

ITN Call 2016 – Relevant EU Policies

Disclaimer: This document is not exhaustive. It describes the most “common” EU policies which refer to research, researcher careers and research/doctoral training. In describing the impact on “innovation capacity”, in addition to general EU policies which discuss innovation, researchers are strongly encouraged to refer to policies, papers, research roadmaps etc. related to the research area described in the proposal, which can typically be found through a quick “Google” search.

A useful library of policy documents can be found at
<http://ec.europa.eu/euraxess/index.cfm/services/researchPolicies>

The following documents may be relevant for the Impact sections of the proposal, but may also be relevant in defining the ITN programme and for use in the proposal as a whole.

1. “Charter and Code”: The European Charter for Researchers and Code of Conduct for their Recruitment, <http://ec.europa.eu/euraxess/index.cfm/rights/whatIsAResearcher>.

The “Charter and Code” principles are mainstreamed into the MSCA. Everyone applying for MSCA funding should read the C&C. Some principles which are particularly relevant to ITN (not exhaustive) are:

- Employers and/or funders of researchers should ensure that the most stimulating research or research training environment is created which offers appropriate equipment, facilities and opportunities, including for remote collaboration over research networks. *Particularly relevant to the Excellence section (1.1 research programme, 1.2 training programme) and the Implementation section (3.3 Infrastructure)*
- Employers and/or funders of researchers should draw up, preferably within the framework of their human resources management, a specific career development strategy for researchers at all stages of their career, regardless of their contractual situation, including for researchers on fixed-term contracts. It should include the availability of mentors involved in providing support and guidance for the personal and professional development of researchers, thus motivating them and contributing to reducing any insecurity in their professional future. All researchers should be made familiar with such provisions and arrangements. *Particularly relevant to the Excellence section (1.3 supervision).*
- Employers and/or funders must recognise the value of geographical, intersectoral, inter- and trans-disciplinary and virtual mobility as well as mobility between the

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public and private sector as an important means of enhancing scientific knowledge and professional development at any stage of a researcher's career. Consequently, they should build such options into the specific career development strategy and fully value and acknowledge any mobility experience within their career progression/appraisal system. *Particularly relevant to the Excellence section (1.2 training programme, 1.4 interaction between the participants) and the Impact section (2.2 Structuring research training-contribution of the non-academic sector).*

- Employers and/or funders should ensure that a person is clearly identified to whom early-stage researchers can refer for the performance of their professional duties, and should inform the researchers accordingly. *Particularly relevant to the Excellence section (1.3 supervision).*
- Employers and/or funders of researchers should recognise it as wholly legitimate, and indeed desirable, that researchers be represented in the relevant information, consultation and decision-making bodies of the institutions for which they work, so as to protect and promote their individual and collective interests as professionals and to actively contribute to the workings of the institution. *Particularly relevant to the Implementation section (3.2 management).*

In addition, the principles on Recruitment are of particular importance when outlining the ITN's recruitment strategy in the Implementation section.

2. Europe 2020 Flagship Initiative – Innovation Union

http://ec.europa.eu/research/innovation-union/index_en.cfm?pg=action-points

The Innovation Union, published October 2010, outlines over 30 action points with the aim to do three things:

1. make Europe into a world-class science performer;
2. remove obstacles to innovation – like expensive patenting, market fragmentation, slow standard-setting and skills shortages – which currently prevent ideas getting quickly to market; and
3. revolutionise the way public and private sectors work together, notably through Innovation Partnerships between the European institutions, national and regional authorities and business.

The 30 IU commitments are broken down into chapters:

1. Promoting excellence in education and skills development
2. Delivering the European Research Area
3. Focusing EU funding instruments on Innovation Union priorities
4. Promoting the European Institute of Innovation and Technology (EIT) as a model of innovation governance in Europe
5. Enhancing access to finance for innovative companies
6. Creating a single innovation market
7. Promoting openness and capitalising on Europe's creative potential
8. Spreading the benefits of innovation across the Union
9. Increasing social benefits

10. Pooling forces to achieve breakthroughs: European Innovation Partnerships
11. Leveraging our policies externally
12. Reforming research and innovation systems
13. Measuring Progress

It is clear that all commitments relevant to Horizon 2020 have been incorporated into the Horizon 2020 programme.

Specific IU Commitments which appear particularly relevant to ITN 2016:

- #1: By the end of 2011, Member States should have strategies in place to **train enough researchers** to meet their national R&D targets and to promote attractive employment conditions in public research institutions.
- #2: The Commission will also support business-academia collaborations through the creation of "**Knowledge Alliances**" **between education and business** to develop new curricula addressing innovation skills gaps (see also commitment 3 on e-skills). They will help universities to modernise towards **inter-disciplinarity, entrepreneurship and stronger business partnerships**.
- #7: The Commission will design future EU research and innovation programmes to ensure simple access and **stronger involvement of SMEs**, in particular those with a high growth potential.
- #20: The Commission will promote **open access** to the results of publicly funded research. It will aim to make open access to publications the general principle for projects funded by the EU research Framework Programmes. The Commission will also support the development of smart research information services that are fully searchable and allow results from research projects to be easily accessed.

3. Europe 2020 Flagship Initiative – Agenda for new skills and jobs

<http://ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=626&type=2&furtherPubs=yes>

The Agenda, published October 2010, presents a set of concrete actions that will help:

1. Stepping up reforms to improve flexibility and security in the labour market ('flexicurity')
2. Equipping people with the right skills for the jobs of today and tomorrow
3. Improving the quality of jobs and ensuring better working conditions
4. Improving the conditions for job creation

Key points relevant to ITN:

- Providing the right mix of skills
- Matching people's skills and job opportunities, and capitalising on Europe's potential jobs
- Enhancing geographical mobility throughout the EU
- Promoting entrepreneurship, self-employment and innovation

4. Europe 2020 Flagship Initiative – Youth on the Move

http://europa.eu/youthonthemove/docs/communication/youth-on-the-move_EN.pdf

Youth on the Move is a comprehensive package of policy initiatives on education and employment for young people in Europe. Launched in 2010, it aims to improve young people's education and employability (specific focus on reducing youth unemployment) by:

- making education and training more relevant to young people's needs;
- encouraging more of them to take advantage of EU grants to study or train in another country;
- encouraging EU countries to take measures simplifying the transition from education to work.

Key points relevant to ITN:

- Developing modern education and training systems to deliver key competences and excellence
- Promoting the attractiveness of higher education for the knowledge economy
- Supporting a strong development of transnational learning and employment mobility for young people
- Supporting young entrepreneurs and self-employment

5. ERA Communication 2012 http://ec.europa.eu/research/era/pdf/era-communication/era-communication_en.pdf

This document refocuses the European Research Area policy into five key priorities:

1. More effective national research systems
2. Optimal **transnational co-operation and competition** (On common research agendas, grand challenges and infrastructures)
3. An open labour market for researchers (Facilitating **mobility**, supporting **training** and ensuring **attractive careers**)
4. **Gender** equality and gender mainstreaming in research (Encouraging gender diversity to foster science excellence and relevance)
5. Optimal circulation and transfer of scientific knowledge (To guarantee access to and uptake of knowledge by all)

Point 5 is essentially about **open access** to research publications and research data and is particularly relevant to sections 2.3 (Dissemination & Exploitation) and 2.4 (Communication & Public Engagement) of the proposal. A commitment to open access on behalf of all participants in the ITN (after any necessary procedure to protect Intellectual Property) would be well received by the evaluators. Open access to publications (green or gold model) is acceptable, and open access to research data through the Open Research Data Pilot would be additive <http://www.openaire.eu/en/open-access/open-access-in-h2020/h2020-oa-data>.

6. Principles for Innovative Doctoral Training

http://ec.europa.eu/euraxess/pdf/research_policies/Principles_for_Innovative_Doctoral_Training.pdf

The Principles have been extracted from the Extract from the "Report of Mapping Exercise on Doctoral Training in Europe "Towards a common approach" of 27 June 2011(final),¹ adopted by the ERA Steering Group on Human Resources and Mobility. The Principles were defined with the help of experts from university associations; industry and funding organisations. They reflect the **Salzburg II Recommendations**² of EUA, good practice in Member States and the Marie Curie experience. The Principles have been endorsed in the Council conclusions on the modernisation of higher education, Brussels, 28 and 29 November 2011.

The Principles are:

1. Research Excellence
2. Attractive Institutional Environment
3. Interdisciplinary Research Options
4. Exposure to industry and other relevant employment sectors
5. International networking
6. Transferable skills training
7. Quality Assurance

7. Mobility of Researchers between Academia and Industry: 12 Practical Recommendations

http://ec.europa.eu/euraxess/pdf/research_policies/mobility_of_researchers_light.pdf

Although this document was published eight years ago (2006), it still contains recommendations that are relevant to researchers moving between academia and industry (non-academia). Some recommendations relevant to ITN 2016 are:

- Developing **joint training programmes** to better address future employers' needs, including developing doctoral programmes **in partnerships** with the business community;
- Preparing early stage researchers for a **career in both sectors**, including developing **entrepreneurial skills**. Recognising merits by adding to the diploma a record of courses taken and experience acquired;
- Providing **supervision quality insurance**, in particular for early stage researchers. Researchers should be followed by two supervisors with adequate training, **one from each sector**;
- Increasing **inter-sector mobility possibilities** for both early stage and established researchers.

¹

http://ec.europa.eu/euraxess/pdf/research_policies/Report_of_Mapping_Exercise_on_Doctoral_Training_FIN_AL.pdf

² http://www.eua.be/Libraries/Publications_homepage_list/Salzburg_II_Recommendations.sflb.ashx

8. Gender in Horizon 2020

Gender equality is a cross-cutting issue in Horizon 2020 and shall be implemented across **all areas of Horizon 2020, including the MSCA**. This will extend to promoting the gender dimension in research and innovation content. Gender equality is also included in Horizon 2020 monitoring and evaluation exercises. Key objectives include:

- Gender balance in decision-making: The aim is to reach the Commission's target of 40% of the under-represented sex in each group and panel. For Horizon 2020 Advisory Groups, the target was raised to 50%, given the high response rate from women to the Commission's call for interest launched in February 2013.
- Gender balance in research teams at all levels: Applicants for funding are encouraged to promote equal opportunities and to ensure a balanced participation of women and men at all levels in research and innovation teams and in management structures. Gender balance in teams will also be taken into account when ranking proposals with the same evaluation scores.
- Gender dimension in research and innovation content: Gender is explicitly integrated into several topics across the Horizon 2020 Work Programme. Topics with an explicit gender dimension are flagged, to ease access for applicants, but all H2020 applications should take the gender dimension into account.

Factsheet:

https://ec.europa.eu/programmes/horizon2020/sites/horizon2020/files/FactSheet_Gender_2.pdf

Document: Gendered Innovations – How Gender Analysis Contributes to Research

<http://ec.europa.eu/programmes/horizon2020/en/news/%E2%80%9Cgendered-innovations-how-gender-analysis-contributes-research%E2%80%9D>

Gender Toolkit

http://www.yellowwindow.be/genderinresearch/index_downloads.html

The European Commission sponsored the development of a Gender Toolkit for FP7 by Yellow Window Management Consultants. The documents are freely available on the web, and include an overview of gender in research, a checklist for help in preparing grant applications, and detailed, discipline specific, documents examining the role of gender.

9. Good Practice Elements in Doctoral Training

http://www.leru.org/files/publications/LERU_AP_15_Good_practice_elements_in_doctoral_training_2014.pdf

LERU, the League of European Research Universities, published this guide in 2014. It provides examples of good practice elements in doctoral training at LERU member organisations across four areas:

- Professional development for researchers as now done through formal workshop-style professional development sessions to develop skills which can then be put to use in research and will be valuable in future careers. Examples of good practice at LERU universities under this first category are given under the heading of ‘formal research training’.
- The section on ‘career development’ provides examples of activities at LERU universities to promote awareness of both academic and non-academic careers that are open to doctoral graduates, highlighting in particular some areas that are less well known to our candidates.
- The category ‘concepts and structures’ describes some of the innovative structures that LERU universities have developed for managing and promoting innovation in doctoral programmes, particularly for providing international and interdisciplinary exposure.

These good practice examples could be used as “inspiration” for ITN activities, which could be linked back to the good practice guide in the Impact section, e.g., “The ESRs in our ITN will have the opportunity to explore academic and non-academic careers, in line with the LERU Good Practice Elements in Doctoral Training”.

10. Erasmus Mundus Handbook of Excellence – Doctoral Programmes

http://eacea.ec.europa.eu/erasmus_mundus/tools/documents/repository/handbook_of_excellence_2012_doctoral_en.pdf

Prepared via the Erasmus Mundus Quality Assessment Process, this document examines the key elements of successful Erasmus Mundus Joint Doctorate programmes (now EJD), providing a structured journey through the key stages of setting up a research/doctoral training programme, from identifying a possible programme through to design and delivery. The key actions in this document have been incorporated into our webinar for ITN 2016, so we will not repeat them here. However, the document’s Annex A provides a useful overview of the research and policy literature that provide a background to EU policies on doctoral/research education as part of the Bologna process. The statements in the Annex will be useful for *Impact section 2.2 ‘Contribution to structuring doctoral/early-stage research training at the European level’*, in particular:

- Quote from the Bucharest Communiqué:³ “Study programmes must reflect changing research priorities and emerging disciplines, and research should underpin teaching

³ EHEA (2012a) Making the Most of our Potential: Consolidating the European Higher Education Area: Bucharest Communiqué. European Higher Education Area, April 27.
[http://www.ehea.info/uploads/\(1\)/bucharest%20communique%202012\(1\).pdf](http://www.ehea.info/uploads/(1)/bucharest%20communique%202012(1).pdf)

and learning. In this respect, we will sustain a diversity of doctoral programmes. Taking into account the Salzburg II recommendations and the Principles for Innovative Doctoral Training, we will explore how to promote quality, transparency, employability and mobility in the third cycle, as the education and training of doctoral candidates has a particular role in bridging the European Higher Education Area (EHEAR) and the European Research Area (ERA).”

- In just over a decade, the EHEA has made significant progress in creating a more “European” doctorate, which takes doctoral programmes beyond mono-disciplinary and single-institution silos, into a multi-disciplinary and collaborative activity that is focused not just on local and national goals, but those of Europe positioning itself in the competitive global higher education environment.

11. Collaborative Doctoral Education: University-Industry Partnerships for Enhancing Knowledge Exchange

<http://www.eua.be/Libraries/research/doc-careers.pdf?sfvrsn=0>

In this report, the European University Association (EUA) in “Collaborative Doctoral Education: University-Industry Partnerships for Enhancing Knowledge Exchange” presents the findings of the project “DOC-CAREERS: From Innovative Doctoral Education to Enhanced Career Opportunities”. A number of comments in this document are relevant particularly to the **European Industrial Doctorate**, in particular:

- Collaborative Doctoral Programmes involving industry and university are a good vehicle to enhance knowledge transfer, intersectoral mobility and mutual understanding. Doctoral programmes enable companies to take part in researchers’ education and training, exposing them to environments which will allow candidates to acquire skills relevant to the business world in addition to those relevant to the academic world.
- Collaborative Doctoral Projects are doctoral theses carried out with interaction between a university, a company and a doctoral candidate. A distinctive characteristic is that industry experts take part in the supervisory committee. Industry can play several roles, but being in the supervisory committee is what effectively reflects the specific nature of the collaborative doctoral project.
- Structured industry placements (periods of internship of doctoral candidates in business premises where they have the opportunity to perform their research while experiencing the “life” of the company) are seen as one of the most important contributions that an industry can offer to the education of a doctorate holder wishing to gain insight into the business world (e.g. from using business labs and participating in business meetings to having lunch in the canteen).
- Main outcomes in terms of qualifications of doctorate holders are that they gain an understanding of the role of research beyond the academic world and hence they are better prepared for employment in industry and for establishing better links with it if employed elsewhere.
- Companies regard collaborative doctoral programmes as a genuine part of developing stronger relations with universities and may perceive that doctorate holders educated between and by the two worlds are better prepared to fit in

corporate positions than doctorate holders educated exclusively in a university environment.

- Benefits to doctoral graduates of participating in a collaborative doctoral programme:
 - Broader employment perspectives for doctoral graduates, especially outside academic environments.
 - Better awareness of the broader employability opportunities for doctorate holders
 - Understanding the industry research environment
 - Embedding industrial mindset as well as university mindset in his/her education
 - Able to deal easily with the two worlds because of better understanding
 - Those who follow a subsequent academic career path can inform academic curricula development
 - Improving CV: when looking for employment, doctorate holders take with them the good reputation of the scheme that funded their research and/or the name of the company and university in which they worked.