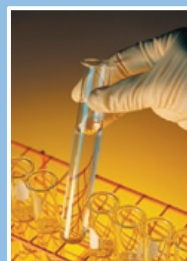


The European **Charter** for Researchers and the **Code** of Conduct for their Recruitment

8-9 September 2005 Victoria Park Plaza, London, UK



A conference held under the UK's Presidency of the European Union



report of proceedings



Report written by **Estelle Kane**,
UK Research Office, Brussels



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Executive Summary

Introduction

On the 8th and 9th of September 2005, the UK GRAD Programme, the Office of Science and Technology, the Research Councils UK, the European Commission (Directorate General for Research) hosted a conference on the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers, entitled 'Turning policy into practice: building the pool of talented researchers to achieve Europe's goals and future innovation'.

More than 250 people from 35 countries across the EU Member and Associated States attended the conference. Through a mix of strategic plenary presentations and practical workshop sessions, participants were able to gain an understanding of the context of the development of the Charter and Code, and identify the implications of adopting them on personal, institutional and national levels. The conference speakers provided various explorations of the potential gains and obstacles of implementing the Charter and Code and the surrounding issues. Through the workshops and discussions conference participants identified various topics provided some conclusions and finally recommendations to all stakeholders, from individual researchers to political leaders. A summary of these topics, conclusions and recommendations are provided below.

Emerging themes

A range of emerging and recurring key themes was identified during the conference. There was general agreement that for Europe to achieve its objectives of becoming the most dynamic knowledge economy by 2010 we cannot afford not to create a positive environment in which our researchers can fulfil their professional potential. A recurring topic was the importance of interlinking the activities of the European Research Area (ERA) and European Higher Education Area (EHEA) into an integrated "Europe of Knowledge".

An overarching theme of the conference was the need for substantial cultural change in the way researchers are perceived, managed and conduct themselves. The recognition of research as a profession - with researchers recognised as well as recognising themselves as professionals - is a key aspect of this change in perspective. It was felt that all those involved in the development and/or management of researchers – from political leaders to employers and the researchers themselves – have a collective responsibility to implement and apply the principles of the Charter and Code. There is a need to improve both the visibility and management of research training as an integral and natural part of a researcher's role. This needs to be acknowledged by all – employers in their appraisal systems, funders in their conditions of grant, and researchers in terms of their professional skills. It was agreed that the Charter and Code itself is not the end of the process, but rather the beginning of a shift in perception at the European level of an understanding of research and the talented individuals that carry it out.

Acknowledging the Charter and Code as a driver for change, participants recognised that despite all efforts to date, there are high percentages of researchers, employers and funders who are unaware of its existence and therefore potential. There was support to increase efforts in raising awareness.

It was also felt that the issue of the diversity of research staff needs to be addressed explicitly in any further debate, especially noting that many researchers do not fit a single profile, whether in terms of working part-time or full-time, gender, ethnicity, disabilities and funding source.

Whilst acknowledging the differences between the academic and industrial sectors, each with their own pressures and objectives, it was considered important that both sectors should be viewed as career possibilities for researchers. Two-way mobility between the sectors should be actively encouraged and valued for the new skills and experiences researchers can bring. With respect to supporting researchers in their career, it was clear that large companies provide many examples of good practice from which other employers of researchers could learn.

Although outside the intention of the Charter and Code, several presenters highlighted the importance of attracting more people into research careers. Presenters from industry particularly highlighted the lack of a pool of suitable talent for recruitment. The variety of motivations for entering into a research career were mentioned throughout the conference, such as; a fascination for research, prestige, career opportunities, working conditions and personal circumstances. It was clear from discussions that the key motivation varied from individual to individual. However, a key message was that more needed to be done to promote the attractiveness of research to those of school age.

Finally a consistent discussion topic was that in order for the Charter and Code to be useful tools, they should be implemented on a voluntary basis. However, it is also important to recognise the national legal and institutional context within which the Charter and Code should be implemented, including the impact of the Fixed Term Directive (FTD). It was strongly emphasised that positive drivers for change are more likely to encourage adoption of Charter and Code than negative ones. In line with this, the importance of not increasing any level of bureaucracy was supported by all.

Key conclusions

Several conclusions evolved from the themes throughout the conference, particularly during the discussions in the six different workshops. Participants confirmed their commitment to a need to invest in Europe's researchers to create a platform for Europe's future prosperity. Participants agreed that the Charter and Code's principles are beneficial to the development of the ERA. The Charter and Code should be used to inspire cultural change at all levels: from recognising the value of trans-national and intersectoral mobility, to acknowledging researchers as professionals.

It is important to acknowledge the "multiplicity of visions of research careers" within the research community as well as the diversity of those who carry out research. This multiplicity of researchers and research careers should be reflected in any implementation and development activities related to research training policy.

Currently there is fragmentation between disciplines, countries, sectors and perceptions of when an individual becomes a researcher. There is a general lack of recognition of research as a profession, reflected in its status and working conditions. There is a strictly one-dimensional view or appreciation of what it is to be a researcher, so assessment and evaluation focuses on research outputs rather than reflective of all aspects of the job. Recognition of the researchers as professional also means acknowledging the fact that the role is varied. The merits of mobility – both trans-national and sectoral – should be embedded in approaches to career development, starting with institutional appraisal systems. These appraisal systems should provide support and encouragement for those who could and would like to benefit from a period of mobility, but not enforcing it as a direct indicator of competence.

Within the public perception it is felt that there is a general anti-science wind, coupled with a disregard for the contribution made by researchers in social sciences, humanities and the arts. There is a perception that a research career is less exciting than other careers and is pursued in isolation. If we are to achieve the Europe of Knowledge we need to change these perceptions.

The adoption of the Charter and Code is a key milestone in addressing the issues around the retention of researchers. In acknowledging the potential of the Charter and Code to inspire this cultural change, it was agreed that the word should be spread more aggressively than it has been so far. It is a good message that has to be understood by all. The methods will vary depending on the country, the environment and the target groups; it is important to understand transmission chains for information dissemination. It is necessary to focus on creating this new approach to supporting researchers as well as strengthening existing ones. There is no short-term solution to achieve cultural change.

To facilitate cultural acceptance the implementation of the Charter and Code must remain voluntary.

Whenever appropriate it should be linked to funding mechanisms, though it is important not to increase the level of bureaucracy. Time must be allowed for implementation - though not too much. To this end, positive incentives rather than negative ones will provide the desired results. Complementarity can and should be found in the implementation of both FTD and Charter and Code, as they share common aims in terms of providing equal opportunities for research staff.

Key recommendations

The conference developed a set of recommendations to all involved in supporting researchers aimed at maintaining the momentum in implementing and applying the Charter and Code.

General recommendations to all

All those involved in developing and supporting researchers are asked to take personal and collective responsibility to disseminate the message of the Charter and Code to all relevant individuals.

Researchers are invited to take their future in their hands and take responsibility for their career development and promoting the need for a cultural change.

If we are to achieve the cultural change necessary to recognise the profession of researcher, our language and actions must reflect and strengthen the message. This includes the need to:

- acknowledge the diversity of career paths and the diversity of those involved in research by recognising there are a multiplicity of visions of research careers and researchers
- recognise that 'research' covers all academic disciplines, including the social sciences, arts and humanities
- use the term 'Early Career Researchers' to reflect the continuum from Early Stage

Researchers/doctoral candidates through to postdoctoral researchers/'contract' researchers

- encourage and ensure that staff within academe perceive and treat researchers as professionals at all stages of their career. This includes:
 - ▶ provision of adequate material conditions and social rights for the researchers
 - ▶ basing career progression on assessment of research processes, rather than exclusively on scientific output
 - ▶ recognising the need for and value of transferable/additional skills
 - ▶ reconnecting and better position a research career in the innovation system, in a knowledge society full of highly qualified people
 - ▶ developing and implementing proper training
 - ▶ offering incentives for supervision of early stage researchers according to defined standards

And finally, we individually and collectively need to promote the public understanding of research and to increase the attractiveness of research as a potential career option. We need to increase interest in and the quality of science teaching, starting in primary school and underline the need for developing critical thinking.

Recommendations for the European Commission

The Commission is asked to recognise and commit to the synergy between European Research Area and European Higher Education Area by referring to it as "Europe of Knowledge".

The Commission should reflect and build on the outcomes of its work so far, and continue to address the issue of recruitment and retention in the research profession through the work of its Human Resources Steering Group and Advisory Group. In particular, by investigating the "multiplicity of visions of research careers" (intersectoral mobility, non-traditional career paths); multiplicity of researchers (diversity issue); the breadth of research areas (from arts and humanities to physical sciences); and research as a profession (recognition of 'researcher' on the ISO).

In order to further raise awareness of the Charter and Code, the Commission is asked to facilitate its dissemination by, for example, providing user-friendly versions in multiple languages, targeted at various groups, to be disseminated to employers, funders and researchers themselves.

The Commission is asked to reflect its commitment to the Charter and Code in its role as a major funder of research by being an exemplar in adhering to its principles in the management and operation of EC funding programmes e.g. the Framework Programme and specifically, Marie Curie Fellowships.

EC funding programmes should recognise the need for funding to be related specifically to the career development of researchers.

Recommendations for Member States

Key political leaders, national stakeholders, funding organisations, professional organisations and any other national bodies are asked to pledge support for the Charter and Code.

Member States are asked to provide appropriate and adequate legislative support to organisations to implement the Charter and Code by, for example, analysing the Charter and Code in the context of national structures, including the Fixed Term Directive, third country visa directive and other national specific conditions that may hinder its implementation.

Member States are invited to map the Charter and Code against existing legislative code and common practice and to change their legislative framework accordingly. In the process, they are asked to look at ways of offering incentives such as tax relief to encourage intersectoral mobility.

Recommendations for Funders

All funders are invited to recognise the importance of a stable and sustainable funding environment in order for employers to provide adequate working conditions and career framework for its researchers.

National funders are invited to embed the Charter and Code in their conditions of grant and work towards providing a change in perception about the importance of research training and its management and the

necessity for career development. Funders are asked to consider providing positive incentives such as making available more funds or to providing flexibility in existing funding sources to improve researchers careers by for example, moving researchers from a stipend to an employment contract, offering extensions or providing training opportunities.

Funders are invited particularly to consider two principle aspects of the Charter and Code in their conditions of grant: transparency in recruitment procedures, and the provision of minimum social security coverage including health, accident coverage and maternity leave.

Funders are invited to provide a public description of how they will embed the Charter and Code within their conditions of grant, specifying a clear timetable for implementation and evaluation procedure.

Recommendations for HE institutions and other employers of researchers

Leaders of organisations that employ researchers should provide clear recognition of the importance of career development, research training and its management, by embedding these within institutional practice. Organisations are invited to sign up to the Charter and Code with a visible statement as part of their branding. The Charter and Code should be disseminated within the organisation, alongside an analysis of how it relates to institutional practice.

Organisations should embed the Charter and Code in their appraisal systems, including acknowledgement of the benefits of inter-sectoral and trans-national mobility. Leaders may wish to consider making a public statement to reflect their commitment to research training and its management.

Leaders are asked to create an environment that allows researchers to take responsibility for their career development by providing access to career guidance, skills training and development. They may wish to offer incentives for the supervision of early stage researchers according to defined standards. They are also asked to consider the complementarities of FTD and Charter and Code in supporting career development

Recommendations for individuals

Managers who support the development of researchers should take this responsibility seriously. They should be honest about career prospects within an institution or the wider profession of research.

Researchers should take responsibility for their career development by being pro-active and look for opportunities to be more informed about the career options available, to develop their competencies accordingly and to engage in the research community.

It is important that researchers have a voice: that they are encouraged to engage in the debate and support the implementation of the Charter and Code. It is necessary to develop more effective mechanisms for two-way communication and gathering feedback.

Next steps

Both the European Commission and the UK Presidency provided their strong endorsement of the key issues and recommendations from the conference.

The UK Presidency stated that it endorsed the Charter and Code and intends to play a significant role in its implementation. It views the Charter and Code as an important instrument in improving European competitiveness, and the conference as a beginning of a journey and not a destination in its own right. It aims to provide a plan of work to aid implementation in the UK.

The European Commission pledged that it would take forward the outcomes of the conference by:

- analysing the key conclusions with the Member States and the other stakeholders
- deepening the discussion through ad hoc working meetings, that may focus on particular difficult issues,
- organising a follow-up meeting at which progress would be assessed and evaluated.

The full proceedings of the conference will be disseminated to all participants and other stakeholders throughout Europe through collective networks.

Context

In January 2000, the European Commission proposed the establishment of the European Research Area (ERA)¹, acknowledging the need to introduce a European dimension to research careers. This statement was followed in March by the creation of the Lisbon agenda, a political strategy that goes beyond research policy. The Council agreed that the EU should make 'Europe the most dynamic and competitive knowledge economy in the world by 2010' (Lisbon Council Conclusions, 2000)². This was followed by a further statement in Barcelona 2002, that Europe must raise its investment in research to 3% of European GDP by 2010 (Barcelona Council Conclusions, 2002)³. Each of these objectives recognised the importance of the researcher and resulted in political objectives specifically related to the role of the researchers and the need to improve their conditions and career opportunities.

The ERA communication and Lisbon objectives fed into 'A Mobility Strategy for the ERA' (Commission Communication June, 2001)⁴, whose principle aim was to 'present a strategy to create a favourable environment for the mobility of researchers in the ERA, in order to develop, attract and retain human resources in research and to promote innovation'. This was further supported by the Commission's Communication entitled 'Researchers in the European Research Area: one profession, multiple careers' (July 2003)⁵, which provided detailed propositions to ensure the recruitment and retention of researchers in the ERA, including the first outline of the European Charter and Code.

The Lisbon Objectives were reinforced in the Spring 2004 Council meeting, stating that 'Human Resources are critical for research and development (R & D) and priority must be given to training, retention and mobility of researchers' (Presidency Conclusions European Council, 25-26 March 2004)⁶. It was further reinforced by the High Level Group report, chaired by William Kok, entitled 'Facing the challenge – the Lisbon Strategy for growth and employment' (November 2004)⁷ which also emphasised the need to increase the attractiveness working conditions in research in Europe.

In respect of these issues and concerns, the European Commission with all EU Member and Associated States, through the Human Resources Steering Group and discussions from a key workshop held under the Dutch Presidency 'Brain Gain – the Instruments', developed a 'European Charter for Researchers' and a 'Code of Conduct for the Recruitment of Researchers'⁸. The Charter and Code provide a set of general principles and requirements that specify the roles, responsibilities and entitlements of researchers, employers and funders with regard to research careers. These are built on the basis that enhanced career prospects provide:

- an incentive for individuals to remain within research careers and stay in Europe;
- a more content and motivated workforce that incurs economic benefits to employing organisations and to the Europe more widely; and
- a positive public attitude towards the researchers' profession, and therefore encourage more young people to embark on careers in research.

The Commission's recommendations on the Charter and Code were formally adopted by the Council in April 2005⁹. The UK Presidency Conference was designed to facilitate the acceptance and implementation of the Charter and Code, by bringing together the key people empowered to ensure real change in the support and management of Europe's researchers.

¹ 'Towards a European Research Area' - COM (2000)6 - 18 January 2000
http://europa.eu.int/eur-lex/en/com/cnc/2000/com2000_0006en01.pdf

² 'Europe the most dynamic and competitive knowledge economy in the world by 2010' (Lisbon Council Conclusions, 23 – 24 March 2000).
http://ue.eu.int/ueDocs/cms_Data/docs/pressData/en/ec/00100r1.en0.htm

³ 'Europe must raise its investment in research to 3% of European GDP by 2010 (Barcelona Council Conclusions, 15 – 16 March 2002)
http://ue.eu.int/ueDocs/cms_Data/docs/pressData/en/ec/71025.pdf.

⁴ 'A Mobility Strategy for the European Research Area' (Commission Communication June, 2001)
http://europa.eu.int/eur-lex/en/com/cnc/2001/com2001_0331en01.pdf

⁵ 'Researchers in the European Research Area: one profession, multiple careers' (July 2003),
http://europa.eu.int/comm/research/fp6/mariecurie-actions/pdf/careercommunication_en.pdf

⁶ 'Human Resources are critical for R & D and priority must be given to training, retention and mobility of researchers' (Presidency Conclusions European Council, 25-26 March 2004)
http://ue.eu.int/ueDocs/cms_Data/docs/pressData/en/ec/79696.pdf

⁷ William Kok, entitled 'Facing the challenge – the Lisbon Strategy for growth and employment' (November 2004)
http://europa.eu.int/growthandjobs/pdf/kok_report_en.pdf

⁸ Commission Recommendation of 11 March 2005 on the European Charter for Researchers and on a Code of Conduct for the Recruitment of Researchers [2005/251/EC]
[http://europa.eu.int/eracareers/pdf/C\(2005\)576%20EN.pdf](http://europa.eu.int/eracareers/pdf/C(2005)576%20EN.pdf)

⁹ Competitiveness Council Conclusions 18 April 2005 [7723/05 Presse 75]
http://ue.eu.int/ueDocs/cms_Data/docs/pressData/en/intrm/84698.pdf

Summary of political, institutional and industrial perspectives

The conference was chaired by **Janet Metcalfe**, Director of the UK GRAD Programme who opened the conference by welcoming all participants, and outlining the aims of the conference. These included exploring the benefits of adopting the principles of the Charter and Code, as well as identifying and sharing good practice. She emphasised the fact that all who were present should consider themselves as participants, as we are all here to explore together our experiences of application and implementation of the Charter and Code.

Welcome to the Conference

Lord Sainsbury, Parliamentary Under-Secretary of State for Science and Innovation, UK

Lord David Sainsbury emphasised the UK's continuing support for the Lisbon agenda and highlighted some of the UK EU Presidency priorities including making the necessary investment in science and progress in the Framework Programme negotiations. He spoke about how the Charter and Code is important for creating an attractive environment for researchers and making Europe competitive. He concluded by providing UK support for implementing the Charter and Code.

Lord Sainsbury opened the conference by welcoming and thanking all participants for attending, including the keynote speakers: Janez Poto_nik, Georg Winckler, Mike Collis and Sir Gareth Roberts. He emphasised the UK's continuing support for the Lisbon strategy. He highlighted some of the UK Presidency of the EU priorities, including:

- promotion of the knowledge society and employment through opening markets and maintaining labour market flexibility
- making the necessary investment in science and education
- continuing the focus on the Lisbon Strategy's drive for jobs and growth.

The UK is determined to make good progress on the negotiations on the Seventh Framework Programme and the setting-up of a European Research Council, which it believes are of critical importance to the future economic success of Europe.

Lord Sainsbury said that the re-launched Lisbon Strategy recognises that Europe's future economic development depends on its ability to create research-based sectors that are capable of competing with the best in the world. He believes that Europe has made serious steps towards the establishment of a genuine internal market for science and technology, and that the ERA is becoming a reality. He stated:

"Our success in creating new ideas and increasing knowledge transfer depends on our ability to attract and retain researchers, both academic and non-academic, in what is today a world labour market for the best scientists and engineers."

He views the Charter and Code as a positive move to maintain Europe's capacity to do research and produce innovation, as they provide a framework for the roles, requirements and entitlements of researchers, funders and employers. Importantly, it places responsibility with researchers themselves, as well as employers and funders. He discussed some examples of the things addressed in the Charter and Code, including:

- the fact that the Charter and Code covers researchers at any point of their career
- it provides guidance on working conditions to ensure that there are no barriers preventing anyone from developing a successful career in research
 - the necessity to have internationally comparable recruitment procedures
 - the need to ensure that applicants received equal treatment across Europe.

Lord Sainsbury highlighted the work completed at UK level to improve the attractiveness of research careers, by increasing its investment in research, researchers and research facilities. Some of the funds were used to implement the measures recommended by Sir Gareth Roberts in his review 'SET for Success'¹⁰, which looked at the supply of people with science, technology, engineering and maths skills. The review advocated co-ordinated action from the government, employers and universities. The review recommended that measures should be taken to enable the provision of a comprehensive PhD programmes, with the introduction of professional skills training in order to support their future careers, whether in academic, industry or elsewhere.

He emphasised Europe's goal to create an attractive environment for researchers, with the aim of encouraging more to enter and stay in the profession. There is a need to maximise the contributions researchers can make by ensuring they are aware of all the career pathways open to them. Europe needs to be the best place for the best people and therefore it needs to ensure that women and those from ethnic minorities are encouraged to undertake research in what has been historically a non-traditional sector. Mobility must be viewed as a positive characteristic that enables the transfer of skills and knowledge and allows for collaborative research and the development of pan-European networks.

He concluded by re-emphasising the UK Government's strong commitment to the principles behind the Charter and the Code, by stating that:

"This conference is an important milestone in making Europe more competitive. It will not be easy to implement the guiding principles of the Charter and Code, but equally we should not underestimate the benefits of doing so."

In conclusion, he hoped that participants would enjoy the conference and leave inspired to facilitate the changes in culture and practices that will be necessary to put into place the agreed action plans, to make the careers of researchers more productive and valuable.

¹⁰ 'SET for Success' Final Report of the Roberts Review
http://www.hm-treasury.gov.uk/documents/enterprise_and_productivity/research_and_enterprise/ent_res_roberts.cfm

Putting the Charter and Code in context: keeping Europe competitive

Janez Potočnik, Commissioner for Science and Research, European Commission

Janez Potočnik provided an overview of the current EU policy context, including the relaunch of the Lisbon Strategy. He explained the measures at EU level to make Europe a more attractive place for researchers, such as the Researchers in Europe initiative and ERA-MORE centres. He concluded by explaining how the Charter and Code is a critical tool for improving working conditions for researchers.

Janez Potočnik opened his speech by thanking the UK Presidency of the EU, and in particular Lord Sainsbury for placing the issue of researchers' careers so high on its political agenda. He reminded the audience that the Charter and Code were adopted six months ago and said that he believes, as Lord Sainsbury does, that these are important steps forward in all our efforts to make research careers in Europe more attractive.

The Commissioner elaborated on the political context of the Code and Charter, both in terms of overall EU policy as well as research policy specifically. He highlighted the fact that the EU is at a delicate time in its development because of failed referenda and budget decisions. He believes this is a problem to do with people's perception of what is happening rather than what is actually happening.

"We can learn a lot from the negative referenda. Most importantly, that we have to clearly distinguish between facts and perception."

Taking the example of the recent enlargement he said it is seen as an opportunity by some and a threat by others. The Commission has an obligation to inform and listen to its citizens' concerns, by working on the European Union's image problem as well as informing its policy development. Despite these concerns, the Commissioner believes that the Commission's re-launched Lisbon strategy should go some way to resolving both the perception and the reality of the European Union and its work.

The Commissioner explained that the re-launched Lisbon strategy is driven by an emphasis on the knowledge-based economy, as Europe needs to stimulate its growth and productivity and also strengthen social cohesion. Knowledge is central to the knowledge-based economy, and Europe must build sustainable leadership in the way:

- knowledge is produced - through research
- disseminated - through education
- applied - through innovation.

This means that Europe must carry out more research and that means we need to have more, well trained researchers in the European Union. He mentioned the European paradox: although more researchers are trained in Europe, we employ fewer per 1000 members of workforce compared to Japan and the US. He believes that young people consider the business environment a more interesting place to work than a research environment and secondly that those who do go into research prefer to work abroad - mainly the USA - as there are less attractive opportunities for research in Europe.

Taking these points into account, the Commissioner highlighted the three main objectives in tackling the researchers in Europe problem: firstly, to increase financial investment, secondly to enhance public recognition of research and thirdly to create conditions to persuade European researchers to stay in Europe. Recent figures suggest that Europe will be at 2.2% of GDP expenditure on research by 2010 if investment is not increased. Using the growth in China as an example – 10% or more per year – he said that China would be catching up with Europe, not Europe with US or Japan. He welcomed the UK's commitment to significantly invest in European research and hoped that budget conclusions will be reached in order to have a continuous support for EU research. With respect to recognition of role of researchers, he highlighted the Commission's initiatives under the 'Researchers in Europe 2005 initiative'.

And finally, with regards to the need to increase working conditions, he emphasised a need to develop an integrated strategy for human resources in science and research. Member states and others should work together to encourage mobility and help break down the administrative and legal obstacles that researchers face. He highlighted the work that has been done since the publication of the Commission's 'One profession: multiple careers' communication. Examples include: the Researchers in Europe Initiative [RIE] to acknowledge the effective contribution they make to society, as well as the Marie Curie Actions, ERA-MORE centres, the mobility portal, the Directive and Recommendations for the admission of third-country nationals to carry out scientific research in the EU¹¹ and last but not least, the Charter and Code.

"I am certain that if researchers are provided with a professional environment, it will create a more creative and better atmosphere for them, and consequently, enhance their research performance."

He described the Charter and Code as an important step towards developing and implementing an integrated European strategy for human resources science and research. A strategy that:

- should support development of better employment and working conditions that provide favourable access and opportunities for women
- must value international and trans-national mobility as an enriching experience for professional development for the acquisition and transfer of new knowledge
- must enable mobility between academic and non-academic sectors
- should go some way to end national or local practices that hamper recruitment of best available talent
- should go some way to providing researchers across Europe with the same rights and obligations

The aim should be to provide a better environment in which they can carry out their research, and make it more attractive to stay in Europe.

He emphasised the benefits of the Charter and Code by saying that the EU needs to build on its potential and achievements for its citizens, and it needs to support realisation of knowledge society and provide opportunities for all. The EU needs further investment in human capital, and take due regard of its importance in political, economic and societal terms. On a grander European scale, there are many other issues of concern - such as environment, terror, and economic competitiveness – that mean member states must work closer together.

He called upon all those present to do make full use of the Charter and Code and to transpose them into our national, sectoral or institutional contexts.

¹¹ http://europa.eu.int/eur-lex/en/com/pdf/2004/com2004_0178en01.pdf

The Universities' Perspective: what do the Charter and Code mean in a global research environment?

Georg Winckler, President, European University Association and Rector, University of Vienna, Austria

Georg Winckler provided an overview of the world within which European universities are operating by saying that universities are facing an increasingly competitive research environment on a national, regional and global level. He explained that it is in this context that the relevance of the Code and Charter for universities has to be assessed. Georg presented the university perspective in three parts: the pressures that universities are facing; the competitive advantage of US universities and finally the ideal profile of a European university. He concluded by highlighting the importance of professionalisation of research and that the Charter and Code has a significant role to play within this.

Competitive pressures on European universities have two aspects: one is that of technological developments and the other is the emerging knowledge societies. Technology has enhanced the physical and virtual mobility of people, creating the brain drain or brain gain phenomenon. In the past, most European universities operated within their national boundaries. It is clear that now they are or must operate beyond these. The second aspect, that of the emerging knowledge societies, has, Georg argued, has an ambivalent effect on universities. Firstly, there is a clear and increased demand for research and higher education services; they are working in a growth market, with increased competitiveness at an international level. This has led to universities needing to look at the way they are managed and adopt more professional solutions. The term 'mass university' has been used to describe this change. Georg believes this reflects the ambivalence effect: the increased demand for universities services – research, teaching and innovation – has not been adequately developed because of national bureaucracies, lack of money or simply inertia to respond to the new challenges.

Georg then turned to the advantages of the US system and identified three features. Firstly, there is a high degree of autonomy and accountability. In his experience, organising supply is best left to the key actors – in this case HEIs – and not central planners. In the US, the higher education system is successful in granting broad access, as it is democratic at the bottom and elitist at the top. Secondly, the higher education systems are well financed, at approximately twice the EU % GDP. European universities need to start talking about attracting more money, especially from private sources. And finally, the US HE system operates on a large scale, in a large society and a large economy. Most European universities operate at national levels. The creation of the Europe of Knowledge, comprising the European Higher Education Area and the European Research Area needs to be pursued with urgency. The creation of a trans-European labour market for researchers is a part of these efforts. The Charter and Code should contribute to the implementation of the Europe of Knowledge.

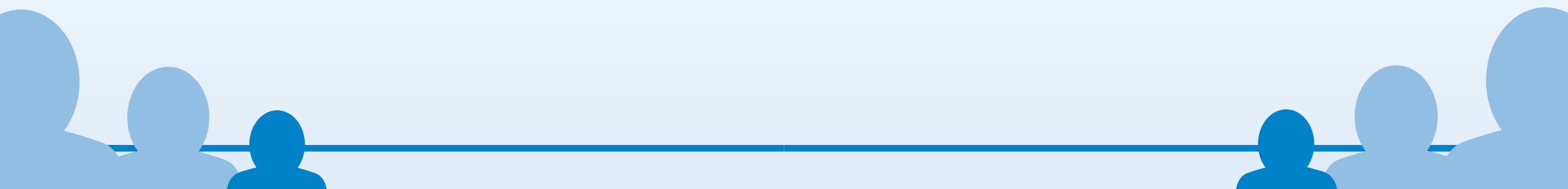
“Europe needs autonomous, accountable, well funded universities which operate in a large society or, as the Glasgow Declaration of the EUA puts it: ‘Europe needs Strong Universities for a Strong Europe’.”

Europe should develop its own profile in order to generate a global fascination for the envisaged Europe of Knowledge and Georg proposed three main elements of this new identity. Firstly, explicit cultivation of multilingualism, interculturism and good balance between science and the humanities. Secondly, the universities should be of high quality cultural institutions with strong ethical values. And thirdly, the universities should advocate networking and co-operation, preserving the Humboldtian unity between teaching and research.

Georg stated that the Code and Charter should help solve some of the problems mentioned, by strengthening a Europe of Knowledge notion and the single trans-European labour market for research careers. It professionalises the researcher, which is needed to achieve competitiveness in a global research environment. For universities in particular, it prescribes better working conditions for new entrants into research. This is particularly important as there is a looming demographic crisis in academia with a significant proportion of researchers being close to retirement. Attracting early stage researchers also implies that new entrants are not considered as apprentices, as reflected in the traditional master-apprentice model of the relationship between supervisor and supervisee. It is important to view the young researchers as innovators and provide them with their autonomy as soon as they are ready. Linked to this are better employment conditions, so that they receive social security benefits and contributions as any other person in employment.

“The Charter and Code professionalises research careers in Europe which is needed to achieve competitiveness in a global research environment”

In summary, the EUA will support initiatives which lead to the implementation of the Charter and Code, as it believes it has a significant role to play in the creation of the Europe of Knowledge. However institutions are autonomous and one has to respect institutional decisions concerning employment of staff. There are differing opinions on the Charter and Code and the EUA is ready to organised debates or participate in events like today's conference. It is true that some kind of cultural shift is needed in order for all the principles to be adopted. Georg concluded by saying that the EUA looks forward to the long-term benefits that this change will bring.



Industry perspective: embedding the Charter and Code

Mike Collis, Scientific Director, Discovery Biology, Pfizer Global R & D and Representative, UNICE and the Confederation of British Industry

Mike Collis presented an industry perspective on the implications of the Charter and Code, illustrated with examples from his own research career. He looked at what influences people to follow research careers, what potential impact the Charter and Code could have on industry, then on academia and concluded with examples of additional measures to support the principles of the Charter and Code.

Mike provided a summary of the pharmaceutical industry in the UK, the sector in which he has worked most of his life. In the UK the pharmaceutical industry is a major employer, employing 73,000 people with another 250,000 jobs in related sectors. The pharmaceutical industry is the leading industrial funder of research base in the UK, provide a quarter of industrial R & D in the UK and supporting over 1,100 collaborations excluding clinical and contracts. Investment in pharma R & D in the UK is about three-fifths that of the US, and slightly more than Japan. There has been a general increase in investment in R & D pharmaceuticals around the world since 1990.

With respect to the general European context, Mike noted the message that Europe's shortage of researchers in key disciplines poses a serious threat to the attainment of the Lisbon and Barcelona objectives. In the context of the pharmaceutical industry, the key shortages are in synthetic chemistry and in vivo physiology and pharmacology. In the UK, the Association for British Pharmaceutical Industry is evaluating the sector's skills needs. In Europe, Mike argues that the substrate of researchers is available – the EU trains more graduates and PhDs in Science and engineering than the US. The challenge is therefore keeping them in a research career, and this is the objective of the Charter and Code.

Mike then looked into what motivates people to become researchers and used his own career as an example. He highlighted several themes: a fascination with science, the highs and lows of researching, the chance to make a difference, the opportunity to follow your own ideas and work with scientific leaders, money, security, and career structure. He believes that money, security and career structure do not motivate people to go into research, but they become important factors in keeping people in research. In his career, he has always bridged two sectors – industry and academia – from the start of his training to his current position. Reflecting on his career, he believes that he has been successful because he took responsibility for it and actively sought various challenges. His willingness to be mobile, across sectors as well as physical location, gave him a diversity of opportunities and experiences. Strong supervision and mentoring, alongside various mobility fellowships also were very helpful. However, ultimately the desire to settle down in one place sets in and it is then that tenure opportunities should be offered.

Mike asked the question whether the Charter and Code will make research more attractive? He believes it will have an impact in terms of retention on those who are already in post or started in a research career. The Charter and Code should aid employers with their responsibilities of ensuring a good environment, conditions, stability, appropriate salary, career development and supervision. The Charter and Code provides many good principles which he supports – including equal rights across the EU – but he reminded us that industry has many obligations, not just to researchers, but to its other employees and stakeholders such as shareholders. He highlighted that there is likely to be minimal impact of the Charter and Code on the larger companies as it describes best practice already in place in many industrial research organisations. The impact on SMEs would be more significant but it will be harder for them to implement – because of the infrastructure and resource implications.

Mike then provided an illustration of a career structure for researchers in industry. There are clear career tracks in research and management, with training as part of researchers' performance objectives. In Pfizer developing and supervising others is rewarded as a key part of the researchers' job. Mike also discussed implementing the Charter and Code in academia, which he argued, could be seen as a greater challenge. Using his experience in the UK, he said recognition and reward comes from research grants and winning prizes; training and mentoring are not rewarded and often seen as getting in the way of a research project. In addition, prizes and grants are often of a short-term nature, which means they can only support short-term contracts. Mike suggested developing or providing a separate funding stream to reward good practice in researcher training and development.

“One message on helping the code of conduct to be implemented is that in terms of funding academics and research in institutions is not to think just about research outputs but on rewarding and supporting training and development of researchers.”

He believes that there needs to be some kind of career structure for researchers that have clearly defined steps and criteria to achieve progression. Researchers should be provided with honest feedback on their achievements and potential on the career ladder. In order to do this, there needs to be some kind of career stability. In the UK for example, only 3% of bioscience research assistants in the UK are on a permanent contract. A large reason for this is the lack of financial stability and short-term grant process. This impairs forward manpower planning in higher education institutions and development of career structure.

Successful career management requires performance assessment, of both the researcher and the supervisor. Researchers should be assessed against defined and appropriate goals; building on quality not quantity and provided with honest career advice. For the supervisor, training and mentoring should be part of their goal, and it should be rewarded. He also said that it should be acknowledged that the best researchers may not make the best supervisors. Support should be provided so supervisors can carry out these roles to the best of their abilities. Mike recommends a dual ladder in academia, along similar lines to the dual career ladders in many large companies.

Mike emphasised the importance of inter-sectoral mobility, and how it benefits all participants. Doctoral programmes involving industry are a great success in the UK. Postdoctoral mobility between academia and industry should be supported at the European level by the Human Resources and Mobility programme under Framework Programme 6¹², the current scheme, Marie Curie Intra-European Fellowships¹³, is not good for industry. The industry host scheme should be re-introduced.

In conclusion, Mike said that the code enshrines good practice, though it is unlikely to encourage young people into research but should encourage those who are already in it to stay. The Charter and Code should remain voluntary, and provide guidelines rather than tramlines. Different countries are likely to have different approaches. The research environment is competitive and it may be that in some cases short term contracts are better than no contract. Mike reiterated the message that it is important to encourage compliance rather than enforce. National funders should be looking at longer-term research grants, and user friendly mobility awards. Implementing the Charter and Code will be more of a challenge for the smaller companies and academia than larger companies; academia could learn from industry with respect to career tracks and performance appraisal. However, more needs to be done to ensure the financial stability of HEIs in order for them to be able to offer similar structures to their researchers.

¹² Human Resources and Mobility Work Programme (September 2004)
<http://www.cordis.lu/fp6/mobility.htm>

¹³ Marie Curie Intra-European Fellowship see Human Resources and Mobility Work Programme (September 2004)
<http://www.cordis.lu/fp6/mobility.htm>

Building the Agenda: success and challenges facing the UK

Sir Gareth Roberts, Chair, Research Careers Committee, UK

Sir Gareth Roberts provided a situational analysis of researcher policy at the UK and EU levels. He analysed the successes and obstacles overcome at EU and UK level and concluded by outlining future work of UK Funders Forum in relation to the EU's Charter and Code and the UK's Research Concordat.

Sir Gareth Roberts explained that he had been invited to provide an analysis of the success and challenges facing the UK with respect to the management and support of researchers. This included providing an insight into several UK initiatives, such as the Research Careers Initiative (RCI)¹⁴, QAA Code of Practice¹⁵, and SET for Success.

Sir Gareth Roberts started by exploring the main difference between the UK's RCI and the European Charter and Code. The Charter and Code is addressed at all researchers including postgraduates as well as postdoctoral researchers, working in all disciplines, across all employment sectors. This compared to the RCI that focuses solely on contract researchers (postdoctoral researchers on short-term contracts). Sir Gareth believes that the EU approach is correct and will work towards this aim at the UK level.

Sir Gareth then provided a summary of the work so far in the career management of researchers in the UK. Firstly, there was the introduction in 1996 of the 'Concordat', designed to provide a framework for the career management of contract research staff. The establishment of the Research Careers Initiative (1997-2002) followed. This aimed to improve the position of staff employed by universities on short-term contracts. Finally, the Research Careers Committee was recently established to consider the benefits of introducing a new Concordat linked to the Higher Education Funding Councils' Human Resource Strategies.

At the same time, the QAA developed its first Code of Practice for Postgraduate Research Programmes (1996). The code, revised and republished in 2004, is a statement of good practice that has been endorsed by the UK Higher Education Community. The Code was developed in such a way as to encourage institutions to:

- monitor their success against a set of appropriate internal and external indicators and targets
- only accept postgraduate researchers into an environment where high quality research is occurring
- only appoint supervisors who have the appropriate skills and subject knowledge to support, encourage and monitor postgraduate researchers effectively
- provide postgraduate researchers with appropriate opportunities for personal and professional development
- identify each postgraduate researcher's development needs and agreed jointly with the appropriate academic staff; and regularly reviewed
- provide opportunities for postgraduate researchers to maintain a record of personal progress, including reference to the development of research and other skills.

Sir Gareth provided an introduction to the work carried out under the 'SET for Success' Review, which was published in April 2002. He highlighted the key recommendations on postgraduate training that were funded by the UK government, as follows:

- the average stipend paid by Research Councils raised to the tax-free equivalent of the average graduate starting salary. (Minimum PhD stipends increased by 50% to £12,000 per annum)
- government funding should be provided on the basis that the average full-time student requires financial support for 3.5 years
 - all Government funding should be conditional on researchers' training meeting stringent minimum standards including at least two weeks' dedicated training a year principally in transferable skills. (£20 million has been distributed in 2005/6 for postgraduate and postdoctoral skills training)

The 'Set for Success' report included other recommendations relating to postdoctoral researchers:

- contract research posts should be viewed as transitional rather than having a semi-permanent basis
- supervisors and advisors should discuss the researcher's most probable future career trajectory as part of the regular staff appraisal system, once this trajectory has been established, this should be used to determine the types of training and career opportunities to be undertaken by the individual.
- funding should be available for 1,000 new academic fellowships to provide a more stable and attractive route to academia. This is a joint scheme between the universities and the Research Councils. Phased over a period of five years, the fellowships provide the opportunity for researchers to carry out their research within an institution, at the end of which the institution provides them, if all goes well, with a tenured position or at least institutional funding. (400 in place during 2005/6)

The review provided a model of three broad career trajectories for short-term research staff: 'non-academic/industrial' pathway - a research career in business/industry or a career in management/commerce etc, 'research associate' pathway, a university research rather than a full academic career: this would apply to those who have developed specialist knowledge of research equipment or methodologies and finally an academic pathway, following a university career involving the full range of academic duties.

In summary, the UK has made much progress over the last ten years towards a coherent research careers strategy. At postgraduate level, it has included increased stipends, additional finance for skills training and a code of practice for Postgraduate Research Programmes. At postdoctoral level it has provided additional finance for salaries and skills training, and 1000 new academic fellowships. The Funders Forum is now working on a new Concordat for contract researchers, which will look to producing a Code of Practice aligned with the Charter and Code. The UK are looking towards using the Charter and the Code and the Fixed Term Directive¹⁶ to encourage a reduction in the use of fixed term contracts.

"We need to be more progressive and have an enthusiastic approach to the reduction in the of numbers of people in British universities on fixed term contracts."

¹⁴ The Research Careers Initiative Final Report
http://www.universitiesuk.ac.uk/activities/RCI/downloads/RCI_final.pdf

¹⁵ QAA Code of Practice
<http://www.qaa.ac.uk/academicinfrastructure/codeOfPractice/default.asp>

¹⁶ Fixed Term Directive
<http://europa.eu.int/scadplus/leg/en/cha/c10822.htm>

Question and Answer session

The question and answer session following the keynote presentations raised two important issues related to the diversity of researchers.

There are possible policy tensions between the desire to increase mobility and the participation of women in research careers. There is a tension here if mobility is considered as an absolute requirement in a successful research career. An example was an Intra-European Fellowship in Spain where there was the expectation to work long hours in the laboratory, minimal help in finding accommodation or a school for her child.

The panel was clear that mobility should be seen as an opportunity and is probably more relevant in some research areas than others. It should not be a de facto requirement in career development. The Commission commented that much work has been done recently to accommodate this kind of issue, primarily through the establishment of the ERA-MORE centres.

There were also concerns that given most PhDs are completed by people on a part-time basis, to what extent are part-time researchers taken into account as an untapped resource, as there is such potential there? The panel acknowledged that this was a neglected cohort.

Summary of round table session highlighting key issues

Chaired by **Irina Veretennicoff**, Professor at the Vrij Universiteit, Brussels and Vice-Chair, European Commission's External Advisory Group Human Resources and Mobility

Irina introduced the round table session, designed to introduce the six workshop themes, setting them in context and highlighting their key issues, by highlighting the fact that if Europe wants to attract and retain researchers, it should aim to look at real life implementation issues. In order to do this we should acknowledge the diversity of the system in terms of regulations, cultures and fields of applications, e.g. private versus public - and types of research e.g. curiosity, society or market driven. She introduced the five speakers, all representing different stakeholders with interest in the implementation of the Charter and Code.

Jeanne Grosclaude,
Research Director, Eurocadres, France

Jörg Schneider,
Director of Division, Research Training Groups and Research Careers,
German Research Foundation (DFG), Germany

Jan Misker,
University Relations Manager, Philips Electronics BV, The Netherlands

Gadi Rothenberg,
Associate Professor, van't Hoff Institute for Molecular Sciences,
University of Amsterdam, The Netherlands and Marie Curie Fellowship
Association

Jeanne Grosclaude, Research Director at Eurocadres provided a perspective from Eurocadres, the Trade Union for Graduate Associations. Eurocadres was involved in the development of the Code and Charter and supports its principles. Jeanne highlighted several key elements of the Charter and Code. She emphasised the importance of appreciating the balance between entitlements and responsibilities of researchers. There have been repeated calls for providing opportunities for all, to offer sustainable career development and this message is still relevant today. The Charter and Code suggest a continuous pathway in a career in research, as well as promoting intersectoral mobility. She believes that there are some tools that are missing in order to provide full support to regulation of professional and managerial staff. In terms of career pathways, it is important the employers respect and trust other appraisal systems, especially in the light of encouraging mobility, both inter-sectoral and trans-national. It is necessary to build a skills portfolio that allows people to be judged on what they have done as well as what they could be. In this context, Jeanne outlined a triangle of skills of a contemporary researcher: someone who is open to mobility, inter-disciplinarity and communicating with the society in which they live.

Jeanne also outlined the special case of the research environment, where the scientist is both an employee and employer, where they need to be able to manage within the higher education administrative system as well as demonstrate good practice in their field.

"The care taken of early stage researchers should be seen an indicator of an excellent team."

The other context to be acknowledged is that of the legal one. For the FTD to work effectively, the burden of anxiety of fixed term contracts should be shared with the employer, as opposed to being the sole concern of the employee. Jeanne noted that the Charter and Code did not mention work-time length – are researchers a group that are able to opt-out of the Working Time Directive¹⁷, and is that something we would want to encourage?

And finally, as an example of practice, Jeanne explained how training of Early Stage Researchers is an integral part of Network of Excellence of which she is a participant.

Jörg Schneider, Head of Division, Research Training Groups and Research Careers at the German Research Foundation (DFG) introduced his speech by stating that the DFG provides broad support for the Charter and Code for researchers. It has many similarities with its own 'Recommendations for Safeguarding Good Scientific Practice'. Any organisation – from universities to Max

Planck institutions- must adhere to the principles of the 'Recommendations for Safeguarding Good Scientific Practice' and so the key principles of the Charter and Code are already embedded in the German research system. The DFG is considering making adherence to the Charter and Code a condition of its grant alongside the 'Recommendations for Safeguarding Good Scientific Practice', though they have identified some tensions - minor and major - which needs to be addressed before it can be fully implemented.

The first concerns the Charter and Codes recommendation that 'researchers should make every effort to ensure that their research is relevant to society...'. Whilst understanding the sentiment, the DFG strategic aim is to fund basic, curiosity driven research with no mention of obvious or immediate social implications. Secondly, there is concern that the current evaluation and appraisal system would become too

heavy handed if it were to include the recommendations in the Charter and Code. And finally, the major problem is related to funding and salaries. There are some good reasons, as far as DFG is concerned, why stipends are more beneficial – for researchers and their host institutions – than salaries. This includes visa issues for non-EU citizens to the impact on time to complete PhD.

In summary, the DFG would like to make the Charter and Code a condition of grant as soon as they resolve the three issues, and provide an opportunity for practice inform policy.

Jan Misker, University Relations Manager at Philips Electronics BV provided an overview of Philips approach towards building the pool of talented researchers to achieve Europe's goals and future innovation, and more specifically about how the Charter and Code can support mobility. He started by emphasising the Charter and Code should not be considered as a goal itself, but rather a tool to aid retention of researchers. He highlighted that in industry most large companies operate a dual ladder system for its researchers, in terms of research and management. Inter-sectoral and inter-disciplinary mobility is seen as creating career opportunities.

Jan provided a summary of identified recent trends in human resources management at Philips Electronics. One can not and should not completely separate industry and academia. Multi-disciplinarity experience and communication skills are becoming more important competencies for researchers. Industry is also working more in partnership with its competitors, sharing facilities and research as appropriate, in order to compete on the global scale. Philips work with research intensive universities as it is important for its business. They have seen a change in the origin of their research staff, noting that since 1999 their PhD staff has become more international (i.e. non-Dutch).

He highlighted that Philips has a specific human resources strategy aimed at developing the talents of its 2000 researchers. Research is carried out in six different countries, and mobility is stimulated and rewarded. Research careers are managed through a performance review system, where they develop an annual plan, and feedback is received regularly. The dual ladder system encourages development of new skills.

"We cannot afford not to offer researchers a research-friendly environment, or they are gone."

With respect to the Charter and Code, Jan reiterated the message that it must not be implemented by law. A human resources strategy is essential to any large organisation and industry can not afford not to have a researcher friendly environment. It is a case of changing the culture of research training and its management, but not the rules under which operates. Recruitment of research staff must only ever be driven by excellence.

"Employability is considered a joint responsibility both of the researchers and of the company"

Gadi Rothenberg, Associate Professor, van't Hoff Institute for Molecular Sciences, University of Amsterdam and Marie Curie Fellowship Association provided a summary of his career so far, from his PhD to his tenured position at the University of Amsterdam. He gave examples of how the Dutch research system has approached the problem of lower success rates of women in obtaining research grants and diversifying

the skills and competencies of its postgraduates. In identifying the fact that fewer women of the 'good' and 'very good' category were awarded grants, the Netherlands Organisation for Scientific Research (NOW) decided to allocate awards as a proportion of female applicants.

With respect to complementary skills training, it provides workshops in writing grants, planning your career, creative thinking and networking. All the workshops and talent days are aimed at enhancing talent and creating scientific elite. In Gadi's opinion, it is important that these skills are offered but that participation is voluntary. He concluded by commenting on the working-length time issue raised by Jeanne but also in questions in the earlier session. In his opinion, researchers should reject positions at organisations that have a culture of long hours. He did so in a lab led by an eminent scientist, and obtained a position in another lab, which he found very rewarding.

Questions and Answers

Gadi's 'controversial' views on the academic working culture raised some interesting issues during the following question and answer session.

There was general discussion on the issue of working-time, and specifically what managers expect of their researchers. Researchers have varied and complicated roles; from teachers to managers, as well as partners and parents. How is it possible to do all this at an appropriate level?

Gadi responded that it is a personal issue and researchers should refuse to work somewhere that demands those hours. However, this was felt to be too idealistic by participants, whose overriding views were that the cultural acceptance of long working hours was embedded throughout academia.

Another important topic raised was the tension between mobility and tenure. In many situations careers are developed in one institution. How to assess mobility in this situation? Is an institution that supports such a rigid system of lower quality? The panel responded that mobility increases the chances of high quality research as it provides opportunities for researchers to bring in new skills and ideas.

The question of the ageing population was also raised, including the need to ensure that we do not discriminate against age. How can we do things with respect to those who want to work beyond compulsory retirement age? Industry provides some examples, such as providing them with desk space, or organising an advisory role where appropriate. The counterbalance is that a researcher should not have to wait for the oldest person to move on before they can become independent. There is a need to avoid the situation where we have to wait for 'dead man's shoes'.

Finally, a question on what is needed to adequately assess research performance, prompted the response that funders do not look in-depth at other performance issues that are HEI-related, such as management responsibilities, supervisor support. It would be overkill for funders to assess and evaluate the performance of every single researcher.

¹⁷ Proposals for Revision of Working Time Directive
http://europa.eu.int/comm/employment_social/news/2004/sep/working_time_prop_en.htm

A vision for the future: taking forward the Charter and the Code

Kate Runeberg, Senior Adviser, Nordic Council of Ministers and Docent, Helsinki University, Finland chaired this session on looking at the wider view: the importance of the Charter and Code in maintaining and improving Europe's position on the international stage, particularly creating an environment that is attractive to researchers.

The theme was addressed by:

Ian Halliday, President Elect, European Science Foundation

Joke Driessen, Business Group Manager for Propylene Oxide, Derivatives and Styrene, Shell Global Solutions, The Netherlands

Ian Halliday, President Elect of the European Science Foundation introduced his speech by explaining that high level political engagement and leadership is required in order to take forward the Charter and the Code. He emphasised that

“Europe needs a coherent vision of its science landscape, as it needs to understand that its competitors operate on continental-equivalent scales.”

In his experience as a funding chief, the quality of staff at universities was fundamental in order to achieve the broader strategic objectives. He needed to ensure that research staff had a strong background and the appropriate attitude. He questioned why it has taken so long for skills to be taken seriously. He believes that this is because there is always a concern about diverting money from research to anything else, especially on what is perceived as the 'softer' skills. The UK government has increased its spending on science, accepting that money is required for both research itself as well as for the system within which it is carried out.

Ian said that salaries are always a controversial aspect of research training and staff management.

“The key issue is providing researchers with the opportunities for responsibility early on in their career, placing them in ‘mission critical posts’, as most other professions do.”

He believes that opportunities for dynamism and financial rewards are seen as minimal compared to other careers. He raised the question of two-year fellowships – are they efficient in terms of spending money? It appears that universities prefer the two-year fellowships. He felt that it is worth noting that funding is affected by political cycles, and therefore this time period has a direct impact on funding cycles and availability. Ian stated that research students want to work with leaders in their fields, and want to understand the culture of science. They are not interested in where their money comes from

Ian cited the example of CERN and highlighted that there is much Europe can learn from it. It was set up post war by European states, including the UK and Germany, within one year of being proposed and at a time of economic crisis. It has become the envy of the world. It is important to have a similar strategic vision for European science. The Charter and Code is a tool that goes some way to supporting a vision of European science that is a favourable environment in which to carry out research and pursue a career in research.

Joke Driessen, Business Group Manager for Propylene Oxide, Derivatives and Styrene at Shell Global Solutions introduced her speech by providing some interesting and recent quotes about the Lisbon agenda and industry, including 'the skills of engineers have never been more necessary or their contribution more worthwhile' and 'the nature of future projects means technological expertise is going to be increasingly important'.

She outlined Shell Global Solution's attraction and recruitment strategy, focusing on diversity and inclusiveness, scarce graduate resources, attraction efforts, recruitment and mobility, women in science and technology and finally the ERA in the global world. Joke outlined the organisations diversity and inclusiveness strategy, which acknowledges diversity – in terms of visible (age, gender, ethnicity and physical appearances) and non-visible (such as religion, nationality and education) and promotes inclusiveness, a place where differences are valued. Essentially, they acknowledge that the research community at Shell Global Solutions should be a reflection of its society. The strategy is embedded across the company in terms of career management (e.g. mentoring), talent management (recruitment), infrastructure (leadership accountability) and awareness and engagement (communication).

Joke used an example from the UK to highlight the scarce resources of graduates. She highlighted Shell Global Solutions approaches to recruiting and retraining women, from female testimonials in the external media to creating a 'Women in Leadership' Forum.

“These initiatives require financing and it takes time to see their impact.”

Joke highlighted how important mobility was in the nature of Shell's work, and how they try to maximise its benefits. It includes hiring from academia as well as working with academia. The transfer of knowledge (or knowledge mobility) between the sectors is seen as an important development of its business.

Joke then provided an analysis of women in science and technology, as supported by work from the European Commission's Expert Group on 'Women in Science and Engineering: the business perspective'. It was noted that to attract women into science, high school was the prime decision point. Here, stereotyping is really influential and is not driven entirely by rational decision making. Other areas of interest include the attractiveness of universities and industry as a place of work, as well as the ability of managers to get the most out of a diverse workforce.

In summary Joke argued that the Charter and Code and other initiatives are instrumental in improving the attractiveness of the EU as the place to pursue a career in research. However, it is important not to underestimate the costs of implementing them. Joke finished by raising an important question. The volume of research activity in many industrial sectors is fairly stable: in meeting the Lisbon aims, who is going to stimulate and finance the targeted growth?

Questions and Answers

Ian's presentation raised a question of the status of the researcher: surely the prestige counts for something? Prestige is obviously an important element going into research or being an academic, but there is still at a minimum level of acceptability in terms of salary and working conditions that must be provided.

The issue of brain drain from East Europe was raised by a Romanian researcher. Why should I have to move to another country in order to achieve acceptable conditions and what about the impact on my country? Ian suggested "a move to place that will support your genius, and then return in order to help create a level playing field".

Following a further discussion on the costs and benefits of mobility, Joke highlighted that for companies, supporting mobility within EU has a very high cost compared to outside the European Union, especially the USA and China.

Summary of workshops, conclusions and recommendations

The rapporteurs from the six workshop sessions reported back to the conference on the potential gains, obstacles, good practice and most importantly, recommendations, actions and next steps in implementing the Charter and Code.

Workshop A: The impact of funding mechanisms on applying the Charter and the Code

Chair: **Georges Bingen**,
European Commission

Speakers: **Iain Cameron**,
Research Councils UK and
Christoph Ramoser,
Austrian Federal Ministry of Education,
Science and Culture, Austria

Rapporteur: **Susana Borrás**,
Roskilde University, Denmark

This workshop explored the issue of the impact of funding mechanisms on applying the Charter and the Code. The participants discussed the question of how the Charter and Code can be best used to mainstream professional development and working and training conditions, particularly within conditions of grant. In doing so they identified some areas of good practice and recommendations.

The issue was considered controversial due to a huge diversity of traditions and national systems in Europe. The differences not only exist across borders but also within countries. Even though institutions, employers and funders are working within the same legal framework, the structures linking funding and working conditions for researchers can be very different. Nevertheless, this workshop concluded that there is a minimum level of conditions that should be fulfilled. It was agreed that this is where the Charter and Code comes in, as the principles of it seem to be beneficial to the development of the European Research area.

The workshop identified some examples of best practices, from industry and academia, of linking funding to working conditions for researchers. For example, Philips is very aware of the need to address career management in its funding strategy. In Finland, the new Parliament is debating a proposal that all PhDs, no matter where they come from and who is funding them, should pay taxes and receive full social security including full participation in public pension schemes. It was noted that in Norway, PhD students already have access to full social security and pension rights, whether they are funded by universities, research council, charity or industry. And finally, in the UK, a scheme called 'University Awards' run by the Wellcome Trust allows universities to attract strategically important research staff, including research technologists and analysts, by providing support for an individual for up to five years, leading to either a permanent post or guaranteed support for at least a further five years.

"Use the Charter and Code to change culture, not necessarily as an obligation but as an inspiration"

This workshop's recommendations were:

- to use the Charter and Code to change culture, not necessarily as an obligation but as an inspiration.
- the funding should be linked to a minimum level of principles endorsed in the Charter and Code, in particular:
 - ▶ transparency in recruitment procedures;
 - ▶ minimum social security coverage including health, accident coverage and maternity leave.
 - ▶ to make available more funds or to exploit complementary funding sources with the intention of upgrading researchers careers, for example:
 - ▶ from stipend to an employment contract
 - ▶ extend duration of stipend/contract
- funded organisations provide a publicly available description of how they implement the Charter and Code.

Workshop B: Researchers as professionals - achieving the vision

Chair: **Daniela Corda**,
Consorzio Mario Negri Sud, Italy

Speakers: **Jasmin Buco**, Eurodoc, Bosnia and France and
Jürgen Enders, Centre for Higher Education Policy Studies, The Netherlands

Rapporteur: **Eva Egron-Polak**,
International Association of Universities

This workshop explored the issue of the researchers as professionals. The participants discussed the question of the benefits to researchers and research of treating all researchers as professionals, in particular whether there were any obstacles to be tackled. In doing so they identified some areas of good practice and recommendations.

The workshop participants agreed that the slogan "One profession multiple careers" actually hides a multitude of visions, of what it is to be a scientist or a researcher. There isn't a single vision of a researcher, which is part of the problem of achieving a vision of the profession. There is a lack of recognition, which goes with a lack of esteem and status and poor working conditions, especially in the early stages of a research career. Fragmentation is a problem, between disciplines, career structures and sectors. Scientists or biologists for example rarely define themselves as researchers as well. The diversity of career structures between countries is another major obstacle in perceiving researchers (and researchers perceiving themselves) in a unified way. There is mutual distrust between academia and industry, and this needs to change. It was underlined in our workshop that of 250 people attending the conference only four or five were actually from the industry, which shows an apparent lack of interest in the Charter and Code. There was much discussion about the public perception of a researcher or scientist, and it became apparent that there was a general disregard for the contributions made by social scientists. The workshop also concluded that student perception of research career is that it is less exciting and carried out in isolation. It was felt that career assessment and evaluation is too one-dimensional, focusing on research outputs rather than reflective of all aspects of the job.

Our recommendations are to better position research careers within the knowledge society, to improve the understanding and offer more clarity of what research career structures may look like. To do this, we need to push for an ISO¹⁸ category for researchers. We also recommend the development of a European careers structure framework, to make comparisons of mobility and transparency possible. We need to develop and implement proper training and offer incentives for supervision of young researchers, and we need to have common standards. We need to encourage and ensure that all staff in

academia perceives researchers as professionals, starting from young researchers. We need to base career progression of researchers on the assessment of research process rather than on scientific output. Finally, we need to promote research careers at the earliest stage.

"The slogan 'one profession multiple careers' hides a multiplicity of visions of the scientist and/or researcher within the research community itself"

This workshop's recommendations were that there's a need to:

- reconnect and better position a research career in the innovation system, in a knowledge society full of highly qualified people
- improve understanding and offer more clarity to the research career structures, starting with ISO categories for researchers
- develop a European career structure framework which is descriptive in terms of competencies and missions at each stage of a career
- develop and implement proper training and offer incentives for supervision of young researchers, according to defined standards
- encourage and ensure that staff within academe perceives and treat researchers as professionals at all stages of their career. This includes provision of adequate material conditions and social rights for the researchers
- base career progression on assessment of research processes, rather than exclusively scientific output, recognise need for and value of transferable/additional skills
- promote research careers by increasing interest and quality of science teaching, starting in primary school and underline the need for developing critical thinking.

¹⁸ ISO International Organization for Standardization
<http://www.iso.org/iso/en/ISOOnline.frontpage>

Workshop C: The Fixed Term Directive and the Charter and Code – exploring the whole picture

Chair: **Jean-Patrick Connerade**,
Imperial College London and Euroscience

Speakers: **Jens Vraa-Jensen**,
Dansk Magisterforening, Denmark
and Education International and
Massimo Serpieri,
European Commission

Rapporteur: **Conor O'Carroll**,
Irish Universities Association, Ireland

This workshop explored the links between the Fixed Term Directive and the Charter and Code. The participants discussed the potential synergies between the Fixed Term Directive and the Charter and Code, and how it is possible to build on these synergies to benefit researchers career development. In doing so they identified some areas of good practice and recommendations.

In discussions this workshop came to several conclusions.

Firstly that it was important to make the distinction between the fact that implementation is voluntary in the case of the Charter and Code and compulsory in the case of the Fixed Term Directive. It was felt that so far the FTD has been used as a blunt instrument, but it could be applied to benefit research careers. The principles and flexibility of the Charter are really useful and compulsory application should be avoided. The workshop concluded that complementarity can be found between the two instruments in their implementation. For example the FTD ensures that researchers on fixed term contracts have equal conditions to permanent staff, and this is also a strong message in the Charter and Code.

“Institutions should build on the complementarities of the Fixed Term Directive and Charter and Code to enhance research career paths”

And finally, it was concluded that the Charter and Code should be clearly written as a booklet that can be distributed especially to all stakeholders, especially early stage researchers.

This workshop identified some areas of good practice at different levels. For example, it was noted that the Lithuanian government recently issued a decision on minimal conditions for contract researchers and has included the European Charter in national law. In terms of working conditions and support, AXA & Fondation Kastler in France was cited an example of good practice as they have a special agreement to give social security coverage to Third Country researchers. And finally in Ireland the implementation of the FTD means that postdoctoral researchers now have full social security coverage including pensions.

This workshop also identified some areas of poor practice that hopefully the Charter and Code will go some way to addressing. This included the situation in Germany where an academic who has been on fixed term contracts has a maximum of 12 years in which to find a permanent position, after which they have to leave academia. It was felt by some that the implementation of the FTD within institutions is based on risk minimisation and that funding agencies and government are not always recognising their responsibilities. For example, in the UK the necessary redundancy payments to contract researchers as part of the FTD implementation can have the effect of penalising researchers by forcing them to use research funds to foot the bill.

This workshop's recommendations were that:

- institutions should sign up to the Charter with a visible statement as part of their branding
- there should be appropriate monitoring
- institutions should build on the complementarities of the Fixed Term Directive and Charter and Code to enhance research career paths, particularly with career guidance
- the European Commission should investigate a new system whereby during short term stays accumulated money and is invested in a pension fund in your final destination
- address the fact that research funding mechanisms mitigate against research careers by lack of continuity.

Workshop D: How can the Charter and Code support appraisal for mobility?

Chair: **Daphne Van de Sande**,
Agency for the Promotion of European Research (APRE)

Speakers: **Sigi Gruber**,
European Commission and Pascale Depré, European Space Agency

Rapporteur: **Dagmar M. Meyer**,
University of Göttingen, Germany and Marie Curie Fellowship Association

This workshop explored the issue of whether the Charter and Code can support mobility. The participants discussed the question of how employers/funders can be convinced of the benefits of mobility (geographical and sectoral) and how this could be systematically encouraged and fully recognised in the career development systems. In doing so they identified some areas of good practice and recommendations.

This workshop concluded that mobility is not an end in itself but it is a means on an individual level to professional and personal development, and on a broader level, to contribute to the advancement of Science and Research in Europe. This could be something positive if implemented properly. It is necessary therefore to focus on the greatest possible benefits from it and ensure that mobility is valued. The challenge is how to co-ordinate what is happening on a political level with organisational policies, and how to practically implement it. It was felt that one reason why mobility is not valued is because of the lack of awareness. In economical terms, people should be aware that they can benefit greatly from the people that they hire. If on a macro level, the government and authorities are not even aware that mobility can make a positive contribution to the development of science, then there will be problems on the micro level with institutions and organisations.

The benefits of mobility are often not fully known, due to a lack of follow-up actions. People often move from one place to another and there is no bridging between the different mobility experiences. What people have gained from an experience abroad should be carried over to the next destination, to ensure a real transfer of knowledge. At the institutional level, we have realised that there is a need for a comprehensive Human Resources strategy that has to include a proper appraisal system, which must include recognition for mobility. Mobility should be encouraged and supported but never enforced, and this should be taken into account in an institution's recruitment policy.

This workshop identified some examples of good practice across Europe including the exchange programmes EDF-University of Karlsruhe and EDFCNRS; the Friuli-Venezia Giulia Region mobility grant scheme which is fully in line with principles of Charter and Code of Conduct; the “Money follows people” principle applied by EUROHORCS organisations; the INSERM “Interface contracts”; recent moves by the central government of Spain aligning status of Early Stage Researchers with Charter and Code and finally the Marie Curie European Reintegration Grants¹⁹.

“Mobility is a means to professional and personal development not an end in itself”

This workshop's recommendations were:

- to employers and funders: apply broader assessment criteria, valuing not only past achievements but also people's potential
- to recruitment committees: give special consideration to the intangibles gained through mobility, but not a priori preference to candidates with a mobility record
- to national authorities: offer incentives such as tax relief to encourage intersectoral mobility
- to national/regional authorities: provide greater support to joint PhD programmes and co-tutelles (legislative and financial); allow for new contract models with integrated mobility (e.g. secondment agreements)
- to funding agencies: provide support to follow-up actions after mobility experience to allow for full exploitation of potential benefits
- simplify intersectoral mobility schemes
- to researchers: be proactive!

¹⁹ Marie Curie European Re-integration Grant, see Human Resources and Mobility Work Programme (September 2004)
<http://www.cordis.lu/fp6/mobility.htm>

Workshop E: Sharing best practice in recruitment

Chair: **Ulrike Albrecht**,
Humboldt Foundation, Germany

Speakers: **Jan Taplick**,
EMBO, Germany and
Isabelle Le Nir,
Schlumberger Research, European Technical
Co-ordination, France

Rapporteur: **Alexandre Quintanilha**,
The University of Porto, Portugal and European
Commission's External Advisory Group,
Human Resources and Mobility

This workshop explored sharing best practice in recruitment. The participants discussed the question of how the principles of the Code can contribute to more transparent and open recruitment processes, are there any issues that need to be tackled to ensure the benefits are realised and finally what might hamper adherence to the Code. In doing so they identified some areas of good practice and recommendations.

There was great support for the basic principles of the Charter and Code, and there was a very clear warning that whatever instruments get put into place and whatever mechanisms are developed, we should be aware that this does not increase bureaucracy into the system. It should not make the process of recruitment more complicated and therefore frighten people. The carrot and not the stick should be used if possible. It is important to spread the word more aggressively, to carry the message back to colleagues and our institutions and involve them in the debate. We should allow time for implementation, it is understandable that not all institutions will be capable of implementing the Charter and Code straight away, but that the time should not be too long. It was felt that participants should go home and get people talking about it, analysing what it means socially, economically and in terms of careers.

This workshop identified some examples of good practice. It was clear that the recruitment procedures of Schlumberger were truly international because they recruit internationally, and an equal proportion of people are hired by the company from each of the five continents. They encourage mobility both geographically and disciplinary, making the point that mobility must be considered across disciplines as well as moving from country to country. They support and allow for dual careers, such as from management to research. They put much emphasis on the empowerment of people to develop their own careers.

EMBO demonstrates good practice in its evaluation process. The committees that are put together are interdisciplinary and transparent in the sense that feedback is provided to the various applicants. Merit is judged by many parameters, not solely on publication records.

"We need to spread the word more aggressively"

This workshop's recommendations were:

- specify clear timetable for implementation
- develop 'metrics' for implementation
- expect a carrot for implementation
- recognise the need for culture change
- take responsibility for introducing change
- do not underestimate the value of networking
- use clear, transparent and manifold criteria.

Workshop F: Spreading the word - empowering researchers to own their future

Chair: **Argyroula Sigala**,
National Hellenic Research Foundation, Greece

Speakers: **Mary Ritter**,
Imperial College London, UK and
Carolina Cañibano,
Universidad Rey Juan Carlos, Spain

Rapporteur: **Katarina Kostalova**,
Slovak Academic Information Agency (SAIA N.O.), Slovakia

This workshop explored the issue of spreading the word to empower researchers to own their future. The participants discussed the question of how awareness about the existence of the Charter and Code be better promulgated, and how could researchers become more engaged in the uptake of these initiatives. In doing so they identified some areas of good practice and recommendations.

The message for spreading the word will depend on the country, the environment and the target groups. In Europe, there are big differences between our countries and we must respect this. There is no short-term solution, as a culture change is needed and we need to focus on creating new culture or strengthening our existing one if it is in line with the strategy. Beyond the dissemination of the information, we need to endorse the Charter and Code. We need to persuade senior staff to play a supportive role with regards to the Charter and Code for it to be taken seriously. It will eventually contribute to a better research environment for researchers. It is also important not to raise false expectations. It is clear that we want to make a difference, therefore the people that can make a difference should be involved.

The workshop discussed an example of good practice at Imperial College, demonstrated through the transferable skills training that they offer. It was underlined that it must be a two-way collaborative process between doctoral researchers and supervising senior staff. A supervisor appraisal system must be in place. Another example was provided from the NGO environment. It was felt that initiatives for good practice and sharing information are very important, for example UK HERD with its newly created platform for postdoctoral researchers or UK GRAD with its network of institutionally-located Hubs. From the business environment, Philips has shown good practice, with very similar policies in place as the Charter and Code. It was agreed that the empowerment of people is very important and that transparent processes guarantee results and a stable future.

"Researchers should take their future into their hands"

This workshop's recommendations were:

- key to empowering is to know strengths and weaknesses which is impossible without interaction and usage of different routes
- empowerment means to have access to quality development and communication processes within our own institutions
- empowering researchers has to be a two-way process - EC, national governments and institutions need gather researchers input and feedback
- we have to sell advantages of the Charter and the Code to governments, funders and employers, so they are taken seriously; machinery needs to be put into place at least, thus existing barriers will be made public and resolved sooner or later
- more earmarked money from European and national funders in the research system are needed in order to guarantee skills and careers development; research grants should not be awarded to those institutions that do not treat researchers properly
- researchers should take their future into their hands and they need to be involved actively in the implementation processes connected with the Charter and the Code.

Panel session: Where next?

The members of the panel represented a range of stakeholders in the Charter and Code. They responded to the recommendations of the workshops and provided further input from their relative perspectives on how these recommendations can be taken forward and the future impact of the Charter and Code on researcher careers,

Rinaldo Bertolino,
General Representative, Italian Rectors Conference, CRUI

Monique Fouilhoux,
Co-ordinator, Education and Employment Unit, Education International

Gonzalo Leon,
Vice-Rector for Research, Technical University of Madrid Spain

Howard Moore,
Director, Regional Bureau for Science in Europe (ROSTE), UNESCO

Dunja Potocnik,
Research Assistant, Eurodoc Representative, Croatia

Rinaldo Bertolino,
General Representative of the Italian Rectors Conference summarised the implementation process of the Charter and Code in Italy so far. The Italian Rectors' Conference believes that the Charter and Code provides a great opportunity for Universities to become active protagonists in its application process, whilst encouraging social dialogue amongst researchers, stakeholders and society in general. On May 31st 2005 at Trieste, the Italian Rectors' Conference promoted the launch of the European Charter and Code of Conduct at national level. This was followed by a signed declaration of commitment to the values, principles, implementing measures and knowledge of the recommendation by seventy-seven Italian universities. They committed themselves to carry this out in a responsible and respectable manner within their own institutions. The Coordinator of Universities Autonomy (CRUI) guaranteed the follow-up of the local universities' application of the Charter and the Code. The CRUI created nation-wide working groups in the search for common solutions at university level, and will also monitor the progress achieved and keep the Commission informed on the overall application process.

"There's a clear responsibility sharing. Policy implementation would be more likely assured if action at the Community level is accompanied by domestic actors becoming involved in an osmotic process of transnational information sharing, mutual learning and sharing of good practices"

The Italian Rectors' Conference, as an independent body, oversees national legislation on Universities and Research and will continue to follow the Parliament reform on the university professional and legal status on the role of researchers. There is great political uncertainty concerning these topics. In particular, CRUI views the Charter and Code as further support for the CRUI's struggle to promote the recognition of researchers as professionals.

However, besides national and European co-ordination, the positive impacts on research from the application of the Charter and Code rely heavily on local efforts and achievements. The University of Camerino has already created internal working groups to analyse how to adapt the principles and values of these documents to their internal status and regulations. As addressed in workshop A, funding mechanisms are essential when applying the Charter and Code, but Rinaldo added that what would the motivation be for private funders and employers if the European Union does not lead the way?

It is the CRUI's desire that the topics discussed become part of the European Universities Association's agenda. Rinaldo requested a global meeting in order to see what has been done so far with regards to the Commission recommendation of application in the near future. By actively engaging in political decisions, institutions such as Universities and the Rectors' Conference can inform political options and foster European debate. The adoption of the Charter and Code provides an opportunity to enrich the world of policy making to which CRUI and Italian universities are strongly committed.

Monique Fouilhoux,
Co-ordinator of the Education and Employment Unit, Education International

introduced her speech by bring to people's attention some of the conclusions of the recent Trends IV report, which looks at the implementation of the Bologna Process. The report showed that the implementation of the Bologna process has resulted in the priority of the development of new study programmes and education, resulting in less time for research, less control over their working time and decreasing time to pursue their own interests in research.

"We are strong supporters of the proposed European Higher Education Area and European Research Area and we regret that up to now the two processes have been to a large extent developing separately in spite of clear overlaps between the two."

Monique explained how Educational International has been involved in the process of elaboration of the Charter and Code since the beginning, and they have been impressed with the way the process has been conducted. It has not been top-down, but a consensus building work that has developed through questioning, investigating, consulting, listening and confronting ideas with all stakeholders. Monique stated Education International's support for the Charter and Code and for its implementation in the context of each country.

"We are organising specific sessions on the Charter and Code and thinking about a specific brochure"

She mentioned the continually debated topic throughout the conference about the legal status of the Charter and the Code: she believes it should be on a voluntary basis. Education International will do their best to disseminate information in simple, straightforward terms and illustrate the possibility of flexibility and adaptability to the different situations occurring in our countries and institutions. They are committed to disseminate information via members to institutions and across Europe. They will discuss this implementation with all employers. Education International will urge their members to participate in all activities undertaken at national or institutional level. They will lobby and pressure institutions and governments to take action for their implementation.

With respect to the recommendations developed by the workshops, she strongly supports the idea linking funding with application of the Charter and Code. She supports the idea of cultural change with mutual respect and that researchers must be proactive, take their future into their own hands. However, in order for them to do this, they must have exciting choices available to them. Re-evaluation of the academic community is essential, and prestige needs to be linked to financial reward. And finally, Monique added that the Unions across Europe will work together to emphasise the overlaps between the European Higher Education Area and European Research Area processes, and close the perceived gap in Higher Education policy making between teaching and research.

Gonzalo Leon,
Vice-Rector for Research, Technical University of Madrid

started his response by saying that universities come in many different sizes, and have several different functions. Researchers need to be placed at the heart of any university and not considered as a peripheral element.

“All European universities agree today on the fundamental role that human resources play in this game. Neither research activity nor postgraduate teaching can be covered without adequately skilled and motivated staff and students”

Researchers need to become involved, and universities need researchers that are committed, but it is important to change the way that researchers are perceived in the university. The Charter and Code is a good instrument to change this perception. They need to co-exist with civil servants and professors. It is not easy to combine people with different status, rights and obligations but they are all be part of the same institution and must identify themselves as so. This will aid them to move to forward, in terms of the implementation of the Charter and Code. More specific mechanisms need to be identified for the implementation, as the implementation in a University would be very different to the implementation in a private company.

Gonzalo said that it is impossible to apply the Charter and Code without additional funding. It is necessary to decide whether more people are needed in our institutions, or better conditions for the ones that are already there. It is a difficult decision to make, and a commitment needs to be made regionally and nationally otherwise it is not possible to advance. There is a need to transform fixed term contracts, perhaps into permanent contracts. Again, this requires commitment from the funders and also a new way of understanding the structure and composition of faculty members and people in one university. Universities need to have external pressure to inspire change; that it is not enough that institutions are committed to moving forward. However Gonzalo said that the autonomy of Universities has many constraints. We cannot change the salary of professor, we cannot change the amount devoted to fellowships for one person. We need to have clear, joint commitment.

Gonzalo asked that the European Union's next step to be to move towards the implementation of the European Charter and Code. It should help develop comprehensive policy commitment between national, regional and institutional levels. He does not believe that political endorsement alone will work. Continuous support is essential at institutional level, as implementation will require restructuring at faculty levels

Howard Moore,
Director, Regional Bureau for Science in Europe (ROSTE), UNESCO

explained that UNESCO is global intergovernmental organisation and at the moment doesn't have a mandate to support for Europe being competitive in the field of science. As well as European members we have member states including United States, China, and India etc. They are as much a part of UNESCO as our European Member states. UNESCO is in the business of supporting international science and health science systems. UNESCO supports and welcomes the Charter and Code and believes it will lead to an improved science environment and should be used as a model in the rest of world.

UNESCO organised the world conference of science in Budapest and the major document that came from that conference 'Science agenda and framework for action' looked at improvements for recruitment procedures, the need for inter-disciplinarity, professional development, ethics, widening participation in science to include gender issues etc. Those issues are also picked up to in this Charter and Code and UNESCO are happy that this is the case.

The UNESCO conference also called for a 'Code of Conduct' on the part of scientists. Next month the member states of UNESCO will examine a feasibility study on the creation of an international code of conduct for scientists. It is hoped that there will be a balance between entitlements and responsibilities with regard to science. He commented how people have been talking about the possibility of having 25 member states and beyond. UNESCO is concerned with the contribution of those countries that are currently outside the European Union. Howard's office has a role for Central and Eastern Europe, and increasingly science in South East Europe. His office is involved in capacity building, supporting, networking and collaborative work in science. The countries of South East Europe share some common problems to a greater or lesser extent – low investment in science, inadequate infrastructure in terms of research equipment; libraries, low industrial base and therefore very limited private sector involvement in science, and those issues lead to the chronic brain drain.

Howard's office has attempted to address the issues of gender in science, brain drain and mobility in SE Europe. UNESCO has worked with many other organisations to address mobility and feel that UNESCO has a real role to play in disseminating the European Charter and Code.

“We can play an advocacy role in expressing the aims and objectives in the Charter and Code and moving them in to South East Europe.”

UNESCO will organise an event in the coming months to carry the message of this conference to those in SE Europe because their scientists are also of crucial importance to the future of science.

Dunja Potocnik,
Research Assistant and Representative of Eurodoc,
 opened her speech by explaining the aim of Eurodoc. It was set up in 2001 to represent doctoral candidates and junior researchers at European level in matters of education and professional development. There are around 500,000 young researchers in Europe who are trying to organise the next step of their career. Eurodoc has 21 regular member countries and 6 observer countries with the potential for changing and implementing guidelines to build up a knowledge society.

Dunja felt that there is no single measure to aid the implementation of the Charter and the Code. The essential incentives are reflected in the Open Method of Co-ordination, peer pressure and benchmarking. There is also a need to establish a follow-up group to assess and monitor implementation. There needs to be means of gathering evidence of how countries achieve good practice. The second group of initiatives are initiatives for grass roots awareness or empowerment. She said that what is needed, first and foremost, is to inform young researchers about the Charter and Code recommendations. The next step is to set up a network of local advisers to institutions on how to apply the Charter and Code. Additionally, our young researchers should be more involved in local and national consultation processes over this implementation.

Dunja highlighted how it is necessary to ensure transparent financial policy that enhances the quality of programmes, projects and working conditions and encouraging more young people to embark on careers in research and development. In the context of the expectations and future impacts of the Charter and Code, the operational goals stated in the Lisbon agenda require a powerful, committed and convincing strategy.

“Talking about expectations and future impacts of the Charter and Code, the operational goals stated in the Lisbon agenda and the Charter and Code require a powerful, committed and convincing strategy. That way we might have a chance to meet the challenge.”

Dunja then talked about the ideal impacts of the Charter and Code. The first one is the transferability and the guarantee of a minimum level of commercial and social rights such as social security, pensions and parental leave. These should go some way to removing obstacles for choosing a career with mobility. She added that Eurodoc is currently doing some work on this very topic. The second impact is the advancement of ethical and practical aspects of research, such as the development of accountability of quality assurance, improvement of research quality through more contract relationships; in other words recognising young researchers as professionals. Finally, if the Charter and Code is to be implemented in the right spirit, young researchers should be viewed as stakeholders in the higher education researcher community.

“If you want the Charter and Code to be implemented in the right spirit, the established structure should promote the enrolment of young researchers as stakeholders in higher education researcher community.”

Dunja mentioned Eurodoc's recommendations that the diversity of the scientific community should be represented in the European Research Council and in particular young researchers should be included.

Dunja stressed that it was important to avoid ad hoc and short-term measures and to think about efficiency. One of the easiest ways to meet efficiency in this regard is within a structured human resources strategy. One way to gain this is through conversion of vertical to more horizontal systems of decision making and implementation. This way we can assure employability of early stage researchers' creativity and transparency at all levels of decision making and implementation process.

Response from the European Commission and the UK Presidency

Raffaele Liberali,
Director for the Human Factor, Mobility and Marie Curie activities at the Directorate General for Research, European Commission

Raffaele introduced his speech by thanking all the participants for their contribution and the conference organisers for the great work they had completed in order to ensure the conference was so successful.

He was particularly pleased to hear that his concerns have been reflected in those raised during the conference. He acknowledges the concern about the need for minimum social security coverage to be available for all researchers, no matter where they are in their career. He cited an example of a fellowship letter he read recently, which said that if the fellow was to become ill or pregnant, then the fellowship would be terminated. He felt this situation was totally unacceptable and he hoped never to hear of such conditions again. He liked the message that it is important to develop a career structure for researchers, the suggestion of developing a European framework as well as the idea of introducing research as a profession in the ISO categorisation. He welcomed the recommendations on the need to have broader career evaluation criteria that do not solely focus on scientific output, and the need therefore to valorise transferable skills. He believes it is important and appropriate to ensure that there is a non-bureaucratic monitoring process, and that the carrot rather than the stick should be used, though he did make the point that sometimes sticks are needed to get things done. He advised participants that any implementation timetable must take into account the need for a cultural change. He believes the cultural change is everyone's concern, as repeated by many of the participants throughout the conference. The Commission can help create the framework for discussions, but the real work has to be done at a local level, by government, funding agencies, research organisations and researchers themselves. Researchers have to take their future in their own hands.

It is clear that there is a role for industry in all this. The question is how to increase the involvement of industry in training and career development of researchers. There are many differences between the two sectors in terms of their respective situations. However, it should not stop dialogue, and it is necessary to work together on this.

“In the past scientific outputs were most important: human resources were not so important. The real challenge is that we now have to integrate our human resources strategies.”

Raffaele also said that work does need to be done if an integrated human resources strategy is to become a reality at the European level. In the past, scientific output was considered the most important, if not only, element of European research policy, with the role of human resources as its basis ignored. However, it is clear from discussions over the last two days that human resources is no longer the forgotten element of European research policy.

The discussions and conclusions drawn from the last two days are important. It is also important that these are followed up. From the Commission's perspective, it will analyse and build on the conclusions, looking at what actions need to be taken and develop these into a concrete proposal. Raffaele then outlined four actions that he proposes the Commission will pursue over the coming winter: the Steering group will review the conclusions and develop some concrete proposals to take forward. He would like to ensure that there is also an opportunity for all the stakeholders to participate in this process, and look at ways of doing this. He would like to organise another conference or workshop under the Austrian presidency to review the progress that has been made.

Response from the European Commission and the UK Presidency

Anthony Whitehead,
Director, Science and Society, Office of Science and Technology, Department of Trade and Industry, UK

Tony introduced his speech by saying he was grateful to be able to give a few closing remarks on behalf of the UK Presidency. He said it had clearly been a very successful event. He noted that during the last 2 days the practicalities of embedding the Charter and Code had been explored and that all the participants had worked very hard to produce some recommendations as to how this can be achieved. He reminded us of Lord Sainsbury's remarks the previous day, that this conference has come at an important time for the UK, and he considers the implementation of the Charter and Code to be a high priority. The UK are pleased that they have been able to contribute to the development of the Charter and Code and we intend to play a significant role in their implementation. He emphasised that the UK will maintain a strong involvement in the work in this area through its representative (Iain Cameron) on the Steering Group on Human Resources and Mobility, which will be overseeing the embedding of the Charter and Code.

He said that from the conversations he had had that morning it is clear that participants feel that this conference has achieved the goals of being an important milestone in making Europe more competitive, but that we are all aware that important cultural changes are necessary to implement the Charter and Code. He said it was clear that following the thought-provoking presentations yesterday the conference has successfully developed recommendations for the embedding of the Charter and Code. It is apparent that the views expressed from stakeholders in the panel session this morning that they have a very positive view of the outcomes of the conference – as indeed did Raffaele Liberali in his closing comments.

He said that it is critical for successful implementation for all participants to maintain the momentum created by this conference. He said that it should not, must not and will not end here, the onus is on all of us to ensure that the messages and actions agreed here are disseminated throughout the whole of Europe.

“The Charter and Code is...a continuation of journey and not a destination in its own right.”

He said that all should ensure that both young and old across Europe are aware of the Charter and Code and recommendations of the conference. To do this, he urged everyone to go back to their countries, and to disseminate these messages through everyone's networks.

“Passive dissemination is not effective and one needs to be persistent and opportunistic to get the message across.”

He highlighted Joke Driessen's point that the considerable efforts needed for successful implementation should not be underestimated. Iain Halliday mentioned the barrier between writing something down and making it happen and noted the requirement for political leadership. Tony agreed that there is a requirement for this sort of pull – but the prospects of success will be much improved by significant push from both the researchers themselves and their employers in universities and businesses. So there is a role for everyone in making things happen, for example, in addressing the concerns raised by the Researchers as Professionals working group about the lack of recognition and status of researchers. Also everyone can do something to address the perception that research careers are dull.

Tony identified another key dimension: that of the range of softer cultural issues, such as the impact of attitudes to career breaks on workforce diversity – and the impact of the combination of prestige, personal responsibility and salary on career choices. In fact he argues that these are actually the hard issues and tackling them effectively present us all with some of our biggest challenges. As an additional point, the other significant cultural challenge is to see this as a European enterprise and not a national enterprise.

He said that embedding the Charter and Code as vehicles for bringing cultural change was a strong message from the conference discussions. He endorsed the suggestion of the Funding Mechanisms workshop that we should see the Charter and Code as vehicles for bringing about the necessary culture change.

Tony said that the UK will help with this through the outputs of this conference. There will be a report of the proceedings of the conference, which will be made available for all participants and which will be disseminated to all stakeholders throughout Europe through all our collective networks.

He finished by thanking the hard work of all those who made this such a successful event – Janet, Ellen, Louise, Hannah and all in the UK GRAD team, Iain Cameron from the Research Councils UK, Sigi Gruber from the European Commission and his colleague Jo Watts in OST. And, last but not least, he thanked the participants for their contribution and wished them well in their work to spread the messages from the conference.

The European **Charter** for Researchers and the **Code** of Conduct for their Recruitment

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admin@grad.ac.uk



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