faster administrative procedure for delivering the residence permit (immigration authorities of Member States will have to deliver it in 30 days), researchers will have the possibility of submitting applications for residence permits directly to the authorities of the host Member State, if they are legal residents in that country. Moreover, in order to extend the stay in another Member State, it will not be necessary for researchers, as it is currently the case, to return to their country of origin to submit an application.

The Directive will be complemented by two Recommendations inviting Member States to accelerate on a voluntary basis the implementation of the Directive and cover supplementary issues, such as family reunification, operational cooperation between Member States and short-term visas.

The envisaged time schedule for the adoption of these instruments anticipates rapid approval (by July 2004) of the Recommendation on long-term admission issues, while the Directive and the second Recommendation, which deals with short-term visas, are expected to be approved by the end of 2004.

Other relevant Community activities in the field of immigration

Several other proposals for Directives have been drawn up in the immigration area with a possible positive impact on the mobility of researchers.

The situation of doctoral candidates, for example, is duly taken into account in the *Proposal for a Directive on the conditions of entry and residence of third country nationals for the purposes of studies*.²⁹ This directive is under discussion and is expected to be approved by the Council in April 2004.

²⁷ COM(2002)590 final of 30.10.2002

²⁸ COM(2004)178 final of 16.03.2004

²⁹ COM(2002)548 final of 07.10.2002

The particular case of researchers is taken into consideration in Article 3(4) of the *Proposal for a Directive on the conditions of entry and residence of third country nationals for the purpose of paid employment and self-employed economic activities*³⁰ in which a specific provision allows Member States “in the absence of specific provisions of Community law” to “maintain or introduce more favourable provisions regarding (...) researchers and academic specialists”. This instrument is still under discussion.

4.1.2. Coordination of social security schemes

Background and rationale

Although social security remains one of the major obstacles among the legal and administrative barriers to mobility of workers (including researchers), few achievements directly related to the mobility of researchers have been implemented in this area over the past two years.

A seminar was organised in October 2002 to discuss possible means of enabling mobile researchers to better exercise their social security rights

Activities undertaken at national level

The trans-national implications concerning the implementation of social security schemes are tackled, generally, under relevant international agreements. All participating countries have concluded bilateral agreements with countries in and outside Europe. In some cases specific facilities for researchers have been developed.

France - The coverage provided by the “*couverture de maladie universelle*” (universal health cover) is valid for doctoral degree holders and post-doctoral researchers whose remuneration is under a certain ceiling.

Belgium - A new social security scheme has been introduced which allows universities to provide tax-free fellowships with full social security coverage to post-doctoral researchers undertaking a period of mobility.³¹

Activities undertaken by the Commission and prospects

Contacts were established in 2003 between the Directorate-General for Employment and Social Affairs and the Administrative Commission on Social Security for Migrant Workers in order to explore the possibility of improving the conditions of researchers undertaking international mobility.

Greater cooperation between the Commission and the Member States within the framework of the OMC could help to identify appropriate technical instruments and thus facilitate the conditions for migrant researchers under the social security aspects.

³⁰ COM(2001)386 final of 11.07.2001

³¹ See also chapter 4.1.3. (taxation)

Other relevant Community activities in the field of social security

Significant results have been achieved in a number of areas which may have a possible impact on the mobile researcher:

On 1 December 2003, the Council reached a political agreement on the *Proposal for a Council Regulation on the coordination of social security systems, which aims to reform and simplify Regulation (EEC) No 1408/71 on the application of EU social security systems*. Further to the Parliament's position in first reading, the Commission presented a modified proposal in October 2003. The Council unanimously adopted its common position on 26 January 2004. The Parliament' position in second reading is due in Spring 2004 which eventually allows a formal adoption of the proposal before 1 May 2004.

The Council approved *Regulation (EC) No 859/2003 of 14 May 2003 (OJ L 124/1 of 20 May 2003) extending the provisions of Regulation 1408/71 to nationals of third countries who are not already covered by these provisions solely on the grounds of their nationality*.

The *improved portability of occupational pension rights* has been the subject of a two Commission consultations addressed to the European social partners. These consultations were launched respectively in June 2002³² and September 2003³³ in order to address obstacles related to the acquisition of occupational pension rights (minimum age conditions, waiting and vesting periods), the preservation of acquired pension rights and their transferability. Since the social partners will finally not engage in negotiations on these topics, the Commission is currently preparing to propose a legislative initiative in this field.

Directive 2003/41/EC on the activities and supervision of institutions for occupational retirement activities was approved on 3 June 2003.

The Council adopted the *Pension Funds Directive* on 13 May 2003, which is designed to create a single market for occupational pension funds and will secure better protection for pensioners and allow multinational companies to run single EU market-wide pension funds.

In February 2003, the Commission adopted a Communication on the *European Health Insurance Card*,³⁴ presenting a roadmap for its gradual introduction in order to replace the current paper forms needed for access and reimbursement of health care during a temporary stay in a Member State other than the one of insurance. The Administrative Commission on Social Security for Migrant workers adopted on 18 June 2003 three decisions allowing the introduction of the European Health Insurance Card from 1 June 2004.

*A proposal for a Regulation of the European Parliament and the Council amending Council Regulation (EEC) No 1408/71 on the application of social security schemes to employed persons, to self-employed persons and to members of their families moving within the Community and Council Regulation (EEC) No 574/72 laying down the procedure for implementing Regulation (EEC) No 1408/71*³⁵ has been presented. The European Parliament adopted its opinion in first reading on 11 March 2004.

³² SEC(2002)597

³³ SEC(2003)916

³⁴ COM(2003)73 of 17.02.2003

³⁵ COM(2003)468 of 31.07.2003

Finally, the Commission adopted a *proposal for a Regulation of the European Parliament and of the Council amending Council Regulations (EEC) 1408/71 and 574/72 aimed at aligning entitlement to necessary health care for all categories of insured persons and at simplifying the procedures for obtaining health care during a temporary stay in another Member State.*³⁶ This proposal aims at facilitating the introduction of the European Health Insurance Card on 1 June 2004 by aligning the rights on benefits in kind of all categories of insured persons and by simplifying the procedures. This proposal will be formally adopted (co-decision) by the Presidents of the Council and the European Parliament on 31 March 2004.

4.1.3. Taxation

Background and rationale

As regards taxation, the High Level Group on Mobility pointed out that bilateral taxation agreements are missing with some relevant countries, introducing the risk of double taxation, including the double taxation of pensions.

Activities undertaken at national level

Member States were encouraged to complete the network of bilateral tax agreements in order to ensure the inclusion of all countries participating in FP6. Some countries have taken additional measures with a view to creating more favourable conditions for researchers.

Belgium - Universities are allowed to offer tax-free fellowships with full social security coverage to post-doctoral researchers who are undertaking a period of mobility in academia.

Denmark - There is a special tax of 25% for a maximum of 3 years for foreign researchers.

Hungary - For Hungarian researchers tax exemption is provided for studies or research pursued in foreign educational or research institutions, and for scholarships disbursed by a foreign entity (company, private individual, etc.).

Israel – Fellowships from graduate level to post-doctoral researchers are tax free; however, the beneficiaries are not covered by the social security schemes.

Poland – The income of a researcher employed under a work contract is tax exempted if the salary is provided by a foreign government or an international organisation on a non-refundable basis. Different types of research fellowships (e.g. doctoral fellowships, NATO or Marie Curie grants) are tax exempted, based on a decision of the Ministry of National Education and Sport.

Slovenia - A new proposed Law on Taxation proposes freeing foreign researchers of income tax when coming for training and doctoral degree preparation purposes as well as for research work within international projects.

Initiative undertaken by Commission and prospects

Personal tax law falls under the direct responsibility of each Member State and the Commission has not therefore achieved much in the way of progress in this area of researcher mobility. Nevertheless, Member States must in the design of their personal tax systems respect the fundamental Treaty principles on non-discrimination and the free movement of

³⁶ COM(2003)378 of 27.06.2003

workers within the EU and frequently it may also be necessary for them to co-ordinate their tax systems in order to remove obstacles to the exercise of the four freedoms, such as double taxation³⁷. Furthermore, the Lisbon conclusions call on the Council and the Commission, together with the Member States where appropriate, to improve the environment for private research, R&D partnerships and high technology start-ups by using, among other things, tax policies.

Consultations will, therefore, be launched in 2004 with all stakeholders (relevant Commission departments, research institutions, companies, etc.) will be launched in 2004. Taking due account of the particularities of this area, the discussion will focus on the impact of fiscal measures on the mobility of researchers and on any relevant initiatives linked to direct taxation of researchers income and tax deduction schemes for R&D expenses of enterprises.³⁸

4.2. Improvement of information and practical assistance to mobile researchers

4.2.1. The Researcher's Mobility Web Portal

Background and rationale

This instrument responds to a specific need, highlighted by the High Level Group on Mobility, to significantly improve the access of researchers to adequate information on available programmes and opportunities as well as on questions related to entry conditions, access to employment, social security rights, taxation or cultural aspects of the host country.

The Commission devoted specific attention to this initiative in its *Mobility Strategy in 2001*.³⁹

Activities undertaken by the Commission

The Commission started work on this initiative in early 2002 with a feasibility study. In parallel, other initiatives were launched aimed particularly at engaging Member States and the research community to play an active part in the implementation of this action.

The Researcher's Mobility Portal, though in its pilot version, went on line in July 2003 and is hosted on the Europa server under the following address:

<http://europa.eu.int/eracareers>.

The good cooperation with the different members of the Mobility Steering Group made it possible to identify and collect more than 3 000 active links from about 30 countries participating in FP6. These links provide access to a wide selection of international, European, national, regional and sectoral web resources, covering mainly information about research fellowships and grants, research job opportunities and practical information relevant for researchers when they move from one country to another.

³⁷ See Communication "Tax Policies in the European Union – Priorities for the Years Ahead", COM(2001)260 final of 23 May 2001

³⁸ For details see the Communication from the Commission "Investing in Research: an Action Plan for Europe", COM(2003)226 of 30 April 2003.

³⁹ See point 4.1.1. in COM(2001)331 final of 20 June 2001

In order to promote the pan-European portal as a shared initiative between the Commission and the participating countries, the Commission emphasised the need for the development of national mobility portals, which would reflect and build on the content and functionalities offered by the European tool. The ultimate objective is to reach a consensus as regards the interoperability of the different web sources, promoting pertinent information to researchers at national or European level.

Within this context, interoperability is intended not only in terms of commonly agreed content, a common layout and logo; it also relates to a classification system for certain categories, e.g. as regards research disciplines or the standardisation of the use of a certain data structure for the definition, for example, of a common format for advertising research opportunities, which would consequently allow for the exchange of data from different web sources.

In order to stimulate this exchange of data, the Commission has developed a specific tool, the Research Job Opportunity Editor (the RJOE), which makes it possible to exchange data between a local database and the Researcher's Mobility Portal by editing research job opportunities, storing them in a local database and regularly sending a list of selected job opportunities from the local database to the central database of the Researcher's Mobility Portal. The RJOE can be obtained free of charge from the Commission.

Activities undertaken at national level

The development of national mobility portals was taken on board by most of the participating countries as a priority action. The majority of countries agreed to foster integration as regards the structure, the content and the possible exchange of data between these national portals and the European portal, whereas others have opted for a lower level of interoperability:

- Austria, Bulgaria, Cyprus, Denmark, Estonia, Finland, Greece, Hungary, Ireland, Israel, Italy, Lithuania, Malta, the Netherlands, Norway, Poland, Portugal, Spain and Sweden will allow for the exchange of data based on the same structure as adopted for the European portal;
- Germany will use the same layout as the European portal but interoperability is limited to simple links;
- Belgium, the Czech Republic, France, Slovenia and the United Kingdom have opted for simply linking national web sources providing information about fellowships, grants, job vacancies or practical information.

Austria and Greece are developing national portals mirroring the European one.

The Researcher's Mobility Portal Austria:

<http://www.researchinaustria.info/>

The Greek National Researcher's Mobility Portal:

<http://www.certh.gr/library/gr/mobility/main.html>

Prospects

There is a constant need to monitor the quality of the information provided. Therefore, work still needs to be done as regards the further development of the commonly agreed “quality culture” at both European and Member States level. Further adjustments to the current pilot portal will be integrated whenever necessary. The Commission will therefore continue to organise regular meetings with experts from the research community in order to enhance structured feedback on the quality, added value and necessary adjustments for the pilot phase.

The Commission intends to start work in 2004 on further development of the European portal by integrating multilingual features, developing the international dimension and enhancing the feedback functionalities. Other improvements are planned as regards the quality check of existing links, the identification and collection of new links and the development of more integrated interactive parts, such as a monthly newsletter.

Development of the respective national portals/web sources is an integral part of the different proposals put forward to the Commission as part of the structuring of the national mobility centres. Most of those portals will go on line in 2004. Their full development is indispensable for successful implementation of the *Mobility Strategy* at both national and European level.

Other relevant Community activities in the field of information

In order to ensure complementarity within the Commission, cooperation has been established between different departments dealing with European Portals:

- EURES (European Employment Services),⁴⁰
- Portal for Learning Opportunities (Ploteus),⁴¹
- IDA (Interchange of Data between Administrations),⁴²
- The “Dialogue with Citizens” initiative,⁴³
- The Youth Portal,⁴⁴
- EU Administration Portal.⁴⁵

⁴⁰ <http://europa.eu.int/eures/index.jsp>

⁴¹ <http://europa.eu.int/ploteus/portal/home.jsp>

⁴² http://europa.eu.int/public-services/index_en.htm

⁴³ http://europa.eu.int/citizens/index_en.html. The new version of the Dialogue with Citizens website to be published in April 2004 and the future "Your Europe" portal, of which it will become part later in 2004, will provide a vast amount of information relevant to the mobility of citizens within the EU, including researchers.'

⁴⁴ http://europa.eu.int/comm/youth/index_en.html

⁴⁵ <http://europa.eu.int/public-services/>

4.2.2. *The European Network of Mobility Centres*

Background and rationale

As a complement to the Portal, the creation of a Network of Mobility Centres addresses the need to provide customised assistance to researchers and their families in all matters relating to their mobility experience.

The Network, which will consist of around 200 centres throughout Europe, will offer all researchers a practical and harmonised instrument to make it easier to prepare their mobility experience and facilitate their installation in their host country.

Activities undertaken by the Commission and at national level

Based on the work of an informal expert group in 2001 and on several discussions within the Mobility Steering Group, a strategy on the structure and the missions of the Network was agreed upon in 2002 and further expanded in 2003.

All countries appointed in 2002 one or several bridgehead organisations in order to help structure the Network at national level and facilitate the integration of national structures into the European Network. The list of bridgehead organisations is included in Annex 2. Meetings of the bridgeheads were organised in July and December 2003.

With a view to co-financing the organisation of the networks at national level, as provided for in the work programme of the FP6 “Structuring the European Research Area” specific programme, the Commission invited all participating countries to submit proposals to the Commission in May 2003. Three deadlines were defined for the submission of proposals: 23 June, 12 September and 12 December 2003. In total, 30 countries⁴⁶ applied for co-financing. Five countries met the first deadline, 13 the second and 12 the third.

The proposals were based on the results of a mapping exercise of existing assistance services undertaken within each participating country, and the definition of future needs. The work programmes generally cover such activities as the setting-up of one or more Mobility Centres and/or a national mobility network, the creation of national portals or webpages, the drafting of information material such as handbooks and guides, the organisation of training sessions for the Mobility Centres’ staff and awareness-raising activities. In some countries, like Greece and Portugal, structured cooperation will be put in place between the project coordinator, the Ministry of Research and other relevant ministries in order to ensure the impact of the project on decision-making processes in the country.

As regards the setting-up of Mobility Centres at national level, three approaches have been adopted:

⁴⁶ Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Iceland, Israel, Ireland, Italy, Hungary, Lithuania, Latvia, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Turkey, United Kingdom

- Creating one Mobility Centre as a single entry point, backed up where necessary by a national mobility network (Cyprus, Czech Republic, Denmark, Finland, Germany, Ireland, Iceland, Lithuania, Latvia, Malta, Norway, Romania, Sweden, Turkey, United Kingdom)
- Creating several Mobility Centres, each complemented by a network of national or regional correspondents (Austria, France, Hungary, Italy, Slovakia)
- Creating several decentralised Mobility Centres as a network at national level (Belgium, Bulgaria, Estonia, Greece, Israel, Netherlands, Poland, Portugal, Slovenia, Spain)

At the end of 2003, contracts had been signed with 3 countries, negotiations were underway with 15 countries, and evaluations had been initiated with the 12 remaining proposals. Project duration varies between two and three years.

In parallel to the submission of working programmes, discussions were initiated during 2003 with the members of the Mobility Steering Group and the bridgehead organisations in order to set out the Commission's support for the animation and awareness-raising activities of the network. Agreement was reached on Commission involvement in the following issues: setting up of an Intranet between the members; designing and dissemination of awareness-raising material; organisation of 3 to 4 training sessions per year on issues of general interest (social security, entry conditions, regional cooperation, etc.); and the organisation of an annual conference.

Finally, agreement was achieved in 2003 as regards the denomination of the network: the European network of mobility centres will henceforth be referred to as the ERA-MORE network (*European Research Area – MOBILE REsearchers*).

The official launch of the ERA-MORE network is scheduled for May 2004.

Other Community initiatives in the field of information and assistance

The exchange of ideas between the Commission departments responsible for the management of other European networks supported by EC funding (such as the Network of National Resources Centres for Vocational Guidance and the Euro Info Centre Network) was initiated in 2003 and will be pursued.

4.3. Examining issues pertinent for the development of future actions

4.3.1. Benchmarking of Human Resources in RTD

Background and rationale

In September 2000, the Commission began work in close cooperation with the Member States on the first exercise of benchmarking national research policies as an essential component of the European Research Area. One of the topics was related to "Human resources in RTD (including attractiveness of S&T professions)" and a report was published in June 2002.⁴⁷

⁴⁷ ftp://ftp.cordis.lu/pub/era/docs/bench_0802.pdf

Further to this work, a series of four workshops have been organised, two of them on Human resources: “Human resources in RTD: the effects of Brain Drain and counteracting measures” and “Reform of the research system towards more competitive R&D: preparing human resources for the private sector”.⁴⁸

Activities undertaken by the Commission and prospects

The Greek presidency of the European Union and the European Commission jointly organised a conference on “Benchmarking national research policies” in Athens in January 2003;⁴⁹ one of the workshops focused on “The development of human resources for both the private and the public sector”.⁵⁰ The conference concluded that benchmarking is an effective instrument for supporting policy making and calls for its continuing development towards the realisation of the European Research Area.

4.3.2. Measuring the international mobility of researchers

Background and rationale

The High Level Group on Improving the Mobility of Researchers and the Mobility Steering Group have underlined the lack of reliable comparable data on the flow of mobile researchers. Considering the methodological difficulties in gathering data on such flows, in July 2002 the Commission organised a workshop in Brussels on “Measuring the International Mobility of Researchers” in an effort to determine the key issues associated with the monitoring of international researcher mobility. The workshop was attended by a number of invited experts from academic and research institutions across the EU. Its objectives were to review existing data sources and methods associated with the measurement of international researcher mobility, and to assess the possibilities for establishing a system to monitor brain circulation on a regular and reproducible basis.

Activities undertaken by the Commission and prospects

The issue of human resources is now also addressed within the context of the work carried out by the “Task Force on ERA indicators”, and the first results are expected during the first half of 2004. Some indicators strictly related to providing statistics on mobility flows of human resources in R&D have also been proposed for integration into the 2004 work programme of Eurostat.

The measurement of international mobility of researchers is therefore addressed and followed up within the European Statistical System (in the area of statistics on science, technology and innovation). Further production efforts are made in 2004 in exploiting the census micro-data. For this action a specific tabulation program has been designed that will permit limited data production on researchers' mobility issues in autumn 2004.

These activities do however not provide any medium and longer term perspective for data production on international mobility of researchers. Therefore further activities are needed such as e.g. the launching of specific surveys on doctoral degree holders (as already existing

⁴⁸ ftp://ftp.cordis.lu/pub/era/docs/bench_workshop_reports.pdf

⁴⁹ 17-18 January 2003, http://www.cordis.lu/era/bench_proceedings.htm,
ftp://ftp.cordis.lu/pub/era/docs/bench_final_declaration.pdf

⁵⁰ ftp://ftp.cordis.lu/pub/era/docs/bench_summary_faegri.pdf

in a number of non-European countries and as currently emphasised by the OECD). Reference to this issue is also made in the draft Commission regulation implementing Decision No 1608/2003/EC of the European Parliament and of the Council as regards statistics on science and technology⁵¹.

The Commission also intends to launch in the second half of 2004 a dynamic exercise⁵² which will analyse career paths of graduates and post-graduates in R&D, including mobility flows related to both geographical and inter-sectoral levels in the public and private sectors. To this end, the Commission asked the Institute for Prospective and Technological Studies (IPTS) to organise a meeting in November 2003 in order to discuss the ways and means of setting up such an exercise. Cooperation with IPTS on this matter will be pursued with the objective of obtaining first results by the end of 2004.

In addition, the study prepared by Maastricht University on the “International Mobility of European Scientists and Engineers: Moving Policy from a Reactive Role to a Proactive Position” has been finalised and the executive summary is available.⁵³

Activities undertaken at national level

Twelve countries⁵⁴ have undertaken specific initiatives to improve the provision of national statistics on the flow of researchers and a similar number of countries⁵⁵ have produced studies on mobility.

Most of the national statistics available on the flow of incoming or outgoing researchers are restricted to doctoral candidates and post-doctoral researchers. It has to be mentioned that from the responses received, the studies produced on mobility differ in their objectives and scope.

Austria - On the basis of the recently established “Universitätsgesetz 2002” (2002 University Act) a regulation is being prepared to collect comprehensive data on incoming and outgoing university researchers (teaching and/or researching staff). Data will be available from 2005 onwards.

Denmark - The Ministry of Science, Technology and Innovation published a report in September 2003 concerning the annual number of masters and PhDs who have emigrated from Denmark since 1995. The report also includes information on the number of highly skilled workers who later return to Denmark.⁵⁶

France - The CEREQ⁵⁷ produced a study in February 2003 on the international mobility of young doctors and the IREDU⁵⁸ produced a study on post-doctoral diversity and job access.

⁵¹ Mobility statistics are mentioned in Article 2 and in section 3 of the annex

⁵² This will also include an inventory of different existing initiatives related to career paths and mobility.

⁵³ ftp://ftp.cordis.lu/pub/indicators/docs/merit_exsum.pdf

⁵⁴ Austria, Denmark, France, Germany, Hungary, Ireland, Israel, Netherlands, Norway, Slovenia, Spain, Sweden and United Kingdom

⁵⁵ Austria, Denmark, France, Germany, Hungary, Israel, Netherlands, Norway, Poland, Portugal, Spain, Sweden and United Kingdom

⁵⁶ http://www.vtu.dk/fsk/div/Noegletal/universiteter/Ac-rapport_180903.pdf

⁵⁷ CEREQ - The French centre for research on Education, Training and Employment
<http://www.cereq.fr/englishversion/publicpole.htm>

⁵⁸ IREDU Research Institute on the Economy of Education - <http://www.u-bourgogne.fr/IREDU/>

Germany - A study “Brain drain – brain gain, survey on international job careers” was produced in 2002.⁵⁹

Hungary – In 2003 the GKI Economic Research Institute produced a survey on the mobility of researchers in Hungary based on interviews conducted with the heads of 45 state and private research institutes and occasionally with researchers as well.

Netherlands - The Research Centre for Education and Labour Market in Maastricht has produced a study in September 2003 on “Indicators for the international transfer of knowledge from and to the Netherlands”⁶⁰.

Norway - In 2002 a specific commission on “Researcher’s mobility to Norway” produced a report on researchers’ mobility to Norway. The mandate of the commission was to stimulate mobility of researchers to Norway. The following four studies have been undertaken: the project of adding “country of origin” to the Research Personal Register; survey among foreign researchers in Norway; survey among employers employing foreign researchers; and an analysis of register data from statistics Norway.⁶¹

Poland – The Bureau for Academic Recognition and International Exchange conducted a survey among Polish universities and research organisations about the number and type of diplomas and degrees given to foreigners in Poland between 1991 and 2003.

United Kingdom - In 2002 the DTI and Home Office jointly funded a report on what motivates highly skilled migrants to come to the UK. The report is entitled "Knowledge Migrants - The Motivations and Experiences of Professionals in the UK on Work Permits".⁶²

4.3.3. *The researcher’s career and the social visibility of the researcher*

Background and rationale

Human resources are the pillar for research, innovation, excellence and performance in the ERA, and are therefore a decisive factor in enhancing the attractiveness of the European Union as one of the poles for excellence for researchers from all over the world. Investment in R&D represents a major component of the economic and scientific progress of industrial countries but the most important part of any investment is the one in human resources. R&D and innovation activities cannot be carried out without a highly specialised and well-trained workforce. The number of researchers and their mobility are two important aspects of this issue. A third one, directly linked, but less often addressed, and never at European level, is the issue of the researcher profession and researchers’ careers.

This question is crucial because the way in which the profession is recognised by the general public and within the labour market and the way research careers are structured and organised in Europe, in both the public and the private sector, does not allow Europe to fully exploit its potential in this field.

⁵⁹ http://www.stifterverband.org/pdf/braindrain_studie.pdf

⁶⁰ <http://www.ez.nl/publicaties/pdfs/03AEP05.pdf>

⁶¹ <http://forskningradet.ravn.no/bibliotek/publikasjonsdatabase/detalj.html?id>

⁶² <http://www.dti.gov.uk/migrantworkers/index.htm>

Activities undertaken by the Commission

In order to foster dialogue between the different stakeholders at European level, namely the European Community, the national governments and the scientific communities, the Commission adopted in July 2003 a Communication entitled *Researchers in the ERA: one profession, multiple careers*.⁶³ The issues tackled in this Communication are also addressed in the Council Resolution *on the careers of researchers* adopted in November 2003.⁶⁴

The Communication analyses the different elements that characterise the profession and defines the various factors which condition the development of researchers' careers at European level, namely the role and nature of research training, the differences in recruitment methods, the contractual and budgetary dimension and, finally, the evaluation mechanisms and the prospects for progress within the career. The Communication reveals structural weaknesses as well as marked differences within each of these elements, depending on the sector in which researchers operate or the geographical, legal, administrative and cultural environments in which they work. These differences and the lack of openness of researchers' careers in Europe prevent the development of proper career prospects at European level as well as the emergence of a real employment market for researchers in Europe.

Activities undertaken at national level

There are a number of initiatives at national level designed to improve the above-mentioned structural problems, one of them being by opening up national grants, fellowships and research positions for individual researchers.

Austria - All fellowships and grants are open to nationals from other countries, focusing on different target groups and/or thematic areas.⁶⁵

Belgium – The grant programme “Research in Brussels” allows research institutes to host high-level foreign researchers. The programme is characterised by the flexibility of hosting formulas offered and the speed of selection.

Germany - The Alexander von Humboldt Foundation manages grant programmes with the objective of enabling highly qualified researchers of all nationalities to undertake a research stay in Germany. The German Academic Exchange Service (DAAD) grants support for a research stay of foreign doctoral or post-doctoral candidates.

Denmark - Positions financed by the Research Councils are open to foreign applicants. There are various support measures to attract researchers from abroad, like post-doctoral fellowships reserved for foreigners and international publication of professorships. 44% of professorships are published internationally and 16% of the members of the recruitment committees are foreigners (1998-99).

Estonia - The Science foundation grants are open to foreign participants if they conduct research in the country for at least nine months per year. It has a particular programme for young researchers – “My first grant”.

Finland - There is a recommendation from the Ministry of Education that universities should advertise positions internationally.

⁶³ COM(2003)436 final of 18.07.2003, hereinafter referred to as *Career Communication*

⁶⁴ Council Resolution, OJ C 282, 10.11.2003

⁶⁵ www.grants.at

France - Several programmes are open to nationals from other countries:

- Doctoral degree courses supervised jointly by French and a foreign organisation,
- Post-doctoral research stays for foreigners in French research institutes,
- Mobility programme for experienced foreign researchers to run a scientific project in France.

Legal improvements concern the possibility for research institutes and universities of involving international experts in selection committees, which was impossible before.

Israel - All universities are open to post-doctoral researchers from all over the world. The Council for Higher Education has a long-term programme for the support of post-doctoral researchers with particular emphasis on foreign researchers.

Italy – The position of Directors for CNR institutes are advertised internationally.

Ireland - The Science Foundation Ireland (SFI) has specifically targeted high-level researchers in a number of its funding programmes. Approximately 50% of the funding allocated by SFI goes to non-Irish researchers or returning Irish researchers. Specific programmes also exist for new researchers (recent PhD) and returning researchers. As a general principle, jobs are advertised internationally and senior academic and industry appointments routinely involve international experts in recruitment panels.

Luxembourg – The “bourse de formation-recherche (BFR)” is open to all nationals irrespective of the country of study, provided that links with Luxembourg’s research institutions and/or administrations exist. As Luxembourg is heavily reliant on a foreign workforce, the research institutions advertise their positions internationally.

Norway – Research fellowships and researcher positions are in principle open to foreigners. International experts are regularly involved in certain review panels for academic positions.

Poland - There are several scholarship programmes targeting nationals from a given country or region (Germany, Central and Eastern Europe, United States).

Portugal - All scientific jobs financed by public funds must be advertised internationally. To this end, a particular webpage is being created.

Slovenia – The country opened the national research programmes to nationals from other countries in 2001.

United Kingdom - Research Council scholarships are open to EU nationals. Other fellowships are open to overseas researchers.

Prospects

The Commission will implement the different initiatives proposed in the *Career Communication* in the course of 2004, together with the stakeholders of the research community at large. This includes in particular the efforts undertaken to collect the examples highlighted by the different Member States for this report and integrate them into this ongoing work. It also relates to the development of two particular initiatives, namely the development of the European Researcher’s Charter and the Code of Conduct for the recruitment of researchers.

Both initiatives will be implemented by engaging the different stakeholders from the research community in a pre-consultation phase by means of targeted expert meetings (planned for the period February – July 2004), which also includes a Europe-wide collection of examples of good practices. Moreover, the different topics embedded into the development of both the European Researcher's Charter and the Code of Conduct will also be discussed at a conference organised under the Dutch Presidency at the end of September 2004.

The results of these different initiatives will finally form the basis for a *Recommendation from the Commission to the Member States*, which is scheduled for the end of 2004 and will help to attain the political objective in terms of increasing the number of researchers (over 700 000 additional researchers) by 2010, attracting and keeping more researchers in Europe, including fostering the return of European researchers from abroad, and thus creating a more transparent and open employment market for European researchers. It is to note in this context that experience acquired by European researchers abroad can be a source of knowledge, ideas, contacts and experience from which European economy and science can benefit.

Preparatory work will also be initiated in 2004 as regards the organisation of a large awareness-raising project entitled the 2005 'Researchers in Europe' Initiative".

Another initiative proposed in the *Career Communication* states the need to "devote specific attention to the growing role of ICT in the research environment, especially its ability to enhance training and support services and the need of high quality level infrastructures for eResearch (such as Geant and Grids)". This initiative aims to improve the quality and uniformity of the electronic infrastructure (eInfrastructure) available to mobile researchers anywhere in the ERA and thereby remove another possible obstacle to mobility.

Generally speaking, the issue of 'virtual mobility' could be further explored in the European context, as part of networks of collaboration between researchers, or as a basis for e-learning paths for young researchers. It could also be a way for providing a European "virtual" experience to researchers that cannot get mobility schemes.

Moreover, the use of ICT for collaborative links between mobile researchers on common research themes as well as cross-fertilisation of networks which result from researchers mobility, students mobility and teachers mobility needs to be further analysed particularly with a view to reinforce Universities' potential in strategic research areas.

4.3.4. *Mobility between industry and academia*

Background, rationale and prospects

Collaborative partnerships between academia and industry or private and public-funded research organisations have emerged as a critical imperative necessary to sustain the transfer of knowledge and innovation. However, issues such as the transfer of pensions and social security rights,⁶⁶ the loss of acquired benefits and professional status, the different cultures regarding, on the one hand, confidentiality of research results and intellectual property

⁶⁶ The modernisation and simplification of Council Regulation 1408/71 on the coordination of social security systems (COM(1998)779 final of 21.12.1998) will play a significant role in facilitating such moves from one sector to another. See more details in chapter 4.1.2.

protection and, on the other, the pressure of publication for evaluation and career development, also make it difficult to move from one sector to another.

Despite some progress made in the different countries towards a more structured exchange of personnel it is important to stress that obstacles to such mobility continue to persist and both sectors have to tackle them jointly.

Mobility between industry and academia is also tackled in the above-mentioned *Career Communication* and the Commission will in the course of 2004 launch coordinated initiatives in the context of the Open Method of Coordination in order to build on the many good actions which now exist in several European countries.

Activities undertaken at national level

Eighteen⁶⁷ countries have developed actions to encourage greater levels of mobility between industry and academia. Most of the countries have set up incentives for doctoral candidates to move between academia and industry.

Austria - Several action schemes encourage mobility between industry and academia, i.e. Scientists establish enterprises,⁶⁸ Impulse projects - scientists for economy,⁶⁹ AplusB (Academia for business – technology-oriented academia spin-offs) impulse programme,⁷⁰ Kplus programme (competence centres).⁷¹

Belgium – Cooperation between industry and academia has been greatly enhanced by the creation of a new funding channel for so-called strategic basic research in Flanders. This brings together companies, universities and public research institutes. It will be complemented in 2004 by intra-university funds for strategic basic research.

Denmark - The “Industrial PhDs” involves the cooperation of a university, an Industrial PhD fellow and an enterprise in a defined research and development project. The objective of this scheme is to educate doctoral candidates with knowledge of business aspects of research and development, to establish personal networks for the exchange of knowledge between enterprises and Danish/foreign research institutes and to enhance the development and innovation of Danish trade and industry.

Estonia – Several initiatives have been launched:

- Enterprise Estonia-financed programmes (SPINNO, BioSPINNO)⁷² have been launched in all major universities in Estonia in order to initiate start-ups and spin-offs from universities.

- Universities have been actively training scientists on the issues of IPR, entrepreneurship and project management in order to facilitate their mobility to companies.⁷³

- Several projects (eVikings II⁷⁴), roundtables, seminars, workshops and training sessions have been conducted in order to bridge the gap between scientists in academia and enterprises.

⁶⁷ Austria, Cyprus, Denmark, Finland, France, Germany, Greece, Israel, Ireland, Hungary, Malta, Netherlands, Norway, Portugal, Slovenia, Spain, Sweden, United Kingdom

⁶⁸ <http://www.bmbwk.gv.at>

⁶⁹ <http://www.fwf.ac.at/en/projects/impuls.html>

⁷⁰ <http://www.tig.or.at/en/fundingprogramms/apusb/index.html>

⁷¹ <http://www.tig.or.at/en/fundingprogramms/Kplus/index.html>

⁷² http://www.eas.ee/index.php?content=content03&menu_id=605

⁷³ See example at University of Tartu: <http://www.tuit.ut.ee/index.php?page=24001>

Finland - Cooperation between academia and industry is evident in Finland. External financing made up nearly 57% of the higher education sector research funding in 2002. TEKES⁷⁵ is a funding agency that uses indicators such as the share of subcontracting from research institutes, participation in technology programmes, international cooperation and, in projects carried out by large companies, the share of subcontracting from SMEs.

France -

Academia -> industry: Both researchers and professor-researchers can work for the industry while keeping their rights to pension and promotion. Some can even be made available while being paid by their former employer. Researchers and professor-researchers are encouraged to be mobile by quicker promotion in their careers. The law on innovation and research promotes the transfer of technology from public research to industry by the setting up of innovative enterprises. All categories of research personnel can set up enterprises exploiting their research work while keeping their rights both to return and to their benefits.

Industry -> academia: Measures for recognising research work carried out in the private sector in lieu of a doctoral degree allow universities to recruit workers from the private sector (“cadres”) for researcher and professor-researcher positions.

Germany - Several initiatives are implemented and financed at both Federal and Länder level:

- The INNO programme has a special component, which supports the exchange of personnel between companies and science for a period of up to 2 years.
- Within the “aFuE” programme at least one college of further education and a company (above all SMEs) cooperate on projects that involve staff transfer.
- Several Länder promote the hiring of graduates in engineering, sciences or economics.

Greece - The National Programme for Research and Technology 2000-2006 (under the Operational Programme for Competitiveness (EPAN), co-funded EU structural funds) and its specific actions promote industry-academia mobility:

- PAVE - the industrial research programme to enhance cooperation between industry and academia, in particular newly established companies.
- PENED supports highly skilled personnel in the Greek Universities and research centres (with minimum percentage provision of project budget to be co-funded by a legal entity from the productive sector).
- HERON promotes the hiring of PhD holders in Greek enterprises.

Ireland - Science Foundation Ireland through its Centres for Science, Engineering and Technology Programme is specifically focused on industry-academia collaboration, including the actual secondment of individuals from different sectors.

Luxembourg – The national research grant system “bourse de formation recherché (BFR)” currently has a pilot scheme running in the sector of IT where the grantee receives a BFR and a financial supplement from an industrial partner. The grantee is enrolled at a foreign university (the University of Luxembourg does not yet deliver PhDs) and the research is done in cooperation with an industrial partner in Luxembourg. This coordination is certified with the signature of all participants in a “convention de recherche” (research agreement).

⁷⁴ <http://www.esis.ee/eVikings/index.en.html>

⁷⁵ National Technology Agency of Finland

Netherlands - Some form of cooperation between industry and universities already exists, e.g. to facilitate a PhD in an industrial setting. Moreover, the Ministries of Economic Affairs, Education, Science and Culture, and Social Affairs also target mobility between industry and academia in the White Paper on a highly skilled workforce.⁷⁶

Norway - The Research Council of Norway seeks to encourage industry-academia mobility through the “SkatteFUNN” initiative, a scheme of tax deduction given for R&D expenses in all enterprises submitted to Norwegian taxation. Furthermore, the Council has a specific programme “Mobilisation for R&D based Innovation – MOBI”,⁷⁷ and mobility between industry and academia is also encouraged in all other relevant R&D programmes.

Portugal - Agência de Inovação, in association with the Fundação para a Ciência e a Tecnologia, is responsible for a programme created to promote mobility between academia and industry.⁷⁸

Slovenia - Salaries for the newly employed doctoral degree holders when employed in the business sector are subsidised.

Spain - The Programme “Torres Quevedo”⁷⁹ includes labour contracts for experienced researchers in enterprises.

Sweden - The Swedish Agency for Innovation Systems and the Knowledge Foundation are promoting industry-academia mobility.

United Kingdom - There are a series of schemes designed to promote industry-academia mobility, for example: Industrial CASE awards for doctoral students, where industry devises the research project and supplies a co-supervisor for the student and the student spends at least part of their PhD in industry, Knowledge Transfer Partnerships⁸⁰ and Research Assistants Industrial Secondments.⁸¹ These are specifically designed for mobility between academia and industry. Many other schemes encourage joint working or exploitation which would implicitly encourage more joined up working and possible mobility.

4.4. Providing appropriate financial support for developing a critical mass of mobile researchers in Europe

As part of FP6’s Specific Programme “Structuring the ERA”, the EU’s actions in favour of the training, mobility and career development of researchers, known as the “Marie Curie Actions”, provide for broad support for the development of abundant and dynamic world-class human resources in the European Research Area. All 12 Marie Curie actions were opened for the submission of proposals in 2003 in the first round of calls, attracting over 4 300 eligible proposals, covering all scientific disciplines. The largest number of applications were presented in the field of Life Sciences (25%), followed by Physics (17.5 %), Environment (16%), Social and Economic sciences (11%), Chemistry (11%), Engineering (10%) and Mathematics (9%).

The schemes represent the continuation of well-established and successful actions, such as the Research Training Networks and Marie Curie Individual Fellowships, on the one hand, and newly introduced actions focusing on industry-academia relationships, excellence grants and

⁷⁶ See chapter 3 of this report

⁷⁷ <http://www.program.forskningsradet.no/mobi/fs/index.html?kategoriid=1>

⁷⁸ <http://www.adi.pt>

⁷⁹ <http://www.mcyt.es/torresq/>

⁸⁰ <http://www.ktponline.org.uk>

⁸¹ <http://www.epsrc.ac.uk>

individual international fellowships, on the other, the latter accessible both for European scientists to spend a fellowship outside Europe as well as for researchers from outside Europe to undertake a mobility experience in Europe. On the basis of the first calls a total of 850 contracts are in the process of being concluded, with a total value of € 377 million. This means that about 54.000 man months of research training in the different schemes will be financed. In addition, the participation of about 7.000 researchers in conferences and training courses will be supported and about 400 researchers months are supported by means of reintegration grants.⁸²

Overall implementation of this part of FP6 so far is characterised by:

- the very high scientific quality of the proposals received, with 3 000 proposals above the high minimum thresholds, 1 500 of them scoring more than 80 out of 100 in the evaluation;
- continued high to very high demand for the well-established Marie Curie actions, with 1 877 proposals for Intra-European individual fellowships, 741 proposals for Early Stage Training Fellowships and 336 proposals for Research Training Networks;
- successful launch of the new excellence actions (Marie Curie Teams/Grants, Awards and Chairs), with 340 applications in all;
- the launch of the International Marie Curie Fellowships, which is on track to establish itself as a useful instrument for international cooperation. For outgoing researchers the preferred destination is the USA (50%), followed by Australia (15%) and Canada (14%). For incoming researchers, the UK is the preferred host-country (18%), followed by Germany (15%), Italy and Spain (with 8% each). The incoming researchers are mainly from Russia (16%), China (12%), India (9%) and the USA (5%);
- the launch of coordinated reintegrated mechanisms, which after a modest start has gradually increased in participation;
- participation, finally, of women, which at some 39% in the individual fellowships actions is close to the 40% target.

5. CONCLUSIONS

This report pays tribute to the many efforts undertaken at Community and national level to implement the Mobility Strategy for the ERA. All the different initiatives form an excellent basis for the development of further actions, for benchmarking and the identification of examples of good practice in the context of the Open Method of Coordination.

This relates particularly to different initiatives at national level in the field of social security, taxation, statistics and mobility between academia and industry.

As regards admission and residence of third country researchers, the package of legal instruments, consisting of a Directive and two Recommendations, is due to be adopted in

⁸² These figures refer to the number of ranked projects after the evaluation procedure, as presented to the Programme Committee until December 2003, and do not consider modifications further to negotiation.

2004. It provides for a fast track procedure for the admission of researchers by means of a specific residence permit.

The Recommendations allow Member States to accelerate on a voluntary basis the implementation of the Directive and to tackle supplementary issues, such as family reunification, short-term visas and cooperation between Member States. Similar actions ought to be suggested in the area of social security.

Concerning information for and assistance to mobile researchers, two major initiatives are being implemented and need to be further pursued: the Researcher's Mobility Portal and the European Network of Mobility Centres (ERA-MORE).

For the Portal, the challenge for 2004 includes interoperability with the different national mobility portals and constant monitoring of the quality of offered information. Increasing the number of active links, more interactive functionalities and developing the international dimension are as well part of the work to be undertaken in 2004.

The setting up of Mobility Centres in 30 European countries will continue with the objective of launching the ERA-MORE network in the first half of 2004. Emphasis will then be put on networking activities at European level. A broad awareness-raising campaign will be made in 2004 to make these instruments known to researchers and various stakeholders.

The Commission will implement the different initiatives proposed in the *Career Communication* in the course of 2004, together with the stakeholders of the research community at large. This includes in particular the efforts undertaken to collect the examples highlighted by the different Member States for this report and integrate them into this ongoing work. It also relates to the development of two particular initiatives, namely the development of the European Researcher's Charter and the Code of Conduct for the recruitment of researchers which will be presented to the Member States in the form of a Recommendation from the Commission, due to be adopted by the end of 2004.

To satisfy the need to collect data regarding mobility trends and career paths on a more regular basis, the Commission will engage in a comprehensive initiative which will coordinate a series of activities analysing career paths of graduates and post-graduates in R&D, including mobility flows related to both geographical and inter-sectoral levels in the public and private sectors. Member States will be fully associated to this within the framework of the Open Method of Coordination.

ANNEX

1. Questionnaire on achievements at national level in the implementation of the Mobility Strategy
2. The European Network of Mobility Centres (ERA-MORE) - List of bridgehead organisations

**Annex 1 - QUESTIONNAIRE ON ACHIEVEMENTS IN THE IMPLEMENTATION
OF THE MOBILITY STRATEGY FOR THE ERA**

Period:	June 2001 – December 2003
Country:	

1. What is your country's approach for promoting the mobility of researchers at the national and European levels?

1.1. Has a national policy or an action plan to promote the mobility of researchers been developed?

If yes, please specify the approach and indicate the measures foreseen.

How do these relate to the Mobility Strategy for the ERA?

1.2. Who has the main responsibility for implementing the mobility strategy for the ERA and/or the national action plan? If there is co-operation with other bodies (i.e. Ministries), please specify.

Indicate how the activities are monitored.

1.3. Has any specific action been taken at national level to encourage greater levels of intra-sectoral mobility (industry-academia)?

If yes, please specify.

1.4. Are there formal or informal structures for cooperation with other countries participating in FP6 to exchange good practices on general mobility policy for researchers or on particular aspects thereof?

If yes, please specify.

2. 2. What actions have been undertaken in your country to improve access to information on the mobility of researchers?

2.1. Is there an ad-hoc national mobility portal in your country or are there plans to develop one?

If yes, please provide details: (how, where, URL, responsibility, short outline of aim and content, maintenance, future developments etc.).

2.2. If an ad-hoc national Mobility Portal is not envisaged, have homepages dedicated to mobility of researchers been developed instead?

If yes, please provide details: (how, where, URL, responsibility, short outline of aim and content).

2.3. In either case, please specify how interoperability with the European Researcher's Mobility Portal is being organised?

Through exchange of data (XML file)

Through the use of the Research Job Opportunities Editor (software on CD-ROM)

Simple link (no real interoperability)

2.4. Please specify how the homepages of the mobility centres forming part of the network have been integrated into your national information system (i.e. national homepage).

2.5. How have the information providers for the Mobility Portal been mobilised at the national, regional, local or sectoral levels?

Please specify in terms of

a) awareness about the European Researchers Mobility Portal and its Quality Charter

b) promotion activities (please provide details)

2.6. Have any other measures been taken to improve access to information?

If yes, please specify.

3. What actions have been undertaken in your country to improve availability of data on mobility?

3.1. Have any specific initiatives been undertaken to improve the provision of national statistics on the flow of incoming or outgoing researchers?

If yes, please specify.

3.2. Have studies on mobility been produced?

If yes, please specify.

4. What actions has your country undertaken to improve the provision of practical assistance to researchers?

4.1. Have any specific actions been undertaken to improve the quality of assistance services to researchers within your country?

If yes, please specify.

4.2. How is the information flow between legislative authorities (i.e. ministries) and bodies providing assistance to researchers (i.e. bridgehead organisations and mobility centres) ensured?

4.3. What initiatives have been undertaken to participate in the European Network of Mobility Centres?

4.4. Are there any provisions at national level for monitoring the quality of assistance provided to researchers?

If yes, please specify.

4.5. Has your country got an authority responsible for handling practical complaints from researchers (i.e. Ombudsman)?

If yes, which are the experiences?

5. What legal or regulatory measures has your country undertaken to remove obstacles to the mobility of researchers?

5.1. Have any specific legal or regulatory measures been undertaken in order to remove obstacles for researchers and their families in the following areas:

	Legal framework	Administrative framework
Visa and entry conditions	<input type="checkbox"/>	<input type="checkbox"/>
Social security	<input type="checkbox"/>	<input type="checkbox"/>
Taxation	<input type="checkbox"/>	<input type="checkbox"/>
Recognition of diploma	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>

If ticked, please specify (initiative, target group, sector).

5.2. With which states does your country have bilateral social security agreements?

5.3. With which states does your country have bilateral tax agreements?

5.4. In addition to the compulsory social security system, are there any specific schemes for researchers (i.e. complementary schemes, private insurance)?

If yes, please specify.

6. What actions is your country promoting to open up the national research framework to researchers from other countries?

6.1. Are any national or regional programmes open to nationals from other countries?

If yes, please specify.

6.2. Have national and regional programmes been adapted to different career stages?

If yes, please specify.

6.3. Have research positions been advertised internationally?

If yes, please specify.

6.4. Have international experts been involved in recruitment committees?

If yes, please specify.

7. General comments, if any

Annex 2 - ERA-MORE Network - List of Bridgehead organisation

(January 2004)

Austria

- Bureau for International Research and Technology Co-operation (BIT)
- Austrian Exchange Service – Bureau for Academic Mobility (ÖAD)

Belgium

- Government of Flanders – Science and Innovation Administration
- Ministère de la Communauté française – Direction de la Recherche scientifique
- Federal Office for Scientific, Technical and Cultural Affairs (OSTC)
- BRAINS, Brussels relocation and Interfacing Network for Scientists

Bulgaria

- Sofia University
- Ministry of Education and Science

Cyprus

- Research Promotion Foundation

Czech Republic

- Academy of Sciences of the Czech Republic

Denmark

- EuroCenter

Estonia

- Archimedes Foundation
- Estonian Academy of Sciences

Finland

- Academy of Finland

France

- Association Bernard Gregory
- Fondation Nationale Alfred Kastler
- Point de contact national Mobilité

Germany

- Alexander von Humboldt-Stiftung

Greece

- Centre for Research and Technology Hellas (CERTH)

Hungary

- Tempus Public Foundation
- Hungarian Science and Technology Foundation (TÉT)

Ireland

- Conference of Heads of Irish Universities (CHIU)

Iceland

- Rannis – Icelandic Centre for Research

Israel

- Ministry of Science and Technology, Division for International Scientific Relations

Italy

- Fondazione CRUI per le Università Italiane

Latvia

- Latvian State Institute of Wood Chemistry

Lithuania

- Lithuanian Centre for Quality Assessment in Higher Education

Luxembourg

- Ministère de la Culture, de l'Enseignement supérieur et de la Recherche

Malta

- Malta Council for Science and Technology (MCST)

Netherlands

- Netherlands Organisation for International Co-operation in Higher Education (NUFFIC)
- Senter/EG-Liaison
- VSNU

Norway

- Research Council of Norway

Poland

- Academy of Sciences, Institute of Fundamental Technological research

Portugal

- Gabinete de Relações Internacionais da Ciência e Ensino Superior (GRICES)
- Fundação para a Ciência e Tecnologia

Romania

- Ministry of Education and Research

Slovakia

- SAIA, Slovak academic Information Agency

Slovenia

- Centre of the Republic of Slovenia for Mobility and European Educational and Training Programmes

Spain

- Fundación Española para la Ciencia y la Tecnología (FECYT)

Sweden

- The Swedish EU-R&D Council

Switzerland

- Swiss Federal Office for Education and Science

Turkey

- Tübitak, Scientific & Technical Research council of Turkey

United Kingdom

- The British Council