



Brussels, 6 October 2010 (rev)

TOWARDS A EUROPEAN FRAMEWORK FOR RESEARCH CAREERS

Draft for comments

1. Introduction

The Treaty on the Functioning of the European Union states in article 179.1:

“The Union shall have the objective of strengthening its scientific and technological bases by achieving a European research area in which researchers, scientific knowledge and technology circulate freely, and encouraging it to become more competitive, including in its industry, while promoting all the research activities deemed necessary by virtue of other Chapters of the Treaties”

Europe does lack an open and transparent internal labour market for researchers. There are no comparable research career structures. The researchers' labour market is fragmented nationally and there is segregation between careers in academia, industry and other sectors. There is cross-country and cross-sector mobility, but many barriers remain. Career choices are often irreversible as it can be very difficult to move between sectors. Research careers frequently lack perspective; young researchers may not be aware of their prospects inside and outside academia. Employers are not clear of the competences that researchers possess and the benefits they could bring to their company.

This draft text on researcher competency classification aims to communicate the competences that a particular standard of researcher will have in accordance with their classification. It is based on the principle of excellence and the intention to provide a classification that is independent of a particular career path or sector. It identifies those competences necessary for highly diverse careers in the education, research, public and private sectors.

The Commission Communication on the Innovation Union calls for comparable research career structures¹. The European Framework for Research Careers makes research career structures comparable by providing a common language laid down in a voluntary transparency instrument.

¹Europe 2020 Flagship Initiative Innovation Union COM(2010) 546 final of 6.10.2010 (Commitment 5)
http://ec.europa.eu/research/innovation-union/pdf/innovation-union-communication_en.pdf#view=fit&pagemode=none

The European Commission with Member States experts and observers from stakeholders' associations², is working on a European Framework for Research Careers with five broad categories (working titles):

- (i) New Researcher
- (ii) Recognised Researcher
- (iii) Established Researcher
- (iv) Leading Researcher
- (v) Star Researcher

The framework describes the five categories in terms of competences: what a person knows and can do. The framework is "sector-neutral". The descriptors apply to all researchers, independent of where they work in the private or public sector: in companies, NGOs, research institutes, research universities or universities of applied sciences. Regardless of any particular profession one can outline broad categories that describe the different career profiles for researchers. Starting point was the Frascati Manual definition of research and development³:

"Research and experimental development (R&D) comprises creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society and the use of this stock of knowledge to devise new applications. R&D is a term covering three activities: basic research, applied research and experimental development."

The European Framework for Research Careers builds on the European Qualifications Framework for lifelong learning⁴ (EQF) and the Bologna Framework for Qualifications in the European Higher Education Area⁵. The second stage of the researchers' framework corresponds with the highest levels of EQF (level 8) and Bologna (third cycle).

2. Connecting sectoral, national and institutional frameworks

Research career frameworks are emerging at sector-specific, national and institutional level. The Member Organisation Forum of the European Science Foundation (ESF) has developed a framework for researchers funded through its members⁶. The League of European Research Universities (LERU) has worked out a framework for research careers at research-intensive universities⁷. Member States have started to develop national career development frameworks for their researchers, for example the United Kingdom⁸. Individual research organisations have set up their own frameworks directly related to job descriptions within those institutions and

² ERA Steering Group on Human Resources and Mobility and its Working Group on Skills, with observers from the European University Association (EUA), the League of European Research Universities (LERU), the European Science Foundation Member Organisations Forum (ESF) and the European Industrial Research Management Association (EIRMA). By definition, the current draft document does not preclude Member States' and Stakeholders' positions.

³ <http://browse.oecdbookshop.org/oecd/pdfs/browseit/9202081E.PDF>

⁴ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2008:111:0001:0007:EN:PDF>

⁵ <http://www.ond.vlaanderen.be/hogeronderwijs/bologna/documents/QF-EHEA-May2005.pdf>

⁶ Research Careers in Europe Landscape and Horizons <http://www.esf.org/publications.html>

⁷ http://www.leru.org/files/publications/LERU_paper_Harvesting_talent.pdf

⁸ Researcher development framework www.vitae.ac.uk/rdf

companies⁹. The focus and terminology of the various frameworks differ, but there is a substantial overlap in content and purpose.

The European Framework for Research Careers is expected to have a bridging function for the emerging sector-specific, national and institutional frameworks, providing a common language to a wide variety of actors across the continent and beyond.

3. Benefits of the framework

A well promoted European Framework for Research Careers could serve a range of related purposes for different categories of users. It could facilitate dialogue, promote recognition, inform job search and recruitment, stimulate training (lifelong learning) and facilitate mobility within and between countries and sectors (academia-industry). The framework,

will help researchers:

- to take their careers in their own hands, benchmark and assess their competences against the descriptors and make a personal career development plan
- to present their acquired competences in a commonly understood terminology (as part of a personal portfolio)

will help employers¹⁰:

- to recruit Europe-wide and globally with commonly understood job profiles
- to inform their institutional human resources strategies, including aspects such as staff training, career guidance and resource planning

will help governments:

- to set up national skills agendas for human resources in research and innovation¹¹
- to make international comparisons and benchmark their stock of researchers

will help students:

- to get a better idea of what they would achieve getting involved in research

will help society:

- to appreciate the capacities of researchers at various career stages

will help Europe:

- to position itself as an accessible and reliable partner in the global research and innovation community

⁹ See for instance in the DOC-CAREERS project of EUA <http://www.eua.be/eua-work-and-policy-area/research-and-innovation/doctoral-education/doc-careers/>

¹⁰ Universities, funders, public research organizations, companies

¹¹ The European Partnership for Researchers invites the Member States to develop and support consistent "national skills agendas" to ensure that researchers are equipped with the necessary skills to contribute fully to a knowledge-based economy and society throughout their careers.

http://ec.europa.eu/euraxess/pdf/comm_pdf_com_2008_0317_f_en_communication.pdf

- to attract highly skilled talent from third countries to contribute for some time to research and innovation.

4. Actions to implement the framework

In order for all the benefits to occur, the European Framework for Research Careers needs to be well promoted and implemented. Here are some examples:

Member States could use the European Framework for Researchers Careers to develop national and regional career frameworks in line with their national skills agenda's.

Employers could set up institutional career frameworks for their researchers, inspired by and related to the European and national frameworks. Universities could use the descriptors as a reference for doctoral training as well as for continuous professional development of researchers. They can build up expertise on how to teach, learn, assess and recognise researchers competences.

Individual Researchers could make active use of the competence descriptors to make their personal career development plan and articulate their competency level in a sector-neutral way.

The European Commission could support the exchange of experience between the actors involved in implementing the European framework through promotion, peer learning, reviews and pilot activities. The Commission could practice the use of the categories and descriptors through EURAXESS Jobs and its own actions.

5. Reactions to this draft European Framework for Research Careers

The Commission welcomes reactions to the ideas laid down in this document. You are kindly invited to send your comments, questions or suggestions, before 1 February 2011, to:

RTD-CAREER-FRAMEWORK@ec.europa.eu

Annex:
Category Descriptors

Category Descriptors

There are five broad categories for researchers which are independent of any particular sector (working titles):

- (i) *New Researcher***
- (ii) *Recognised Researcher***
- (iii) *Established Researcher***
- (iv) *Leading Researcher***
- (v) *Star Researcher***

The framework identifies both necessary and desirable research competences. Competences identified are applicable across a wide range of careers, including those in higher education, the private and public sectors¹².

Nature of the descriptors

- High quality research is the prime objective
- The descriptors focus on those core competences linked to research and not on other competences that may be relevant for a particular profession, for example, teaching in academia
- The categories do not necessarily relate to seniority
- Apart from the first (New Researcher) the categories should not be considered as stages on a progressive career path, although it may be assumed that a researcher in one category will also have accumulated/acquired the necessary competences of the preceding categories
- A researcher could thus remain in the category “established” for his or her entire career
- The descriptors will not necessarily match one-to-one with each individual career
- The descriptors aim to demonstrate the transferability of the competences and skills to other environments and fields of research where they can be applied and used
- The descriptors of researcher competences are dissociated from any particular job title or career track
- Descriptors are not intended as a list of tick boxes.

¹² Researchers in the European Research Area; One Profession, Multiple Careers, Brussels, July 2003, COM(2003) 436 final

New Researcher

This is a transitional phase for someone new to research that would last typically for 2-3 years. The individual would normally progress to the next category after having demonstrated the capacity to conduct research. This category includes researchers in training, new doctoral candidates or early career research assistants.

At the end of this phase the researcher will:

- *Have received mentoring and guidance as this is a progressive learning phase.*
- *Have the ambition to develop knowledge of research methodologies and discipline*
- *Have demonstrated a good understanding of a field of study*
- *Have demonstrated the ability to produce data under supervision*
- *Be capable of critical analysis, evaluation and synthesis of new and complex ideas*

Recognised Researcher

Here we are including;

- ◆ those who are close to completing a doctorate
- ◆ those who have recently completed a doctorate but have not yet established a significant level of independence,
- ◆ researchers with an equivalent level of experience.

These descriptors are adapted from the well accepted Dublin Descriptors for the third cycle of the European Higher Education Area (Bologna)¹³, which correspond to the Learning Outcomes of level 8 of the European Qualifications Framework for lifelong learning (EQF)¹⁴.

Necessary competences

- *Has demonstrated a systematic understanding of a field of study and mastery of research associated with that field*
- *Has demonstrated the ability to conceive, design, implement and adapt a substantial programme of research with integrity*
- *Has made a contribution through original research that extends the frontier of knowledge by developing a substantial body of work, innovation or application. This could merit national or international refereed publication or patent.*
- *Demonstrates critical analysis, evaluation and synthesis of new and complex ideas*
- *Can communicate with their peers*
- *Takes ownership for and manages own career progression, sets realistic and achievable career goals, identifies and develops ways to improve employability.*

Desirable competences

- *Can communicate with the wider community, and with society generally, about their areas of expertise*
- *Can be expected to promote, within professional contexts, technological, social or cultural advancement in a knowledge based society*

¹³ <http://www.ond.vlaanderen.be/hogeronderwijs/bologna/documents/QF-EHEA-May2005.pdf>

¹⁴ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2008:111:0001:0007:EN:PDF>

Established Researcher

This describes researchers who have developed a level of independence.

Necessary competences

- *Has an established reputation within the field*
- *Identifies research problems and opportunities*
- *Identifies appropriate research methodologies and approaches*

Desirable competences

- *Makes a positive contribution to the development of knowledge, research and development through co-operations and collaborations*
- *Can secure research funding / budgets / resources*
- *Communicates their research effectively to the research community and wider society*
- *Is innovative in their approach to research*
- *Is committed to professional development of their own career and acts as mentor for others.*

Leading Researcher

This is a researcher leading their research area or field. It would include the team leader of a research group or head of an industry R&D laboratory. Additionally, leading researchers include individuals who operate as lone researchers.

Necessary competences

- *Has an international reputation in their field*
- *Demonstrates critical judgment in the identification and execution of research activities*
- *Makes a substantial contribution (breakthroughs) to their research field*
- *Recognises the broader implications and applications of their research*

Desirable competences

- *Is an expert at managing and leading research projects*
- *Is skilled at managing and developing others*
- *Has a proven record in securing significant research funding / budgets / resources*
- *Is an excellent communicator and networker within and outside the research community [creating networks]*
- *Is able to create an innovative and creative environment for research*
- *Acts as a professional development role model for others.*

Star Researcher

This category is for acknowledged world leaders in their field. In some areas, they might be one of only a few other individuals with similar credentials.

Necessary competences

- *Is acknowledged as international leader in their area*
- *Has a global impact on their research area and beyond*
- *Shapes the development of and opens up new research areas and/or interdisciplinary approaches*

Desirable competences

- *Is an inspirational role model for other researchers*
- *Is an outstanding communicator both within and outside the research community*