ERAC Mutual Learning Workshop on Human Resources and Mobility

Brussels, 26th March 2014

<u>Final Report by the Expert group</u>

<u>Expert Group</u>

Iain Cameron, Research Councils UK

Hugo Horta, Technical University of Lisbon

Karen Vandevelde, Ghent University

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1. INTRODUCTION

Mutual Learning Seminars have been held by ERAC between 2011 and 2013 on Research and Innovation Policies and have been perceived as successful. In particular the 2013 ERAC Mutual Learning Seminar[1] proved to be a unique occasion to exchange views on recent policy developments and planned policy reforms across the EU. In the note from 17 April 2013[2] Clara de la Torre expressed her belief that there was room for organising a limited number of dedicated workshops to address specific policy issues identified during the European Semester. In the context of the Innovation Union she mentioned two such candidate issues for ad-hoc workshops for the end of 2013 or the beginning of 2014: the first one related to the IU commitment n°17 and the second one linked to the IU commitment n°1. This idea was unanimously approved by the ERAC delegates at the 14th plenary meeting on 19 April 2013. As a result of this, ERAC included the workshop dedicated to the national strategies put in place to train enough researchers to meet national R&D targets and to promote attractive employment conditions (IU Commitment n°1) in their work programme for February/March 2014.

2014 Mutual Learning Workshop

The workshop organised on 26th March 2014 brought together the topics of 'open, merit-based and transparent recruitment' and 'intersectoral mobility'. The shared concern linking these topics is to maximise the value of the European investment in talent and grant the best researchers the best opportunities to establish rewarding and effective careers inside and outside academia.

The workshop aimed to give Member State participants a valuable insight into each other's policy challenges regarding Innovation Union Commitment n°1, which relates to training enough researchers to meet their respective R&D targets and to promote attractive employment conditions. The key aim of this commitment is to ensure that the EU has a sufficient supply of highly qualified workers, who should be offered attractive careers and easy mobility across sectors and countries; otherwise innovative investments and talent will move elsewhere[3]. These specific aims were reinforced in the 2012 EC Communication 'A Reinforced European Research Area Partnership for Excellence and Growth'[4] which invited stakeholder organisations to "Fill research positions according to open, transparent and merit based recruitment procedures proportionate to the level of the position in line with the basic principles of the Charter & Code and including non-EU nationals" and to "Develop and implement structured programmes to increase mobility between industry and academia".

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[1] http://www.consilium.europa.eu/policies/era/erac/erac-mutual-learning-seminars-2013

[2] Ref. Ares(2013)722452 - 18/04/2013

[3] http://ec.europa.eu/research/innovation-union/pdf/innovation-union-communication_en.pdf#view=fit&pagemode=none page 8

[4] http://ec.europa.eu/euraxess/pdf/research_policies/era-communication_en.pdf page 11

Workshop structure

The overall structure of the one-day workshop was based on two sessions covering each of two issues followed by an open discussion in which all attendees participated. The composition of the workshop was intended to be restricted to one participant per Member State, as well as Iceland, Switzerland and Norway. This resulted in 30 attendees from 20 countries and three European organisations[5]. An attendee list is annexed to this report. Each participant was expected to contribute a short paper, before the workshop, based on a questionnaire developed by the expert group. This input was intended to be based on national policy strategies related to the two topics mentioned above. The questionnaire responses formed a significant input to papers on the two topics each of which contained a summary of the questionnaire results and which were circulated to attendees prior to the meeting. A summary of the results was also presented at the meeting. During the workshop participants had the opportunity to gain a valuable insight into each other's policy challenges and policy responses. Following the workshop the pre-meeting discussion papers were updated to accommodate the discussion and to include recommendations agreed by the expert group.

The first session covered open, merit-based and transparent recruitment[6]. As the implementation of open recruitment varies greatly among Member States, this was a valuable discussion from which participants were able to gain constructive input from each other's experiences. The second session covered researcher mobility between academia and industry and other sectors of employment[7]. Europe has relatively few researchers employed in industry compared with major competitors such as the US, China and Japan, although the number of PhD students is rising. However, many doctoral candidates do not appear to receive the right doctoral training in order to be adaptable to changing labour market demands.

The workshop took the form of a managed discussion - structured to maximise the input of attendees. During the first session 'The issues at stake' as part of introducing each topic the two experts included pre-arranged structured interventions addressing specific aspects. This was purposely designed to encourage participation by the attendees. Attendees were encouraged to discuss issues over lunch. During the afternoon 'Looking forward' session the attendees were divided into two breakout groups of approximately 15. Each group addressed both topics sequentially with the experts switching groups midway through the session.

The overall level of engagement by attendees was high and this can be attributed to the use of the questionnaire to raise issues in advance, the structured participation of selected attendees during the keynote presentations and the fact that attendees were well briefed and willing to participate in open discussion.

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[5] Note that transport issues prevented the planned attendance by German representatives.
[6] Note throughout the text the term 'Open Recruitment' is used as a shorthand title for this topic
[7] Although the term industry may sometimes be used as shorthand it should be understood as industry and other sectors of employment
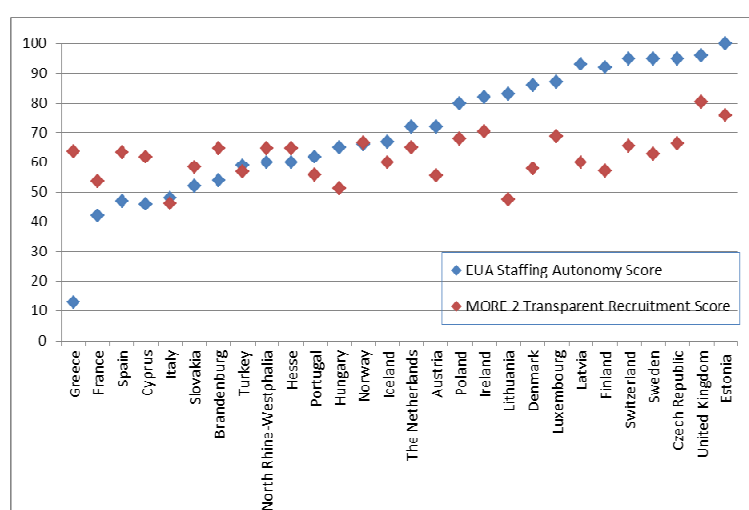
Open, merit-based and transparent recruitment

A specific aspect of **open, merit-based and transparent recruitment** is that it ensures that research performers are able to select the best researchers from the widest possible pool of talents, thereby fostering mobility. The implementation of open recruitment varies greatly among EU Member States. Several initiatives such as posting jobs on EURAXESS, involvement in the HR Excellence in Research logo and national and institutional efforts have helped to improve transparency in recruitment practices.

However, the 2013 EU Researchers' Report quotes the MORE2 survey finding that "60% of EU researchers on average are satisfied with the extent to which research job vacancies are advertised externally by their institutions". The implication is that the remaining 40% may be dissatisfied. This average masks significant differences between countries ranging from around 30% to 80% satisfaction that recruitment was open. This figure, taken from the MORE2 survey, shows the proportion of researchers in each country surveyed who believed that recruitment at their institution was open. These results were mirrored in responses to questions on whether recruitment was merit-based or transparent.
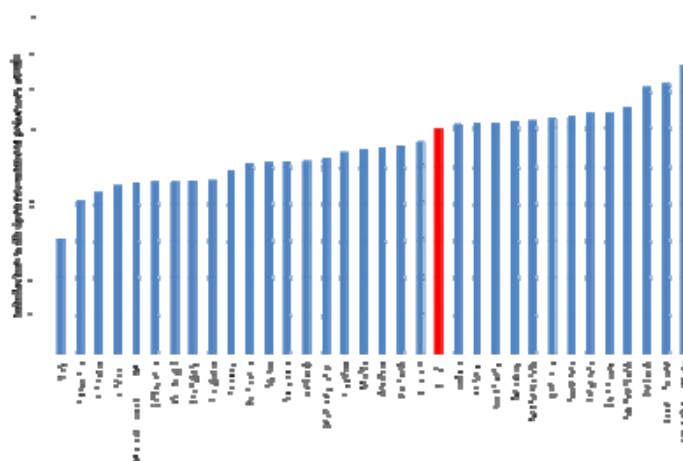
The relative autonomy of Universities is a factor which might be expected to be related to the level of open recruitment in a country. This issue is discussed in more detail in the report on Open Recruitment but it is possible to compare the Staffing autonomy score taken from Annex 5 to the report University Autonomy in Europe II - The Scorecard (EUA 2011)[8] with the percentage of researchers who believe that recruitment was open at their institution. The figure shows the lack of direct correlation between the two measures indicating that there is not a simple relationship between the two.

Intersectoral mobility

With regard to the strategies in the second session, Europe has to encourage more **intersectoral mobility** between academia and industry in order to intensify its knowledge economy. Europe has relatively few researchers employed in business, making up only 45% (710 000) of total researchers compared with 78% (1 150 000) in the US, 74% (500 000) in Japan and 62% (940 000) in China. At the same time Europe continues to train an increasing number of PhD candidates.

Figure 4: Researchers (Full Time Equivalent) working in the business and public sectors (in million), EU-27, US, China, Japan, 2010
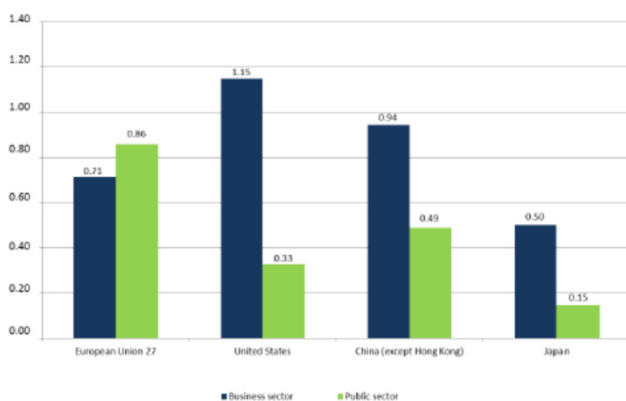
Source: Deloitte
Data: Eurostat

The figure (left) is taken from the 2013 Researchers' Report (prepared by Deloitte for DG Research and Innovation[9]). Figure 4 from the report illustrates the difference between the share of researchers employed in 2010 in the business sector of the EU-27 and other major economies.

Figure 7 (right) taken from the same Researchers Report shows the wide variation in the proportion of researchers in the business sector between European countries.

Figure 7: Researchers in the business sector (Full Time Equivalent) per thousand labour force, Europe, 2000 and 2010
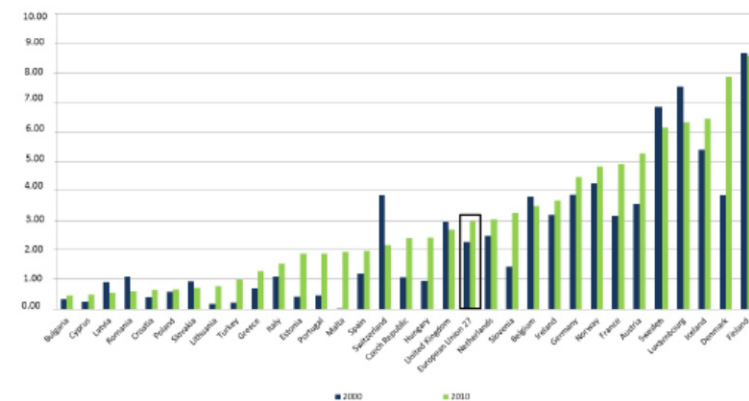
Source: Deloitte
Data: Eurostat
*No information available for BiH, FYROM, IL, LI, ME and SR

Although the nature of doctoral training is diversifying and the majority of graduates embark on careers outside of academia, many are ill-prepared for the labour market, and recruiters are

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[9]http://ec.europa.eu/euraxess/pdf/research_policies/20130911_Researchers%20Report%202013_FINAL%20REPORT.pdf

often ill-prepared to appreciate doctoral graduates' skills. Evidence shows that EU-wide, only 4% of PhD candidates have experience of working in private industry during their PhD[10]. Moreover, only one in ten early-stage researchers (R1 and R2 of the European Framework for Research Careers[11]) reported receiving training in entrepreneurship or intellectual property rights during their PhD[12].

Following the workshop the pre-meeting discussion papers were updated to accommodate the discussion and to include recommendations agreed by the expert group. The following sections of the report summarise the salient points, key issues of discussion and recommendations regarding the two topics.

2 OPEN, MERIT-BASED AND TRANSPARENT RECRUITMENT

Background

A background paper presented by Hugo Horta outlined the main issues with respect to open, merit-based and transparent recruitment with specific reference to the Commission's July 2010 Communication 'Europe 2020 Flagship Initiative Innovation Union' and the 2012 MORE 2 survey.

Specifically the paper reports findings of the specialized and grey literature concerning researcher recruitment in the European Research Area, in academic and public sectors of R&D activity. This is followed by the overall results of the mutual learning seminar. The paper results are informed by the seminar discussion and by a pre-seminar questionnaire directed to and answered by the participating member states in the workshop. It was anticipated that the results could provide new paths for furthering the analysis of open, merit-based, transparent recruitment in Europe.

Perceptions of open, merit-based, transparent recruitment in Europe

Recruitment procedures at European universities characterized as open, transparent, and merit-based are understood as a prerequisite for the realization of the European Research Area (ERA). Open competition enables hiring of the best researchers, at all career stages and fosters effective geographical mobility. It also has the potential to match supply and demand across Europe.

A key issue of perception is that whilst policymakers generally understand the recruitment systems in place to be fair and transparent, a substantial share of researchers do not perceive

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[10] Researchers' Report 2013, page 97. Data from MORE2 study.
[11] http://ec.europa.eu/euraxess/pdf/research_policies/Towards_a_European_Framework_for_Research_Careers_final.pdf
[12] MORE2 final report, page 33. http://ec.europa.eu/euraxess/pdf/research_policies/more2/Final%20report.pdf

it as such thus potentially acting as a major disincentive to start or remain in a research career. Although significant, some caution is required when dealing with this discrepancy since it is one of "perceived understandings" of the same phenomenon.

The results from the MORE2 survey demonstrate strong country specificity in levels of satisfaction with open recruitment. Additionally those in the early career researcher stages are most dissatisfied with the openness and transparency of their recruitment and female researchers show lower levels of satisfaction than males. Some care in interpretation is needed as perception that there is a problem, whilst important, does not necessarily equate to a real problem. Also by definition those surveyed had been successfully recruited and the views of those not recruited are likely to be different.

Benefits and barriers to open recruitment

The observed perception discrepancy concerning open recruitment may be intrinsic to HE systems and more related to the dynamics of scientific and academic institutions than to national norms.

The benefits associated with open recruitment are known however the downside is that it requires substantial resources dedicated to advertisement and can be lengthy. However, for highly internationalized scientific and higher education systems open recruitment, is critical to engage in the global war for talented researchers and scientific performance.

Countries which are developing their scientific and higher education systems tend to be more conservative and the adoption of open recruitment (especially at international level) may take longer and require stronger stimulus and incentives.

Closed recruitment typically gives priority to current employees/students and some positions may be pre-approved for internal recruits. It reduces substantially risks associated with the hiring process (the skills and abilities of the person to be hired are known) however, it limits the pool of applicants and is a known barrier to researcher and academic mobility both nationally and internationally.

Closed recruitment can be associated with academic inbreeding, nepotism and parochialism. It is known to be detrimental to the research and academic endeavours of institutions and the development of scientific systems. Recent studies suggest this practice is diminishing due to research competitive frameworks and public policies fostering the internationalization of researchers and universities.

Questions posed in this section include:

- How can the design and implementation of open, merit-based, transparent recruitment be understood in the long term?
- Are closed recruitment practices necessarily at odds with open/external recruitment practices?
- To what extent can national level policies influence the effective implementation of open, merit-based, transparent recruitment practices in universities and research institutes?
- Can public policies contribute to diminish recruitment practices such as academic inbreeding, and others associated to nepotism and parochialism?
- Are competitive research funding and internationalization policies a possible solution?
- Would a toolkit or good practice guide for open recruitment be beneficial?

Policies in place, good practices and recent changes to foster open recruitment: Results of a questionnaire

The questionnaire (Annex 2) focused on two critical issues: 1) assessment of open, merit-based, transparent recruitment in the various countries as perceived by the respondents, and 2) the identification of good practices and recent changes in terms of policy and incentives to facilitate or encourage open recruitment.

<u>Assessment of open, merit-based, transparent recruitment in the various countries as perceived by the respondents</u>

The major findings of the questionnaire align with the general perception of policymakers found in previous exercises. There was an overall agreement; that universities have a publicly available and open recruitment policy in place; that job specificities are included in the job ads, and that these include clearly defined working arrangements, standards, and transparent procedures for appointment; and that appointment decisions are primarily based on excellence and merit.

Some major barriers to the establishment of an open, merit-based, transparent recruitment were also identified, namely regarding language, burden of application, and the ability to reach the best possible candidates.

In particular language seems to be problematic. Only a few countries asserted that this was not an issue and some identified language restrictions as a major barrier to select and hire the best applicants. The main issue of language is associated to the practice of teaching; however, it also seems to be problematic in terms of international advertisement of vacancies. In some countries not all universities publish vacancies in English; and in others, documents provided by applicants to specific positions may need to be translated into the national language, or filled in the national language.

A few countries suggested that **the application process can be burdensome**. Efforts to simplify recruitment procedures include addressing barriers such as: special forms to present CVs; problems for overseas candidates in relation to documents to ensure the identity, qualifications, and level of the candidates; and requirements to have a bank account in the

host country. It may be however that the understanding of burdensome seems to have been somewhat undervalued [overrated] by the respondents.

Most countries believe the **advertisements are reaching the best possible applicants** to the job, although a few countries consider that this happens only in some cases. There seems to be a strong belief that wider advertisement of vacancies is a strong predictor in attracting the best possible applicants for the job.

A number of minor issues identified included: that although recruitment procedures were stated to be transparent from application to selection, a few countries suggest that this only happens in some cases or regarding some positions; although the composition of the jury/evaluating committee/hiring committee is often made available to the applicant, either systematically or upon request some other countries report that this is only done in some cases.

A widespread promising development reported is that a substantial number of countries reported their universities are changing recruitment practices towards more open recruitment practices.

<u>Identification of good practices and recent changes in terms of policy and incentives to facilitate or encourage open recruitment</u>

Most countries reported implementing good practices concerning easier accessibility to information, transparency of selection criteria, and setting national guidelines for open recruitment. However, only two countries used public funding schemes to explicitly foster open recruitment.

Several countries reported good practices related to the transparency of the selection process and evaluating criteria but good practices were reported regarding the transparency of job information. There was minimal mention of the efficiency of job information posting or the selection process or the use of recruitment mechanisms/tools (such as job portals) to foster intersectoral mobility.

Recent changes towards more open practices had been mainly at the government or funding agency level. Fewer countries reported promotion of these policies/incentives at the university level and this tended to happen as part of strategic reform efforts driven by the universities. Only a few countries reported increases in university autonomy as a means to facilitate or encourage open recruitment raising the question: 'To what extent greater or smaller degrees of institutional autonomy can contribute to the implementation of effective open, merit-based, transparent recruitment practices?'

Less frequent mention was made of recent changes in advertising job vacancies, increasing the transparency of selection processes or contracts or encouraging open recruitment that entailed closer cooperation between societal and economic needs.

Findings of the ERAC Mutual Learning Workshop focused on open recruitment

A number of challenges were identified during the breakout discussion and there was general agreement on the importance of the following five issues:

- The lack of appropriate data on open, merit-based, transparent recruitment is an issue. The current data is regarded as incomplete and based on perceptions.
- It was understood that national policies are relevant, even if the recruitment processes are to a large extent in the realm of institutions. Policy focus on competition and internationalization has the potential to foster open, merit-based, transparent recruitment.
- Greater levels of institutional autonomy could work for or against the implementation of open, merit-based, transparent recruitment.
- Language is a problematic issue for many countries and can be a barrier to establish internationally focused open, merit-based, transparent recruitment.
- Time is of the essence. It was found that changing recruitment processes to become more open, meritocratic and transparent takes time and requires on-going and determined support from policymakers at all levels.

3   INTERSECTORAL MOBILITY

Background

A background paper presented by Karen Vandevelde outlined the main issues with respect to intersectoral mobility with specific reference to the Commission's July 2010 Communication 'Europe 2020 Flagship Initiative Innovation Union'.

Innovation and the competitive edge provided to Europe by its researchers, entrepreneurs and companies lie at the heart of the Europe 2020 strategy. However there are indications, that Europe might not be best using this competitive advantage. For example, despite producing significant amounts of new knowledge Europe has a relatively low number of researchers employed in the business sector, compared with the US and Japan. Also other sectors than the business sector could benefit from the talent of highly trained researchers. In the broadest sense of the term, "intersectoral mobility" refers to all possible bridges that can be built between university, industry and other sectors of employment thus bringing academia and other sectors closer together. The main topics are outlined in the following sections.

Why foster intersectoral mobility?

Intersectoral mobility (defined for the purposes of the workshop as researchers' physical movement between sectors) is one of many methods towards obtaining better knowledge exchange. Policy initiatives focused on intersectoral mobility are strongly linked to other policy areas. For example training and development designed to make researchers better suited to the challenges of the current labour market.

This relationship of intersectoral mobility to knowledge transfer was refined during the course of the workshop and can be illustrated as a pyramid. This encompasses the factors which are preconditions for intersectoral mobility (up arrow) or which can directly enhance its impact (down arrow). The discussions during the workshop also

Figure 3: the role of intersectoral mobility in the knowledge transfer pyramid.

suggested that the stronger the knowledge transfer system, the more these layers are integrated, and the more often policy initiatives incorporate actions operating simultaneously at multiple levels.
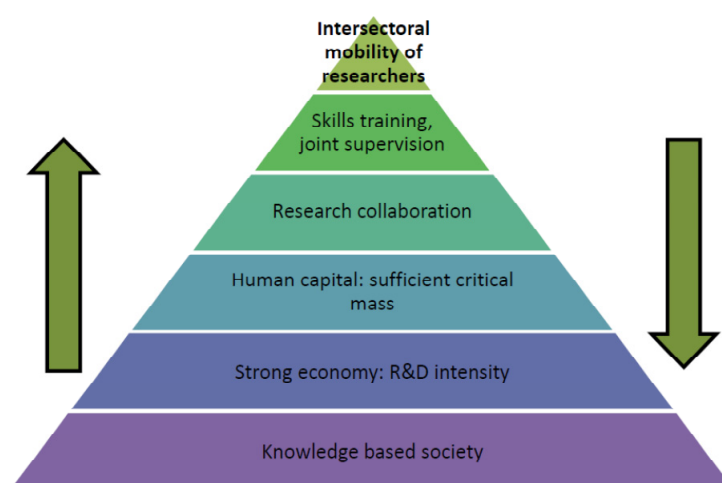
The role of intersectoral mobility in the European Research Area

The Commitment to create a European Research Area which invites researchers to move freely between sectors and countries builds on earlier policies encouraging researchers' international and intersectoral mobility. One of these is the European Commission's 2006 recommendations entitled "Mobility of Researchers between Academia and Industry", the outcome of an Expert Group on the subject. Taking some of the recommendations put forward in 2006 as a starting point, the workshop and report compared these with the issues at stake in 2014. It was also identified as important to keep in mind that the intersectoral mobility and academic-non-academic partnerships may not always be as straightforward in every sector of the labour market.

Intersectoral mobility: quantity and quality issues

Compared to the position in 2006, many countries have increased PhD numbers with the expectation that many will seek employment outside academia. This is reflected in the OECD Careers of Doctoral Holders survey which shows that in some countries more than one-third of graduates are employed in the business-enterprise sectors.

The observation that many PhD graduates "find employment outside academia" does not guarantee they contribute to Europe's innovation strategy. Discussions during the workshop suggested that although it may not be the objective from a broader policy perspective, in practice intersectoral research mobility seems to take place most often – and most easily – at the early stage of one's career, and mainly in the direction from university towards non-academic sectors.

Many employers do not (yet) recognize the value of research experience or a Ph.D. degree, and do not provide researchers with jobs that allow them to capitalize on their research skills, their creativity and their levels of autonomy. Also if Ph.D. graduates' skills do not match those expected in other sectors of the labour market, gaining appraisal from employers for their mobility will be a target that is hard to meet.

Since 2006 there has been little attention to intersectoral mobility at the later R3 and R4 stages of an academic research career in most countries, although such activities could readily fit within the 'third mission' of universities.

This topic of discussion gave rise to the following recommendations:

- Many countries need to **train more researchers** at R1 and R2 level in order to meet their R&D targets, and in order to support intersectoral mobility. More graduates can be attracted into Ph.D. research by treating them as professionals, by providing them with adequate scholarships, and by presenting them with interesting career opportunities.
- R1 and R2 researchers are the target group most easily reached when promoting intersectoral mobility
- Employers who already have doctorate holders amongst their staff, tend to judge their added value more favourably than those who do not. Highlighting good experiences in this area and developing a joint vocabulary between academia and other sectors of society related to "research-based skills" may contribute to **changing the perception of the value of research experience**.
- Employers in other sectors of the labour market and academics need to **learn to speak the same language and appreciate each other's focus and strengths**. This is a process in which taking small steps can be very effective.
- By maintaining a limited set of research performance criteria when hiring R3 and R4 stage researchers, universities miss out on great opportunities to take on board researchers with experience in other sectors of employment. Better **recognition of activities related to the universities' "third mission"** (service to society, including the societal and economic impact of research) will help to bridge the gap between university and other sectors of employment.

Preparing researchers for diverse careers through broader training at university

The 2006 recommendations on intersectoral mobility stated: "Training is often not adequate for working in industry" and suggested that "Supervisors should also be trained to be more effective." Joint training, developing entrepreneurship and providing broader skills which in 2006 were novel in many countries have since become much more common and now feature in the Principles for Innovative Doctoral Training.

In 2014 workshop attendees indicated that changes in doctoral training programmes to better match the expectations of future employers has been feasible, rewarding and relatively low cost. The adoption of joint-training requirements by high-visibility national and international (e.g. Marie Curie) programmes have also accelerated interest. Creating a larger pool of

trained researchers and encouraging greater exposure to other organisations and cultures e.g. through giving expert advice also facilitates mobility. Nevertheless skills training remains an issue that is currently being addressed, fine-tuned and regularly reviewed, and is reported to be a particular problem in several countries. The long-term outcomes of skills development can be difficult to describe and monitoring systems are still being developed.

This topic of discussion gave rise to the following recommendations:

- The **principles of Innovative Doctoral Training**[13] continue to deserve attention. These principles, developed by the ERA Steering Group for Human Resources and Mobility for the European Commission, can play a significant role in focusing the attention on intersectoral mobility. Member states must be prepared to invest time and funding in the implementation of these principles.
- During the doctoral training programme, doctoral researchers need more **exposure to other sectors of the labour market**. This can be achieved through e.g. joint supervision, collaboration with the public/private sector, or internships. This generates benefits for the doctoral researchers (employability skills) as well for the employer/organization (appreciation of research experience) as for the academic environment (networking, collaboration).
- The impact of broader research training on intersectoral mobility and on a more intensive circulation of knowledge are not easy to measure as the outcomes are long-term. Adequate **monitoring systems** need to be developed.

Administrative and legal barriers to intersectoral mobility

Although the 2006 recommendations gave rise to instruments to ease obstacles to intersectoral mobility (such as administrative barriers, recruitment, positive recognition of mobility and alignment of university and industry interests) these had often not been fully exploited.

In 2014 the role of governments was seen as quite varied. Using the triangle presented earlier it can be seen that a small number of initiatives focus on the top of the pyramid and substantial efforts focus on the middle level. In some countries large-scale schemes embraced multiple levels of the pyramid. Yet others had undertaken significant university reform or had introduced tax-incentives for companies employing researchers. Legal and practical barriers (IP, pensions etc.) were seen by attendees as having much less impact on intersectoral mobility. Recovery from the economic crisis may have been better in countries with a robust R&D system.

This topic of discussion gave rise to the following recommendations:

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[13] http://ec.europa.eu/euraxess/pdf/research_policies/Principles_for_Innovative_Doctoral_Training.pdf

- In most countries, legal and administrative measures are in place to facilitate the intersectoral mobility of researchers. Governments should **consult regularly with the research community** whether any such barriers may need to be addressed further.
- **Governments are able to trigger large impacts with small-scale initiatives**, such as establishing partnerships with SME-clusters, focusing on niche areas of strengths, and adopting European Structural Funds & European Social Funds in order to support intersectoral mobility
- **Internships for researchers** – i.e. a limited period of time spent in other sectors in order to gain sector-specific experience and share research experience – are inexpensive, bottom-up initiatives that potentially have long-lasting effects on researchers' employability, employers' perception and long-term collaborative initiatives. Governments can play a role in facilitating, promoting and funding such internships.
- **Government initiatives to support colocation** of university and industry, or to develop **competency clusters** fostering collaboration between university and other sectors on a particular topic, provide a more integrated approach to advancing knowledge exchange.

Similar concerns but different measures, in correlation with innovation performance levels

A significant finding was that many countries participating in the workshop report surprisingly similar concerns regarding intersectoral mobility. These covered: balancing supply and demand issues for researchers to meet R&D targets; a lack of appreciation amongst employers for Ph.D. graduates' research experience; promotion of changes in doctoral programmes, collaboration between university and industry and collaboration with SME's; and use of Marie Curie funds for joint training programmes with industry.

Funding to address these issues was often seen as problematic although countries defined as innovation followers and leaders seemed to have more funding to support intersectoral mobility through long-term structured schemes. Legislative changes in some modest and moderate innovator countries may help them to move towards more structural, all-encompassing measures.

This topic of discussion gave rise to the following recommendations:

- Although **intersectoral mobility** takes up only a small area of the knowledge transfer pyramid, it provides **a highly relevant focus** to recognise weak elements in a country's knowledge transfer system and identify appropriate measures for improvement.
- As many countries experience similar concerns in supporting intersectoral mobility, further **opportunities to exchange experiences and good practices** will help to accelerate the introduction of effective measures towards better knowledge exchange

- Not all good practices would operate as effective enablers in every country. In countries with limited R&D budgets and limited R&D performance levels – modest and moderate innovators – activities addressing the intersectoral mobility of researchers tend to **be project-based rather than structural**, to be reliant on **external funding rather than national funding**, and to focus on one **particular layer** of the knowledge transfer pyramid rather than encompass multiple layers in an **integrated approach**.

4   OVERVIEW AND NEXT STEPS

Open recruitment

Prior to the workshop and following analysis of the pre-meeting questionnaires the Expert Group had agreed a number of key questions (see section 2) to pose to participants. These were designed to test the hypothesis that whilst formal policies and processes for open recruitment may exist at national or organizational level and may be seen as good practice, their implementation within organisations could still give rise to the reality or the perception of a closed system or process.

In the workshop itself general agreement was reached on the challenges which need to be addressed. A key message being that the lack of appropriate data (either quantitative or qualitative) was a major barrier to further understanding of the problem. The challenges identified reflected the fact that there are a number of drivers and influences which can affect the openness of recruitment and these can act differently in different national contexts. These drivers include competition for the best researchers from an international talent pool, varying levels of institutional autonomy and requirements around language particularly with respect to teaching. Nevertheless identifying the drivers was not by itself felt to be sufficient to make progress therefore on-going and determined support from policymakers at all levels for the principles of open, merit-based and transparent recruitment was likely to be required.

Based on the findings of the ERAC Mutual Learning Workshop, the expert group identified three recommendations which together should foster a wider practice of open, merit-based, transparent recruitment. The view of Group was that the implementation of Recommendations two and three should underpin and facilitate the implementation of Recommendation one.

Recommendation 1: Call on Institutions to review and, where appropriate, modify current recruitment practices. This would entail developing processes of institutional self-awareness through communication and reflection meetings that could be relevant for institutions to know to what extent they themselves are applying open, merit-based, transparent recruitment, and to what extent there is a discrepancy between formal open recruitment, its expectations and practice. This is particularly relevant regarding gender, where merit-based approaches should take into account maternity leave and other possible constraints that place women at a disadvantage when merit is based only on metrics (such as

research productivity). It would be appropriate for Institutions to address this issue when participating in the HRS4R process.

Recommendation 2: Regarding the lack of data: There is a need for good indicators to assess the effectiveness of open recruitment, merit-based, transparent practices. Currently, most of the information that is available on recruitment practice is based on perceptions, therefore an appropriate mix of qualitative and quantitative indicators should be developed and used to provide evidence of the openness or otherwise of recruitment practices in European public research institutes and universities. The European Commission should set up a working group to develop such a toolkit. This WG could usefully include or engage with expert researchers and others with expertise in mixed-methods research and methods for systemic monitoring. The resulting toolkit should be able to be used across Europe to analyse and monitor open, merit-based, transparent recruitment processes at European Universities and public research institutes.

Recommendation 3: The practitioners' toolkit should attract the support of funding agencies in the member states. A collective approach and sharing of results could help to develop and maintain policies which foster, improve and promote open, merit-based, transparent recruitment. Given the recognition in the ERAC Mutual Learning Workshop that national policies are critical and taking account of public finance constraints in many European countries, support and encouragement from the European Commission could be critical (at least in the initial stage). This should support rather than replace the role of national and institutional policy implementation and could be linked to the existing HRS4R process. In particular, noting that national policies focusing on competition and internationalization seem to positively impact the adoption of open, merit-based, transparent recruitment practices, such practices should be supported.

Intersectoral Mobility

The Expert Group noted that although the importance of intersectoral mobility had been recognised by the EU and in most European countries for some time, the actual impact of the policies implement appears to be limited or at least hard to identify. The Innovation Union Commitment refers to a European Research Area within which researchers can move freely between sectors and countries, and builds on earlier policies encouraging researchers' international and intersectoral mobility. In particular the group were able to use the 2006 European Commission report 'Mobility of Researchers between Academia and Industry - 12 Practical Recommendations'[14] as a reference point for the discussion in the workshop and associated paper.

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[14] European Commission (2006), Mobility of Researchers between Academia and Industry. 12 Practical Recommendations. http://ec.europa.eu/euraxess/pdf/research_policies/mobility_of_researchers_light.pdf

The ERAC Mutual Learning Workshop did however take a wider view of collaborations and exchanges than the 2006 report in that it included for example government and public sector bodies, the service industry, education and non-profit organisations as well as knowledge exchange with (high-tech) industry.

An important unifying framework developed in the paper and the workshop is the pyramid presented in Section 3 of this report and in more detail in the full paper on intersectoral mobility. This represents the inter-relationship between the different factors which are preconditions for intersectoral mobility or which can directly enhance its impact. The discussions during the workshop suggested a correlation between a stronger knowledge transfer system, the degree of integration of the layers and policy initiatives incorporating actions operating simultaneously at multiple levels.

The final report following the workshop made a number of recommendations under several headings which address: quantity and quality of mobility; training of researchers for diverse careers; administrative and legal barriers; and the variety of approaches to a shared concern to improve mobility.

Based on the findings of the ERAC Mutual Learning Workshop, the expert group identified two main recommendations relating to intersectoral mobility

Recommendation 4: Member States and research performing organisations should investigate what steps they could take to **improve the preparation of researchers for intersectoral careers and for intersectoral mobility**. Although this applies throughout a research career the R1 and R2 stages have been identified as the target group that is most easily reached. This recommendation could be implemented by building on the existing work of Member States and the Commission through the Steering Group for Human Resources and Mobility. It would be a natural extension of the work of the existing SGHRM working groups to consider how the implementation of a) the Principles for Innovative Doctoral Training and b) the Professional Development of Researchers can contribute to intersectoral mobility.

Recommendation 5: Member States and research performing organisations should **consider adopting the pyramid perspective in their policies on intersectoral mobility**: this scheme demonstrates that a coherent approach and integrated policy mix are far more effective than a collection of fragmented, short term initiatives targeted at supporting one aspect of intersectoral mobility. The European Commission might facilitate the process by adopting the pyramid perspective in further communication on or investigation of this topic.

EUROPEAN COMMISSION
DIRECTORATE GENERAL FOR RESEARCH & INNOVATION

Directorate A – Policy Development and Coordination
A4- Analysis and monitoring of national research policies

2014 ERAC MUTUAL LEARNING WORKSHOP ON HUMAN RESOURCES AND MOBILITY	
Date:	**Wednesday 26 March 2014**
Place:	**European Commission, Champs de Mars building (CDMA), room SDR 1 & 2, rue du Champs de Mars 21, 1050, Brussels**

The aim of the 2014 ERAC Mutual Learning Workshop is to give Member State participants a valuable insight into each other's policy challenges regarding Innovation Union Commitment number 1, which relates to training enough researchers to meet their respective R&D targets and to promote attractive working conditions. Specifically, the workshop will focus on current trends in Member States regarding open, transparent and merit-based recruitment and intersectoral mobility.

The workshop will be moderated by Dr Iain Cameron, Dr Karen Vandevelde and Dr Hugo Horta. The responses to the questionnaire participants were asked to fill in prior to the workshop have been used for the discussion papers which are attached. Participants are encouraged to actively participate in the mutual learning workshop in order to benefit fully from the exercise.

Morning session – Issues at stake

9:30 – 10:00   Arrival & coffee

10:00 – 10:30   Welcome and introduction

 - *European Commission (tbc)* [insert name]

 - *Dr Iain Cameron, Chairperson*

10:30 – 12:30   Issues at stake on open, transparent and merit-based recruitment and intersectoral mobility

Presentations by Dr Hugo Horta and Dr Karen Vandevelde followed by discussion

12:30 – 13:30   Lunch buffet

<mark>*Afternoon session – Looking forward*</mark>

13:30 – 15:30   Breakout sessions covering best practice examples and the way forward

- Two groups covering open recruitment and intersectoral mobility for one hour each

15:30 – 17:00   The way forward and possible recommendations

List of Attendees[15]

Title	Surname	Name	Country	E-mail
Mr	Cleanthous	Ioanna	CYP	ikleanthous@dgepcd.gov.cy
Mr (Dr)	Kaarli	Rein	EST	rein.kaarli@hm.ee
Ms	Ursula	Tubli	EST	ursula.tubli@hm.ee
Ms	Dourado	Ana Mafalda	PRT	ana.mafalda@fct.pt
Ms	Kaunismaa	Eeva	FIN	eeva.kaunismaa@minedu.fi
Ms	Gächter-Alge	Marie-Louise	CH	marie-louise.gaechter@sbfi.admin.ch
Ms	Magnusson	Sofia	SWE	sofia.magnusson@regeringskansliet.se
Ms	Fernandez	Rosa	UK	rosa.fernandez@ncub.co.uk
Mr	Kaloudis	Aris	NOR	aris.kaloudis@kd.dep.no
Ms	Nielsen	Signe	DK	sini@ui.dk
Ms	Tschelaut	Julia	AUT	julia.tschelaut@bmwf.gv.at
Ms	Mollee	Bregje	NLD	mollee@vsnu.nl
Ms	Cabello	Cecilia	ESP	cecilia.cabello@fecyt.es
Mr	Skarmeta	Antonio	ESP	skarmeta@um.es
Mrs (Dr)	Dobnikar	Meta	SVN	Meta.Dobnikar@gov.si
Ms	Haegeman	Karen	BEL	karen.haegemans@ewi.vlaanderen.be
Mr	Monnoye	Benjamin	BEL	benjamin.monnoye@cfwb.be
Mr (Dr)	Cameron	Iain	UK	Iain.Cameron@rcuk.ac.uk

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[15] Note that German representatives were unable to attend due to transport disruption.

Annex 2

Ms	Govoroff	Marina	FRA	marina.govoroff@recherche.gouv.fr
Ms	Vandevelde	Karen	BEL	Karen.Vandevelde@UGent.be
Mrs	Pletsa	Vassiliki	GRE	vpletsa@eie.gr
Ms	Hrusak	Jan	CZ	hrusak@kav.cas.cz
Mr	Decker	Pierre	LUX	Pierre.decker@mesr.etat.lu
Mr	Horta	Hugo	PRT	hugo.horta@ist.utl.pt
Mr	McCormack	Brendan	IRE	Brendan.McCormack@djei.ie
Mr	Esposito	Fulvio	IT	fulvio.esposito@unicam.it
Mr	Jorgensen	Thomas	EUA	thomas.jorgensen@eua.be
Mr	Horvat	Manfred	CESAER	Manfred.Horvat@gmx.net
Mr	Kuster	Stephan	Science Europe	stephan.kuster@scienceeurope.org

Annex 3

2014 ERAC Mutual Learning Workshop on Human Resources and Mobility

Brussels, 26 March 2014

Questionnaire

Open Recruitment

and

Intersectoral Mobility

Answers to be sent **by 21 February 2014** to:

 Dorian Carder (dorian.carder@ec.europa.eu)

1) OPEN RECRUITMENT

Please answer the following questions about recruitment in your country[16].

	Never/not at all	Sometimes / in some cases	Very often/very much	Please provide more information where relevant
- Do your universities have a publically available and open recruitment policy?				
- Have your universities recently made changes towards more open recruitment practices?				
- Are the advertisements for academic positions reaching the best possible applicants for the job?				
- Does the job specification clearly define working arrangements, standards, and transparent procedures for appointment?				
- Is the entire procedure from application to selection transparent and efficient?				
- Do language restrictions prevent the selection and appointment of the best applicant?				
- Does the information required in the application place pose an unnecessarily bureaucratic burden on the applicant?				
- Is the composition of the jury/evaluating committee/hiring committee made available to the applicant, either systematically or upon request?				
- Are appointment decisions primarily based on excellence and future potential as researchers?				

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[16] Notwithstanding the differences that may exist between institutions in your country, please give an overall assessment.

Annex 3

Part 2[17]:

a) Please describe any good practices from your country which address the issues above?

b) What recent changes have you made in policy or incentives to facilitate or encourage open recruitment?

Completed by: Name, Organisation, Country

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[17] If examples are already quoted in existing reports such as The Researchers' Report 2013, please feel free to add specific cross-reference.

2) INTERSECTORAL MOBILITY

Do any of the following pose a difficulty in your country? (Never/not at all) (Sometimes / in some cases) (Very often/very much)

	Never/not at all	Sometimes / in some cases	Very often/very much	Please provide more information where relevant
- Gaining acceptance from academics that employment outside academia is a valuable outcome from doctoral training				
- Having sufficient demand for researchers outside academia				
- Having sufficient demand for people below doctoral level in research-related jobs outside academia				
- Preparing researchers with a wider range of skills beyond research skills				
- Creating the opportunity for doctoral candidates and postdocs to undertake meaningful (i.e. 3 months or longer) placements/internships				
- Encouraging doctoral graduates/researchers to actively look outside academia for career opportunities				
- Persuading employers in R&D intensive sectors to appreciate the added value of a doctoral degree				
- Persuading employers in SMEs & different sectors of the economy to appreciate the added value of a doctoral degree				

Part 2:

a) **Please describe any good practices from your country which address the issues above and if possible indicate the benefits you have gained or expected?**

b) **What recent changes have you made in policy or incentives to facilitate or encourage intersectoral mobility and what are the expected benefits?**

Completed by: Name, Organisation, Country