REFLEX
euraxess

Reader & Field guide

Our journey to create a responsive & flexible career development tool

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The reader and field guide will describe the journey we took through the project's lifetime and will show you the main results of REFLEX. Moreover, it will enable you to use the General Training Model Scheme (GTMS) in your context. The GTMS is a system which can be used by Euraxess Network members in the development of career development services to assist researchers' career development. The GTMS can help researchers obtaining a clearer picture of what issues can be important in their career development planning and where to find more information.

Content

1. Aim and Achievement of REFLEX

In today´s ever changing world, **systematic and focused career management** is becoming increasingly important for both researchers and their employers. However, research organisations face the challenge of **how to guide researchers through this process and how to enable them to become creative, critical and autonomous decision makers.**

Currently, a **variety of career development tools is available**, some of them are formal and structured, others are based on an informal and self-directed approach. How can these tools, usually designed for the use in certain research environments, be transferred to other contexts?

REFLEX - A two-year project joining forces of partners from five European countries, addressed these challenges through the design of an intelligent career development framework, based on the direct involvement of researchers, their employers, HR departments, EURAXESS Service Centres and other relevant actors.

The project consortium took the following steps for creating the General Training Model Scheme (GTMS):

- Scenario workshops with researchers and other local stakeholders were organised in every project country to learn about the country specific issues and situation.
- Existing career development tools and practices were collected and analysed with regard to their applicability in different national contexts.
- Afterwards, a set of modules were defined to describe certain practices, procedures and skills, which were combined into a common framework, allowing for countryspecific mutations. The framework integrated and complemented already existing tools, e.g. a workshop on proposal writing skills or a career planning tool – just to name two.
- The General Training Model Scheme focusing on the development of career management skills for researchers was designed, adapted, and tested in different national contexts.

2. Scenario Workshops

National Scenario Workshops were held in all five partner countries. NTNU in Trondheim held the pilot workshop, the others followed shortly afterwards.

National Scenario Workshops:

- 25 August 2015, Trondheim, Norway
- 6 October 2015, Bratislava, Slovakia
- 14 October 2015, Budapest, Hungary
- 3 November 2015, Copenhagen, Denmark
- 19 January 2016, Zurich, Switzerland

What is a scenario workshop?

Key to the project activities was the bottom-up approach and the direct involvement of researchers, their employers and other stakeholders, who are engaged in the career development support. The scenario workshops helped to identify issues of crucial importance for the career development of different groups of researchers in the respective country.

By bringing together researchers, funding institutions, state and private institutions and other stakeholders, the concept of career development framework was analysed and discussed:

- Which information should a framework include?
- How can existing career development practices and tools be improved?

- Identification of new tools and practices to be included in a career development framework.
- Identification of so-called *blockers* (obstacles in researchers' career development) and *boosters* (helping methods in researchers' career development)

The aims of the scenario workshop were to

- raise awareness of anticipated problems
- help to develop common definitions
- facilitate discussions between different actors
- examine the differences and similarities as well as problems and solutions as perceived by the participating role groups
- cultivate steps and solutions for foreseen problems

(See http://participedia.net/de/methods/scenario-workshop)

The original scenario workshop methodology was adapted according to the needs of the project and specific topics it addressed.

Up to 40 participants including researchers and representatives of relevant stakeholder groups participated in each of the national workshops. The composition of the groups was based on the outcomes of the stakeholders' mapping process and differed from country to country. However, the following groups were represented in each of the events:

(1) Delegates of national organizations representing researchers,

(2) Individual researchers (diversity of the individual researchers with regard to gender, career stage, type of career pathway, sectorial background etc. was ensured),

(3) Researchers' employers from various sectors (public, private, NGO) and research funders, and

(4) Researchers' career support professionals.

Main findings from the scenario workshops: Blockers and Boosters

Blockers

In general, most stakeholders mentioned the same kind of blockers, even though stakeholders focused mostly on the blockers relevant for their sectors. Companies mentioned mostly the lack of practical skills, while researchers focused a lot on lack of information and network within industry. There was no clear distinction between early stage researchers and experienced researchers, but most blockers were mentioned as relevant for the younger group of researchers (PhD and Postdocs). People were very engaged in the

topic, interested in sharing experiences and determined to continue trying to improve or remove the blockers in the future. The most important blockers mentioned were:

Knowledge and information blockers	Lack of information about transferable skills
	Lack of information about jobs that are available
	Lack of knowledge about employers' willingness and ability to further educate new employees
	Lack of knowledge about writing scientific grant applications
	Lack of knowledge about the defined academic career path
	Lack of practical skills
	Lack of language skills (both English and local language)
Guidance, network and financial restrictions	Lack of network with other job sectors
	Lack of funding opportunities
	Not a stable financial situation
	PhD wait too long thinking about their career – lack of guidance
	Too much dependence on supervisor
	Lack of qualified mentors
Social blockers	Family - children – housing - Dual Career
	Differences in working culture
	International mobility (pressure to move)
	Legal obstacles (work permit)
Blocker: academic peculiarities	Restriction of positions
	The taboo of wanting to leave academia
	Fixed term contracts and short contracts
	Publication pressure
	Lack of diversification

Boosters

The discussion about boosters was a continuation of the previous discussion about blockers. Many of the blockers were transformed into boosters. Interestingly enough not a lot of boosters mentioned were actually present or in place in the current situation. Many people spoke in the "it would be good if…" sense. Again, as with the blockers, there was not a clear distinction between early stage researchers and experienced researchers.

Supervision boosters	Supervisor should be trained to actually supervise
	Option to choose a supervisor with knowledge within industry
	Performance Development Review (individual talk with a supervisor at least once a year) should be further developed
Industry boosters	Career Fairs
	Career workshops
	Company visits
	Workshops focusing on skills needed for industry
	Cooperation between unions and academia
Training and coaching boosters	International mobility coaches
	Mentoring programs (both within academia and industry)
	Individual career coaching
	More visibility of options in a very early career stage
Network boosters	Possibility to participate in conferences (expand network)
	Acquiring international experience

	Information about networking
Financial boosters	Help with funding applications
	Financial support for courses

General conclusions/reflections on findings during the scenario workshops

In general, we can conclude that the postdoc phase is a very critical one full of doubts and insecurities. The postdoctoral phase plays a pivotal role in affecting the researcher's career perspectives. However, knowledge of the working conditions and career opportunities for postdoctoral researchers in Europe is scarce.

Every partner country has summed up the results from their national workshop in an outcome report and can be downloaded here: http://euraxess-reflex.saia.sk/en/main/scenario-workshops/
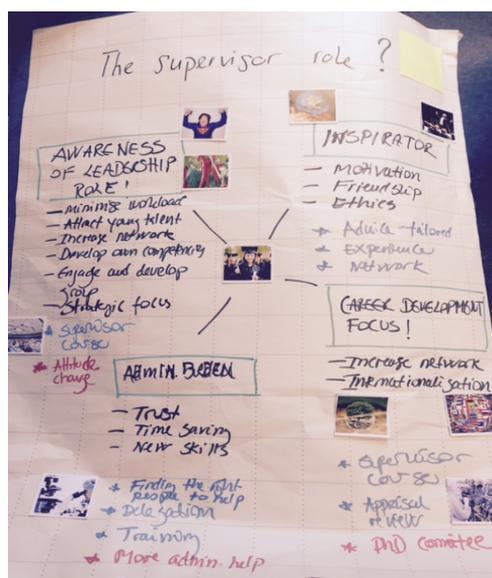
Fig 1: The role of the supervisor as one important booster.

3. Main Elements of the Career Development Framework

Career advice and academic skills & development

Writing, teaching, applying for grants, planning, grant management including administration, publishing etc. are all academic skills, which researchers need to master and constantly improve in order to be able to pursue a successful scientific career. Advisory services and career advice are provided by research institutions and universities, intending to develop the career of hosted researchers. Helping and encouraging researchers to create

opportunities for progress in their current and future work including tools for career clarification has significant importance in gaining funding. The development of soft skills can also be targeted by career development courses and its added value emphasized for the students.

Examples of services and measures

Good practices to support the career of researchers:
Labour unions: An organized association of workers, often the same trade or profession, formed to protect and promote their rights and interests. These associations often assist with career support, which can be quite different in each country though.

Personal development review (PDR): An annual or bi-annual talk with a senior research manager/supervisor where researchers get the opportunity to review the past year, identifying successes and challenges. Moreover to plan for the future, taking into consideration the objectives of the department and its possibilities, and identify learning and development opportunities including dialogue about career development/career paths.

Career center: A career center consisting of counselors specialized in various career development and self-assessment tools. They help individuals to make informed career choices.

Career planning tool: Tests, programmes, models and assessment tools which help researchers to reflect on their career and create new perspectives.

Career coach: A trained person who guides researchers in planning and managing their careers.

Career development workshops: A workshop where researchers are informed on how to look for a job: where to look, how to write an application and CV, how to network, how to use transferable skills etc.

Introduction to early career dialogue: A workshop where researchers with temporary contracts get information about career options, limitations and possibilities on where and how to get career support, hear stories from former colleagues etc.

Funding & grants: A workshop about how to write a successful application and where to receive more information on funding and grants.
scholarships provide the possibility for career development. Experienced researchers are mostly motivated by a position at a non – academic actor, where they can gain

more salary, than in the academic sphere (LERU, 2014). The difference between the career stages of researchers (R1-R4) (LERU, 2014) is also relevant, when considering financial issues. The security of the job and the stability of the work are also taken into consideration by the researchers. The lack of funding and the instability of the research system is also an obstacle (SAIA, 2015).

Information on academic publishing: A workshop about where researchers can publish their articles, who to contact and eventually how to submit a successful publication.

Academic writing: How to write a good and solid paper, what techniques can be used, who is the target group, what is your key message, how to use references etc.

Fig 2: Scene from the Scenario Workshop in Copenhagen.

Good practices of boosters in the researchers' careers were collected in a report: https://euraxess-reflex.saia.sk/en/main/publications. The main elements of the Career Development Framework with the description of boosters and the description of existing good practices are exemplified.

4. The Development of the General Training Model Scheme for Career Development

Based on the outcomes of our Career Development Workshops we created the «General Training Model Scheme» (GTMS) which was an immense step towards our flexible and responsive Career Development Model as it can be adapted *to each national or/and institutional level.*

Training Model Scheme - Researchers' career development

The modules of the GTMS were based upon the valuable input from the National Scenario Workshops from researchers at different stages in their career and other stakeholders. Important for our GTMS was from the beginning that it can be used as a researchers orientation and at the same time as an advisors' orientation for the researchers development. The identified topics are

Mobility	Networking	Career Advice

Academic Skills & Development	Company & Organisational Interaction
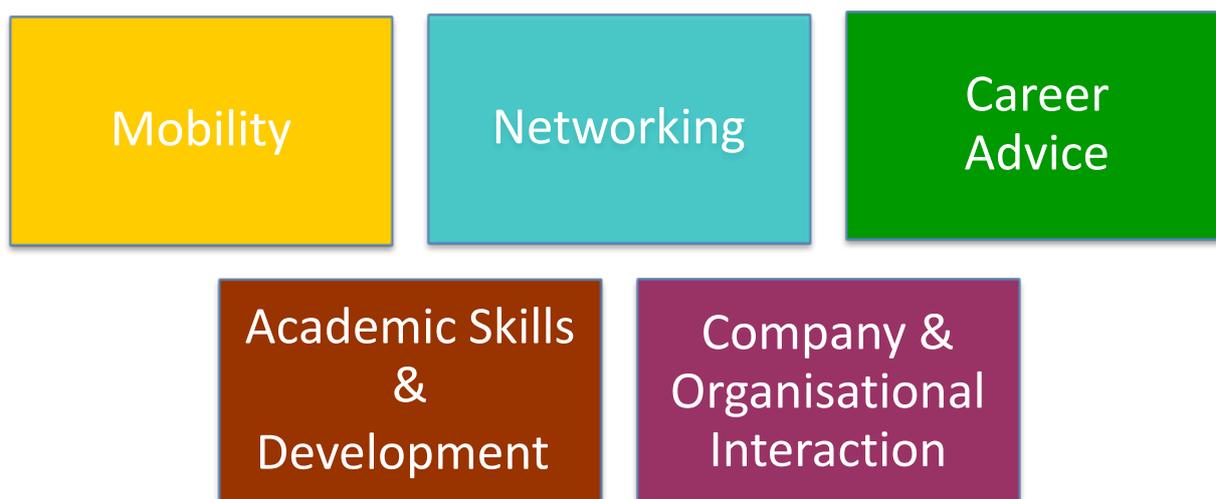
For each of these topics we identified and described the most important modules . The General Training Model Scheme can be used in face-to-face meetings with the help of cards (photo) or online with the help of our REFLEX online strategy developer.

REFLEX online strategy developer

The Reflex online strategy developer is an interactive online tool based on the Reflex Training Model Scheme. The backgroup to creating it was that it is an innovative and flexible online tool to use. It was first presented at the European Workshop on November 9, 2016 in Bratilava (Report on the European Workshop).

The application allows:
- A collaborative mapping of the Career Development related activities and services provided at an individual institution.
- To present the offered Career Development activities and services to researchers through a single interface.

How the application works:
The REFLEX App interface is intuitive and easy to learn and use. Enclosed an overview of the application functionalities and tips how to use them:

1. Basic description of the application structure
- The application structure is based on the model scheme developed in the REFLEX project (General Training Model Scheme). The scheme consists of **five main categories** (we will also refer to them as to the **modules** in this guide). These are: Career Advice, Academic Skills and Development, Company and Organizational Interaction, Mobility and Networking.

- Each Category consists of the set of **sub-modules**. E. g. the category Mobility includes the following sub-modules: Dual Career, Legal and Administrative Issues, Cultural Courses and Mobility Coaching.
- Each sub-module includes a short description. The sub-modules marked with "C" refer to courses. (E.g. C: Language courses). The sub-modules marked with "W" refer to workshops (E. g. W: How to become an entrepreneur).

2. Different preview options

- The application offers several different preview options. Find the details **here.**

3. Customising the scheme

- Institutions can customise the scheme according to their specific situation. The scheme can be edited by several collaborators and subsequently shared with the researchers or other external users. Find the details **here.**

4. Saving and sharing the scheme

- Any updates made in the scheme can be saved and shared with collaborators as well as with external users. Find the details **here.**

5. Terms of use

- The REFLEX Application can be used free of charge. The application can be used for non-commercial purposes only.

The Reflex online strategy developer enables you to:

- Add, remove and reorganise the modules
- Create new modules
- Add the description to each module and update it

It works at different types of devices (mobile responsive design). You can share the editable version with other collaborators. You can share the preview version with researchers.

Fig 3 : Working with the General Training Model at the European Workshop in Bratislava.
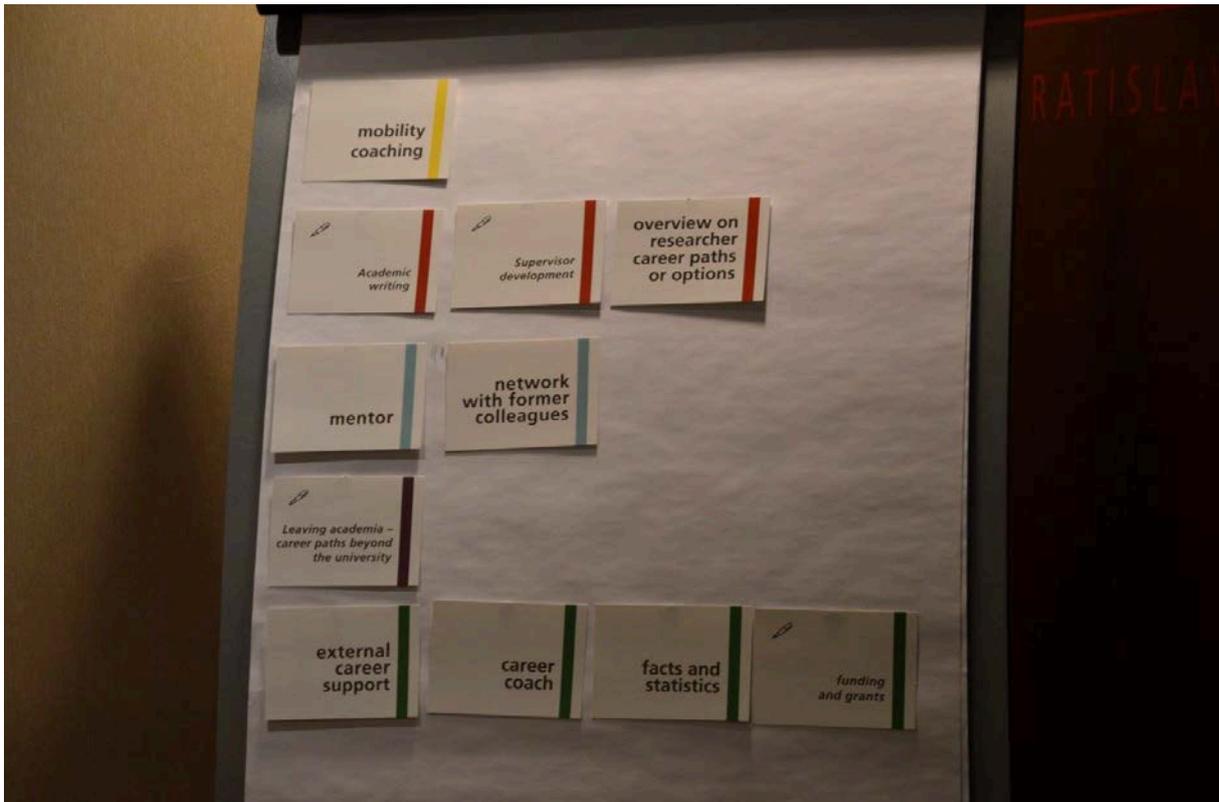
Fig 4 & 5 : Working with the General Training Model Scheme at the European Workshop in Bratislava.

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MODE:

VIEW:

REFLEX Career Development Training Scheme
Name of the institution

MOBILITY

⭐ **Custom sub-module name**

⭐ **Dual career**

Centre for dual career couples

⭐ **Social Events**

⭐ **Legal and administrative issues**

⭐ **C: Language courses**

☆ C: Cultural courses

☆ Mobility coaching

⠿ Show Full Scheme

MOBILITY

⭐ **Legal and administrative issues**

EURAXESS Service Centre

ESC offers both incoming and outgoing researchers assistance with practical issues related to the research mobility.

Contact details:
E-mail: euraxess@worlduniversity.xy
Web: www.euraxess.xy

⭐ **Dual career**

Centre for dual career couples

Personal assistance to the partners and families of international researchers.
More information available at: www.worlduniversity.xy/dualcareers

⭐ **Social Events**

Researchers twinning

The programe helping the international researchers to learn local staff
Find more information at: www.worlduniversity.xy/international

International researchers club

Regular social events (meetings, trips, exchanges) are organised by the association of international researchers
Find more information at: www.profilebook.xy/wu_internationals

⭐ **C: Language courses**

Free language courses for international PhD students

Free courses for international researchers are organised by the department of languages. No registratioon is required.
Contact details:
E-mail: departmentoflanguages@worlduniversity.xy
Web: www.worlduniversity.xy

5. Publications

All reports, implementation guides and good practices report you find on the projects homepage: https://euraxess-reflex.saia.sk/en/

Outcome reports from national scenario workshops

* **Outcome Report Denmark**
  Outcome Report Hungary
* **Outcome Report Norway**
* **Outcome Report Slovakia**
* **Outcome Report Switzerland**

Outcomes report from the European level workshop

* **Outcomes report European workshop**

Main elements of career development scheme

* **Background report**

REFLEX training model scheme

* **Cards for printing**
* **Descriptions**

REFLEX APP User Guide

* **Reflex App User Guide (PDF)**

For more information about REFLEX visit the project website www.euraxess-reflex.eu.