# Sustainable Careers for Researcher Empowerment (SECURE)

## WP2
*Development of Research Career Framework*

## Deliverable 2.1
*First Draft of SECURE Research Career Framework*

DOI: *10.5281/zenodo.10776715*

**SECURE**
Sustainable Careers for
Researcher Empowerment

# Table of Contents

**SECURE**
Sustainable Careers for
Researcher Empowerment

**secureproject.eu**

**SECURE**
Sustainable Careers for
Researcher Empowerment

secureproject.eu

## Table of Figures

**SECURE**
Sustainable Careers for
Researcher Empowerment

**secureproject.eu**

## Document Information

| Title | **First Draft of SECURE Research Career Framework** |
|---|---|
| Deliverable: | D2.1 |
| Distribution: | Public |
| Leader: | Technopolis Group Belgium |
| Author: | Gareth O'Neill |
| Date: | 04 March 2024 |
| Status: | Prefinal Version V0.9 |

## Document History

| Version | Date | Authors/Contributors | Description |
|---|---|---|---|
| **0.1** | 18/09/2023 | Gareth O'Neill (TGB) | Table of contents drafted |
| **0.2** | 29/02/2024 | Gareth O'Neill (TGB), Peter Boddy (Adoc), Sophie Bouccara (Adoc), Dario Capezzuto (EC), Sebastian Dahle (Eurodoc), Gordon Dalton (PLOCAN), Emma Day (Vitae), Corina Moya Falcon (PLOCAN), Katarína Halušková (ABIS), Alina Irimia (UEFISCDI), Jürgen Janger (WIFO), Erna Karalija (ICoRSA), Matthieu Lafon (Adoc), Hélder Lopes (UNL), Nataša Jakominić Marot (UNIRI), Slaven Misljencevic (EC), Dragana Mitrovic (ICoRSA), Panagiotis Moiras (UCY), Sara Pilia (MCAA), Ioana Spanache (UEFISCDI), Ioana Trif (UEFISCDI), Claudia Vieira (UNL), Clare Viney (Vitae), and Saša Zelenika (UNIRI) | Initial report drafted based on input from SECURE partners and invited external experts |
| **0.3** | 04/03/2023 | Gareth O'Neill (TGB), Luisa Henriques (FCT), Fleur Lebhardt (TGB), Sara Pilia (MCAA), and Petar Plausevic (CPN) | Report revised incorporating feedback from reviews and technical formatting |
| **0.9** | 04/03/2023 | Gareth O'Neill (TGB) | Report finalised and submitted to EC for review |
| **1.0** | TBD | TBD | TBD |

## Table of Abbreviations

| Abbreviation | Full Name |
| --- | --- |
| ABIS | Academy of Business in Society |
| Adoc | Adoc Talent Management |
| C&C | European Charter for Researchers and Code of Conduct for the Recruitment of Researchers |
| CoARA | Coalition for Advancing Research Assessment |
| CPN | Center for the Promotion of Science |
| DORA | San Francisco Declaration on Research Assessment |
| EC | European Commission |
| Charter | European Charter for Researchers |
| EEA | European Education Area |
| EFfRC | European Framework for Research Careers |
| EHESO | European Higher Education Sector Observatory |
| ERA | European Research Area |
| ERAC | European Research Area and Innovation Committee |
| ESCO | European Skills, Competences, and Occupations |
| FCT | Foundation for Science and Technology |
| Eurodoc | European Council of Doctoral Candidates and Junior Researchers |
| EURES | European Employment Services |
| ICoRSA | International Consortium of Research Staff Associations |
| MCAA | Marie Curie Alumni Association |
| OECD | Organisation for Economic Cooperation and Development |
| PLOCAN | Oceanic Platform of the Canary Islands |
| RCF | Research Career Framework |
| ReICO | Research and Innovation Careers Observatory |
| RESAVER | Retirement Savings Vehicle for European Research Institutions |
| ResearchComp | European Competence Framework for Researchers |
| RFO | Research-funding Organisation |
| RPO | Research-performing Organisation |
| TGB | Technopolis Group Belgium |
| TTLM | Tenure Track-like Model |
| UCY | University of Cyprus |

**SECURE**
Sustainable Careers for
Researcher Empowerment

**secureproject.eu**

| UEFISCDI | Executive Agency for Higher Education, Research, and Innovation Funding |
|----------|------------------------------------------------------------------------|
| UNIRI    | University of Rijeka                                                    |
| UNL      | Nova University Lisbon                                                  |
| WIFO     | Austrian Institute of Economic Research                                |

secureproject.eu

# 1. Introduction

This report is deliverable D2.1 of the SECURE project [1] on *First Draft of SECURE Research Career Framework*. The **report offers a first draft of the SECURE Research Career Framework** (RCF) and provides an initial response to and interpretation of the new European Framework for Research Careers (EFfRC) [2] from the SECURE consortium. The aim of the project is thus not to create a completely new research career framework but to build on and link to existing initiatives to improve research careers and reduce research career precarity in Europe. This includes the revised European Charter for Researchers (Charter) [3], new European Competence Framework for Researchers (ResearchComp) [4], and updated European Skills, Competences, and Occupations (ESCO) classification [5]. The RCF is supported by proposals for tenure track-like models (TTLMs) as described in SECURE deliverable D3.1 on *First Draft of SECURE Tenure Track-Like Models* [6].

The **report builds on key recommendations from SECURE deliverables** D1.1 on *State-of-the-Art on Research Career Frameworks* [7] and D1.2 on *State-of-the-Art on Tenure Track-Like Models* [8]:

- Build on key European initiatives to improve research careers including close alignment with the EFfRC and links to the Charter, ResearchComp, ESCO, and other relevant RCFs
- Develop an RCF which covers all career stages and covers the full career lifecycle including recruitment and selection, training and development, and mobility and progression
- Develop an RCF which addresses the precarity of research careers, working conditions, fair and transparent assessment, inclusivity and gender equality, and Open Science
- Develop an RCF which offers organisations a suite of options to improve research careers and flexibility to select and refine actions according to their strategic interests and needs
- Develop an RCF which addresses TTLMs and links to the principles of TTLMs by SECURE

The **EFfRC is a Council Recommendation to support research careers** and contribute to a more attractive, open, and sustainable research labour market by attracting and retaining research, innovation, and entrepreneurial talents in Europe. The EFfRC is based on Council Conclusions on Deepening the European Research Area [9] and was first developed by the European Commission as a technical note to the European Research Area and Innovation Committee (ERAC) [10] and then as a Commission Proposal for a Council Recommendation [11]. The EFfRC first consists of a list of 42 key

initiates and observations which sketch the background for and frame the current policy context on research careers in Europe. The EFfRC then proposes 44 recommendations grouped into 8 thematic categories or 'pillars' for research careers as in Figure 1. The EFfRC lastly includes 2 annexes with example occupations of researchers (Annex 1) and the revised Charter (Annex 2).

*Figure 1: European Framework for Research Careers*

| Pillar 1 | Pillar 2 | Pillar 3 | Pillar 4 |
|---|---|---|---|
| Researchers, Research Managers, and Research Technicians in the European Research Area | Recognition, Interoperability, and Comparability of Researchers' Careers | Recruitment and Working Conditions | Researchers Skilled for Intersectoral and Interdisciplinary Careers and for Entrepreneurship and Innovation |
| #1-6 | #7-10 | #11-15 | #16-25 |
| **Pillar 5** | **Pillar 6** | **Pillar 7** | **Pillar 8** |
| Career Assessment, Development, and Progression | Balanced Circulation of Talents and Making the Union an Attractive Destination | Support Actions for Research Careers | Monitoring of Research Careers |
| #26-30 | #31-32 | #33-39 | #40-44 |

The **Charter is a set of principles to define the relationship between researchers and employers/ funders of researchers** and defines their roles, responsibilities, and entitlements. The Charter aims to ensure that this relationship is conducive to creating an environment and framework conditions for generating, transferring, sharing, and disseminating knowledge and technology as well as to the career development of researchers. The Charter is a new revision of the European Charter for Researchers and Code of Conduct for the Recruitment of Researchers (C&C) [12] which is annexed to the EFfRC and contains 20 recommendations grouped under 4 thematic categories: (1) Ethics, Integrity, Gender, and Open Science (2) Researchers Assessment, Recruitment, and Progression (3) Working Conditions and Practices (4) Research Careers and Talent Development. Implementation of the Charter is recognised by the Human Resources Strategy for Researchers (HRS4R) award [13].

**ResearchComp is tool to assess and develop transferable skills and foster career development** which helps researchers assess and develop their transversal skills, higher education institutions and training providers adapt their offer to researchers, and employers to be aware of the competences

of researchers. ResearchComp consists of 7 competence areas (namely cognitive abilities, doing research, managing research, managing research tools, making an impact, working with others, and self-management), 38 competences, and 389 learning outcomes along 4 proficiency levels (namely foundational, intermediate, advanced, and expert). ResearchComp is aligned with the **ESCO classification which identifies and categorises skills, competences, and occupations for researchers and the labour market**. The ESCO classification aims to support job mobility across Europe with a focus on more integrated education, training, and employment.

This **first draft of the RCF is a step towards implementing the strategic recommendations of the EFfRC** which are primarily aimed at member states of the European Union and the European Commission to improve research careers in Europe. The draft RCF proposes how to translate the recommendations into concrete actions for research-performing organisations (RPOs) and research-funding organisations (RFOs). While the recommendations are not always clearly or directly relevant for RPOs and RFOs, the draft RCF has nevertheless aimed to understand and translate the core intention of each recommendation for implementation at RPOs and RFOs. The draft RCF systematically addresses the core topic of each recommendation and notes overlaps and redundancies with other recommendations where these arise from this translation approach.

The **first draft of the RCF is structured around the 8 pillars and 44 recommendations of the EFfRC** and addresses 6 key questions aimed at RPOs and RFOs for each recommendation in the EFfRC:

- How could this recommendation be relevant and useful for RPOs and RFOs?
- Which principles of the Charter could be relevant for this recommendation?
- How could ResearchComp and ESCO be relevant for this recommendation?
- How could this recommendation reduce the precarity of research careers?
- Which actions could implement this recommendation at RPOs and RFOs?
- Which challenges could hinder this recommendation at RPOs and RFOs?

The **first draft of the RCF proposes a list of actions to implement the EFfRC at RPOs and RFOs** with related challenges for implementation for each recommendation. The actions have been formulated at a level of description so as to give RPOs and RFOs clear and practical guidance on how to implement the recommendations, while at the same time allowing flexibility in interpreting and refining the

actions to improve research careers according to their own strategic interests and needs. These actions further serve as the options for trial organisations in SECURE to select and test during the trials. The first draft of the RCF will be consulted with the research community. Feedback from the consultation and trials will feed into a restructured and refined final version of the RCF.

This **report addresses each pillar of the EFfRC and the related recommendations for that pillar**. Section 2 thus deals with Pillar 1, Section 3 with Pillar 2, Section 4 with Pillar 3, Section 5 with Pillar 4, Section 6 with Pillar 5, Section 7 with Pillar 6, Section 8 with Pillar 7, and Section 9 with Pillar 8. The report closes with key conclusions for the next stages of the draft RCF. The recommendations of the EFfRC are in Annex 1 and the principles of the Charter in Annex 2. The responses to the 6 questions for each recommendation in this first draft of the RCF are lastly grouped in Annexes 3-8.

## 2. Pillar 1 - Researchers, Research Managers, and Research Technicians in the European Research Area

2.1. Recommendation 1

*'Researchers' means professionals engaged in the conception or creation of new scientific knowledge based on original concepts or hypotheses. They conduct research and improve or develop concepts, theories, models, infrastructures, techniques, instrumentation, software or operational methods. Researchers may be involved fully or partially in different types of activities – such as basic or applied research, experimental development, operating research equipment in any sector of the economy or society and disseminating and valorising research results. They may also be partially involved in, among others, project management, teaching, mentoring, supporting evidence-informed policy making, open science practices, knowledge and technological transfer activities, and science communication. Researchers identify options for new research and development activities, and plan for and manage them by using high-level skills and knowledge developed through formal education and training or from experience.*

- How could this recommendation be relevant and useful for RPOs and RFOs?

    Different organisations may adopt a different definition of 'researcher' depending on their own internal or even national regulations and policies. Differing definitions of 'researcher' can limit interoperability and comparability across organisations, sectors, and countries. The semantic meaning of 'researcher' can also differ across languages and translations. This recommendation provides a common definition which can be used across languages, organisations, sectors, and countries. Organisations could adopt this definition of 'researcher' or at least clearly communicate on their own definition of 'researcher'. Researchers could also be made explicitly aware of all of the expected activities as well as formal rights and obligations associated with their role of researcher at their organisations

- Which principles of the Charter could be relevant for this recommendation?

    - Pillar 1 > Principle 6 > The Researcher

    - Pillar 4 > Principle 1 > Valuing Diverse Research Careers

**SECURE**
Sustainable Careers for
Researcher Empowerment

**secureproject.eu**

- **How could ResearchComp and ESCO be relevant for this recommendation?**

  - The adoption and promotion of ResearchComp at an organisation could be accompanied by a clear definition of 'researcher' so that it is clear for whom ResearchComp is applicable
  - Organisations could align the classification/tagging of researcher job/grant advertisements with relevant ESCO classifications for occupations, skills/competences, and qualifications

- **How could this recommendation reduce the precarity of research careers?**

  The definition of 'researcher' proposed in this recommendation and its adoption or refinement at an organisation could help the organisation define the scope of precarity. Any organisation aiming to reduce precarity in research careers needs to define who is at risk and who is the target of efforts to reduce precarity. Including a clear definition of 'researcher' along with the associated rights and obligations of the role of the researcher in grant/job advertisements could help researchers manage their expectations in their careers

- **Which actions could implement this recommendation at RPOs and RFOs?**

  - Adopt the EFfRC definition of 'researcher' in organisational regulations and policies
  - Communicate more clearly on the definition and rights and obligations of 'researcher'

- **Which challenges could hinder this recommendation at RPOs and RFOs?**

  - Definition of 'researcher' may already be defined in local or national regulations
  - Semantic meaning of 'researcher' can differ across languages and translations
  - Changing definition of 'researcher' in regulations and policies is a complex process
  - Researchers may be resistant to changes regarding the definition of 'researcher'

## 2.2. Recommendation 2

*Researchers can conduct their activities with equal relevance in all sectors performing research and innovation, including academia, industry, business, public administration and the non-profit sector, where their skills, knowledge and attitudes can be beneficial to European society, the research and innovation system, and the economy.*

- **How could this recommendation be relevant and useful for RPOs and RFOs?**

  Research is not restricted to the academic sector but takes place in collaboration with and

across the public and private sectors. Researchers thus not only work in different sectors but collaborate and move across sectors. While researchers traditionally expect to stay in academia, many need to find employment elsewhere, where there are new opportunities and attractive working conditions for careers in and beyond research. Yet, researchers are often not trained and supported for intersectoral collaboration and mobility. The public and private sectors furthermore do not always recognise the skills/competences of researchers. Organisations could thus encourage and support collaboration and mobility across sectors

- Which principles of the Charter could be relevant for this recommendation?

  - Pillar 1 > Principle 6 > The Researcher

  - Pillar 1 > Principle 7 > Free Circulation of Researchers

  - Pillar 2 > Principle 1 > Researchers' Assessment

  - Pillar 4 > Principle 1 > Valuing Diverse Research Careers

  - Pillar 4 > Principle 2 > Career Development and Advice

- How could ResearchComp and ESCO be relevant for this recommendation?

  - The adoption of ResearchComp at an organisation could include the recognition and development of relevant skills/competences for intersectoral collaboration and mobility
  - Organisations could align the classification/tagging of researcher job/grant advertisements with relevant ESCO classifications for intersectoral collaboration and mobility

- How could this recommendation reduce the precarity of research careers?

  This recommendation helps organisations to recognise that researchers collaborate across sectors and may temporarily or permanently transition to another career in or outside the academic sector. Organisations could better encourage and support their researchers to collaborate across sectors and be intersectorally mobile so that they have intersectoral experience should they want or need to transition to another career. This could increase their awareness, willingness, and opportunities of finding a new career and reduce the pressure and thus precarity of finding employment as a researcher in the academic sector

- Which actions could implement this recommendation at RPOs and RFOs?

  - Raise awareness on the wide diversity of research careers in and outside academia

- Encourage, train, and support researchers for intersectoral collaboration and mobility

- Promote value of researchers and their skills/competences to non-academic sector

- Organise research career events and employer matchmaking events for researchers

- Identify structural and administrative barriers to intersectoral collaboration and mobility

- Collect and share best practices on support for intersectoral collaboration and mobility

- **Which challenges could hinder this recommendation at RPOs and RFOs?**

- Researchers are more interested in academic careers than in non-academic careers

- Researchers are not aware of opportunities and conditions in non-academic sector

- Non-academic sector is not aware of skills/competences of academic researchers

## 2.3. Recommendation 3

*Research management careers can be undertaken by researchers and other professionals to manage and support research and innovation activities. Research management careers should be adequately framed and recognised at the level of the Union, by defining relevant skills and competences, in order to strengthen research managers' professional capacity, to enable the development of relevant training, and to foster comparability. Research managers can perform different tasks, for example:*

*(a) streamlining or facilitating the planning, development, management, FAIR data management, administration, monitoring, communication and valorisation of research and innovation;*

*(b) ensuring compliance with policy objectives, funding programme requirements, financial rules and legal regulations;*

*(c) improving the efficiency and effectiveness of research and innovation projects or systems;*

*(d) enhancing the impact of research and innovation on policy and society;*

*(e) supporting the design and implementation of research and innovation policies, programmes and projects.*

- How could this recommendation be relevant and useful for RPOs and RFOs?

  The term 'research manager' refers to research management staff who are not necessarily conducting research but who manage and support research and researchers. They have often been researchers themselves and completed a PhD. Relevant research management and support functions may already exist in different forms at RPOs and RFOs, but the term or function of 'research manager' may not be clearly defined or recognised. Organisations could improve the profile of research managers by more clearly defining, recognising, and supporting research managers and research management activities at their organisations

- Which principles of the Charter could be relevant for this recommendation?

  - Pillar 1 > Principle 6 > The Researcher

  - Pillar 2 > Principle 1 > Researchers' Assessment

  - Pillar 4 > Principle 1 > Valuing Diverse Research Careers

  - Pillar 4 > Principle 2 > Career Development and Advice

- How could ResearchComp and ESCO be relevant for this recommendation?

  - The adoption of ResearchComp at an organisation could include the recognition and development of relevant skills/competences for research managers and management
  - Organisations could align the classification/tagging of research manager job/grant advertisements with relevant ESCO classifications for research managers and management

- How could this recommendation reduce the precarity of research careers?

  The inclusion of research manager as an alternative career path in the research profession gives recognition to the term and function of 'research manager' at organisations. This could help develop research manager as an independent profession and highlight diverse career paths in research. As many researchers may not be able or want to continue a career as a researcher, becoming a research manager gives them more options to exploit their skills/competences and transition to another research career in or outside academia. This also helps organisations and researchers to be aware of and prepare for such a transition

- Which actions could implement this recommendation at RPOs and RFOs?

  - Define a clear profile for research manager positions with their roles and responsibilities

    - Raise awareness on diverse career paths and research manager as a research career

    - Train researchers in research management and support transition to research manager

    - Support ongoing training, development, and professionalisation of research managers

- <span style="color:#2e74b5">Which challenges could hinder this recommendation at RPOs and RFOs?</span>

    - Creation and embedding of a new profile for research managers is a complex process

    - Researchers are not aware of opportunities and benefits of career as research manager

    - Researchers are not adequately trained and supported for career as research manager

    - Position of research manager may not be recognised with attractive working conditions

## 2.4. Recommendation 4

*Research technicians are professionals whose main tasks require high levels of technical knowledge, training, and experience in one or more fields of engineering, the physical and life sciences, or the social sciences and humanities. They participate in scientific and technical tasks involving the application of concepts and operational methods and the use of research equipment, normally under the supervision of researchers. Research technicians have a crucial support role in the performance of high-level research and innovation. Member States should consider adequately framing and recognising research technicians' careers at national level.*

- <span style="color:#2e74b5">How could this recommendation be relevant and useful for RPOs and RFOs?</span>

    The term 'research technician' refers to research support staff who are not directly conducting research but who provide technical support for research and researchers. They have often been researchers themselves and completed a PhD. Relevant technical support functions may already exist in different forms at RPOs and RFOs, but the term or function of 'research technician' may not be clearly defined or recognised. Organisations could improve the profile of research technicians by more clearly defining, recognising, and supporting research technicians and technical support activities within their organisations

- <span style="color:#2e74b5">Which principles of the Charter could be relevant for this recommendation?</span>

    - Pillar 1 > Principle 6 > The Researcher

    - Pillar 2 > Principle 1 > Researchers' Assessment

**SECURE**
Sustainable Careers for
Researcher Empowerment

secureproject.eu

- Pillar 4 > Principle 1 > Valuing Diverse Research Careers

- Pillar 4 > Principle 2 > Career Development and Advice

- **How could ResearchComp and ESCO be relevant for this recommendation?**

  - The adoption of ResearchComp at an organisation could include the recognition and development of relevant skills/competences for research technicians and technical support

  - Organisations could align the classification/tagging of research technician job/grant advertisements with ESCO classifications for research technicians and technical support

- **How could this recommendation reduce the precarity of research careers?**

  The inclusion of research technician as an alternative career path in the research profession gives recognition to the term and function of 'research technician' at organisations. This could help develop research technician as an independent profession and highlight diverse career paths in research. As many researchers may not be able or want to continue a career as a researcher, becoming a research technician gives them more options to exploit their skills/competences and transition to another research career in or outside academia. This also helps organisations and researchers be aware of and prepare for such a transition

- **Which actions could implement this recommendation at RPOs and RFOs?**

  - Define a clear profile for research technician positions with their roles and responsibilities

  - Raise awareness on diverse career paths and research technician as a research career

  - Train researchers in technical support and support transition to research technician

  - Support ongoing training, development, and professionalisation of research technicians

- **Which challenges could hinder this recommendation at RPOs and RFOs?**

  - Creation and embedding of a new profile for research technicians is a complex process

  - Researchers are not aware of opportunities and benefits of career as research technician

  - Researchers are not adequately trained and supported for career as research technician

  - Position of research technician may not be recognised with attractive working conditions

**SECURE**
Sustainable Careers for
Researcher Empowerment

**secureproject.eu**

## 2.5. Recommendation 5

*All researchers, regardless of their status and sector of employment, should be framed in the following profiles:*

*(a) R1 – First Stage Researcher: Researchers doing research under supervision up to the point of a PhD or equivalent level of competence and experience;*

*(b) R2 – Recognised Researcher: Researchers with a PhD or equivalent level of competence and experience who have not yet established a significant level of independence in developing their own research, attracting funding, or leading a research group;*

*(c) R3 – Established Researcher: Researchers with a PhD or equivalent level of competence and experience who are able to independently develop their own research, attract funding, and lead a research group;*

*(d) R4 – Leading Researcher: Researchers with a PhD or equivalent level of competence and experience who are recognised as leading their research field by their peers.*

- How could this recommendation be relevant and useful for RPOs and RFOs?

  Organisations may deploy different classifications/nomenclatures for researchers at their organisations. The R1-R4 profiles provide a common framework for classifying researchers which can be used interoperably across organisations, sectors, and countries. The R1-R4 profiles are not restricted to academic researchers or researchers obtaining or having obtained a PhD but include researchers in the public and private sectors as well as researchers without a PhD but with equivalent levels of competence and experience. The R1-R4 profiles also allow organisations to target job/grant advertisements to a specific R1-R4 profile. Organisations could adopt the R1-R4 profiles or map existing classifications/ nomenclatures onto the profiles and refer to the R1-R4 profiles in relevant communications

- Which principles of the Charter could be relevant for this recommendation?

  - Pillar 1 > Principle 6 > The Researcher

  - Pillar 2 > Principle 4 > Career Progression

- Pillar 3 > Principle 2 > Stability of Employment

- **How could ResearchComp and ESCO be relevant for this recommendation?**

  - The adoption of ResearchComp at an organisation could include mapping relevant skills/competences and learning outcomes/proficiency levels to the R1-R4 profiles
  - Organisations could align the classification/tagging of researcher job/grant advertisements to the R1-R4 profiles along with relevant ESCO classifications for the profiles

- **How could this recommendation reduce the precarity of research careers?**

  The adoption of the R1-R4 profiles could make it easier for researchers to identify a wider variety of researcher job/grant opportunities matched to their skills/competences and qualifications across organisations, sectors, and countries. The R1-R4 profiles also help organisations define the scope of precarity as early-career researchers are typically in more precarious situations and face different issues than senior researchers. Doctoral candidates are, for example, in some cases students and do not receive professional working conditions or adequate social benefits as they would if they were professionals. Organisations could thus focus on specific R1-R4 profiles and tailor precarity support measures to those profiles

- **Which actions could implement this recommendation at RPOs and RFOs?**

  - Adopt the R1-R4 profiles or map existing organisational profiles onto the R1-R4 profiles
  - Refer to the R1-R4 profiles in job/grant advertisements and relevant communications
  - Identify scope of precarity and propose measures to reduce precarity for R1-R4 profiles
  - Treat doctoral candidates as professionals with related working conditions and benefits
  - Raise awareness of and support adoption of R1-R4 profiles in the non-academic sector

- **Which challenges could hinder this recommendation at RPOs and RFOs?**

  - Integration of R1-R4 profiles in existing regulations and policies is a complex process
  - R1-R4 profiles may not be easily mapped onto existing local and national profiles
  - Non-academic sector is not aware of or does not see benefits of the R1-R4 profiles
  - Lack of widespread adoption of R1-R4 profiles hinders interoperability and usefulness

## 2.6. Recommendation 6

*For the purposes of this Recommendation, R1 and R2 profiles should be considered early-career researchers, and R3 and R4 profiles should be considered senior researchers.*

*Member States are recommended to encourage the use of references to the profiles in all vacancies specifically addressed to researchers or, where relevant, to invite higher education institutions and research organisations to do so.*

*Profiles should not necessarily be considered as stages on a progressive career path.*

*A non-exhaustive list of examples of occupations for researchers across sectors along the R1-R4 profiles is set out in Annex I.*

- How could this recommendation be relevant and useful for RPOs and RFOs?
  Organisations adopting the R1-R4 profiles or mapping their existing profiles for researchers onto the R1-R4 profiles could group and differentiate the R1-R2 profiles for early-career researchers and R3-R4 categories for senior researchers. These two researcher groups have different rights and obligations and typically face different challenges in their careers, whereby this grouping allows organisations to tailor their career support to the two groups. While the recommendation notes that the R1-R4 profiles are not necessarily stages in a career path, the profiles clearly suggest that progression is sequential along a career path

- Which principles of the Charter could be relevant for this recommendation?
  - Pillar 1 > Principle 6 > The Researcher
  - Pillar 2 > Principle 4 > Career Progression
  - Pillar 3 > Principle 2 > Stability of Employment
  - Pillar 4 > Principle 2 > Career Development and Advice

- How could ResearchComp and ESCO be relevant for this recommendation?
  - The adoption of ResearchComp at an organisation could include grouping relevant skills/competences and learning outcomes/proficiency levels into R1-R2 and R3-R4 profiles

- Organisations could align the classification/tagging of researcher job/grant advertisements to R1-R2 and R3-R4 profiles along with relevant ESCO classifications for the profiles

- How could this recommendation reduce the precarity of research careers?

  Early-career researchers are usually the most vulnerable to precarity in their careers as they are typically employed on temporary contracts for the duration of a research project and are not guaranteed any stability after their contract. While senior researchers are often seen as less vulnerable as they typically have permanent positions at organisations, they can be employed on temporary contracts and often may not be able to progress to more senior positions in their careers due to restricted numbers of senior positions. Organisations could aim to address such precarity issues for the R1-R2 and R3-R4 profiles

- Which actions could implement this recommendation at RPOs and RFOs?

  - Adopt the grouping of R1-R2 and R3-R4 profiles in organisational regulations and policies

  - Tailor support measures for career development to R1-R2 and R3-R4 profile groups

  - Tailor support measures to address precarity to R1-R2 and R3-R4 profile groups

- Which challenges could hinder this recommendation at RPOs and RFOs?

  - Two-fold grouping of early-career and senior researchers may be too simple for reality

  - National regulations and policies may define and treat doctoral candidates as students

**SECURE**
Sustainable Careers for
Researcher Empowerment

**secureproject.eu**

# 3. Pillar 2 - Recognition, Interoperability, and Comparability of Researchers' Careers

## 3.1. Recommendation 7

*Member States and the Commission are recommended to promote and support a full recognition of researchers' careers as well as an equal esteem and reward of the different paths regardless of the sector of employment or activity, and to take supportive measures to allow for their full interoperability and comparability across Member States, sectors and institutions.*

- How could this recommendation be relevant and useful for RPOs and RFOs?

  Organisations and researchers are not fully aware of the diversity in research careers in and outside academia. The many functions in research careers are often also not recognised or rewarded equally or commensurate with their required skills/competences and expertise. There are further discrepancies in salaries, working conditions, and social benefits across organisations, sectors, and countries. Existing academic culture at organisations moreover already consists of enshrined norms and views on research careers, whereby structural changes at organisations need to be accompanied by cultural changes. Organisations thus need to raise awareness on the diversity and opportunities in research careers and ensure attractive salaries, working conditions, and social benefits for all of their research staff. Organisations could also improve interoperability and comparability of research careers by adopting, interpreting, and implementing many of the recommendations from the EFfRC

- Which principles of the Charter could be relevant for this recommendation?

  - Pillar 1 > Principle 6 > The Researcher

  - Pillar 3 > Principle 1 > Working Conditions, Funding, and Salaries

  - Pillar 3 > Principle 2 > Stability of Employment

  - Pillar 4 > Principle 1 > Valuing Diverse Research Careers

- How could ResearchComp and ESCO be relevant for this recommendation?

  - The adoption of ResearchComp at an organisation could include aligning with relevant skills/competences and learning outcomes/proficiency levels in their research jobs/grants

- Organisations could align the classification/tagging of research job/grant advertisements with relevant ESCO classifications for occupations, skills/competences, and qualifications

- **How could this recommendation reduce the precarity of research careers?**

  While careers for researchers in academia are precarious due to the limited number of researcher jobs/grants, abundance of temporary/short-term contracts, and oftentimes inadequate working conditions and social benefits, there are many opportunities for other careers in research in and beyond academia with less precarity and better conditions. Organisations could raise awareness about these other opportunities in and beyond academia and better support researchers in this transition on the research labour market. Organisations could likewise better support researchers in transitioning to other research careers by internally improving the interoperability and comparability of research careers

- **Which actions could implement this recommendation at RPOs and RFOs?**

  - Track the long-term career paths of researchers at and beyond home organisations
  - Collect and share best practices on recognition and support of diverse research careers
  - Engage with key stakeholders on recognition and support of diverse research careers
  - Engage with key stakeholders on interoperability and comparability of research careers

- **Which challenges could hinder this recommendation at RPOs and RFOs?**

  - Tracking long-term careers of researchers requires long-term planning and commitment
  - Best practices on recognition and support of diverse research careers may not be findable
  - Engaging with key stakeholders on diverse research careers could cost time and resources

## 3.2. Recommendation 8

*Non-linear, multi-career and hybrid paths could be encouraged and supported by Member States, and should be recognised on a par with linear career paths with multiple professional outcomes.*

- **How could this recommendation be relevant and useful for RPOs and RFOs?**

  Career paths in academia are typically linear whereby researchers aim to stay doing research at universities and progress from early-career to senior researchers. This often entails staying long-term at the same university with the goal of attaining a professorship. Vertical,

horizontal, and hybrid career paths are typically the norm outside academia. Organisations could raise awareness and better recognise non-linear and hybrid career paths for research staff especially in the recruitment and career development of staff. Such support measures could be aimed at both early-career and senior researchers. Academic organisations could hereby learn from existing good practices in the non-academic sector

- Which principles of the Charter could be relevant for this recommendation?

  - Pillar 1 > Principle 6 > The Researcher

  - Pillar 2 > Principle 2 > Recruitment

  - Pillar 2 > Principle 3 > Selection

  - Pillar 4 > Principle 1 > Valuing Diverse Research Careers

  - Pillar 4 > Principle 2 > Career Development

- How could ResearchComp and ESCO be relevant for this recommendation?

  - The adoption of ResearchComp at an organisation could include the recognition and development of relevant skills/competences for non-linear and hybrid research careers
  - Organisations could align the classification/tagging of research job/grant advertisements with relevant ESCO classifications for non-linear and hybrid research careers

- How could this recommendation reduce the precarity of research careers?

  Recognising and supporting non-linear and hybrid career paths encourages researchers to think of alternative career paths and offers researchers more opportunities in their careers. This not only takes some pressure off the traditional research career paths but provides more security to those both on traditional and non-traditional career paths. Organisations could raise more awareness about how non-linear and hybrid career paths can help to reduce precarity and help researchers to find their own fulfilling research career paths

- Which actions could implement this recommendation at RPOs and RFOs?

  - Raise awareness on non-linear and hybrid research career paths among researchers

  - Integrate non-linear and hybrid research career paths into regulations and policies

  - Offer career development support for non-linear and hybrid research career paths

  - Collect and share best practices on non-linear and hybrid research career paths

- Which challenges could hinder this recommendation at RPOs and RFOs?

  - Researchers are not aware of possible non-linear and hybrid research career paths

  - Integration of non-traditional career paths in existing systems is a complex process

  - Researchers may be resistant to changes regarding non-traditional career paths

  - Best practices on non-linear and hybrid research career paths may not be findable

## 3.3. Recommendation 9

*Member States are recommended to implement new versions and updates of the European Skills, Competences, Qualifications and Occupations classification, with specific regard to researchers' occupations and skills.*

- How could this recommendation be relevant and useful for RPOs and RFOs?

  The ESCO classification identifies and categorises skills/competences, occupations, and qualifications which are relevant for the European labour market. The ESCO classification is especially useful for identifying and categorising skills/competences, occupations, and qualifications for the research profession. The ESCO classification further supports the interoperability and comparability of research careers across organisations, sectors, and countries, and can thus help researchers more easily find opportunities for their careers. Organisations could adopt (updates of) the ESCO classification in their classification/tagging of research job/grant advertisements and offer recommendations on future ESCO updates

- Which principles of the Charter could be relevant for this recommendation?

  - Pillar 1 > Principle 6 > The Researcher

  - Pillar 2 > Principle 2 > Recruitment

  - Pillar 4 > Principle 3 > Continuous Professional Development

- How could ResearchComp and ESCO be relevant for this recommendation?

  - The skills/competences in ResearchComp are directly aligned with the ESCO classification

  - This recommendation is about the ESCO classification and is thus directly related to ESCO

**SECURE**
Sustainable Careers for
Researcher Empowerment

**secureproject.eu**

- How could this recommendation reduce the precarity of research careers?

Future updates to the ESCO classification could contribute to the identification of existing or new skills/competences, occupations, and qualifications for the research profession that have been overlooked, have become less/more relevant due to changing occupations, or are required due to development, expansion, or specialisation of the research profession. Updates to the ESCO classification could signal to organisations and researchers that they need to acquire new skills/competences and qualifications for changing or emerging occupations and there are new occupations which are relevant for jobseeking researchers. Updates to the ESCO classification should go hand in hand with updates to ResearchComp

Which actions could implement this recommendation at RPOs and RFOs?

- Integrate (updates of) the ESCO classification into research job/grant advertisements

- Integrate (updates of) ESCO classification into local/national accreditation frameworks

- Identify changing and emerging skills/competences, qualifications, and occupations

- Provide recommendations for future revisions of classifications in the ESCO classification

- Which challenges could hinder this recommendation at RPOs and RFOs?

  - Integration of new classifications or updates to any classifications is a complex process

  - Technical infrastructure may be needed to implement any (updates to) classifications

## 3.4. Recommendation 10

*Member States are recommended to encourage human resources offices in all sectors to map career structures for researchers against the profiles referred to in point 5 of this Recommendation.*

- How could this recommendation be relevant and useful for RPOs and RFOs?

Human resources offices could (but may not always necessarily) be the most suited to interpret the R1-R4 profiles and map them onto and eventually integrate them into existing research career structures at their organisations. Any such mapping is complicated due to the wide diversity and disparity of research career occupations and associated titles within and across sectors. Many organisations are also intersectorally engaged in local innovation ecosystems, which form natural contact points between organisations and sectors. Human resources officers could engage with each other to discuss adoption of the R1-R4 profiles and

mutually learn on best practices and challenges with implementation of the profiles

- Which principles of the Charter could be relevant for this recommendation?

   - Pillar 1 > Principle 6 > The Researcher

   - Pillar 2 > Principle 4 > Career Progression

   - Pillar 3 > Principle 2 > Stability of Employment

- How could ResearchComp and ESCO be relevant for this recommendation?

   - The adoption of ResearchComp at an organisation could help human resources offices to define and support skills/competences relevant for research careers across R1-R4 profiles
   - Organisations could support human resources offices to implement the ESCO classification and R1-R4 profiles in the classification/tagging of their research job/grant advertisements

- How could this recommendation reduce the precarity of research careers?

   The mapping of existing research career structures to the R1-R4 profiles improves the interoperability and comparability of research occupations across organisations, sectors, and countries. This could help researchers more easily search and find relevant job/grant positions and help human resources offices increase the visibility of their job/grant advertisements and attract and recruit new research staff. This could also help human resources offices to identify and create internal career pathways linked to R1-R4 profiles

- Which actions could implement this recommendation at RPOs and RFOs?

   - Conduct a review of research career structures and career paths within organisation

   - Involve human resources officers and research staff in organisational R1-R4 mapping

   - Develop clear documentation, guidelines, and communications on the R1-R4 mapping

   - Engage with other human resources offices to share best practice on the R1-R4 profiles

- Which challenges could hinder this recommendation at RPOs and RFOs?

   - Human resources officers may need to be trained and supported to manage the mapping

   - Engaging internally and with other human resources offices could cost time and resources

# 4. Pillar 3 - Recruitment and Working Conditions

## 4.1. Recommendation 11

*Member States are recommended to promote and support open, transparent and merit-based selection and recruitment of candidates, without penalisation for career breaks or non-linear, multi-career, and hybrid paths.*

- How could this recommendation be relevant and useful for RPOs and RFOs?

  The recruitment and especially selection procedures for job/grant positions are not always open or fully transparent for the candidates applying to the job/grant positions. Alternative career paths such as non-linear, hybrid, and multi-career paths are usually not valued and often penalised in the recruitment and selection of candidates for academic positions. The same applies for career breaks where a candidate has a substantial break in the continuity of their employment or career path. Organisations could be more open about their recruitment and selection procedures, especially when posting job/grant vacancies and in advance of the recruitment and selection of candidates. Organisations could also be more transparent to candidates with individual feedback (upon request) on the result of a specific recruitment and selection. Organisations could lastly inform their recruiters and selectors to recognise the added value of alternative career paths and career breaks and thereby be mindful of unconscious bias against alternative career paths and career breaks

- Which principles of the Charter could be relevant for this recommendation?

  - Pillar 2 > Principle 2 > Recruitment

  - Pillar 2 > Principle 3 > Selection

  - Pillar 4 > Principle 1 > Valuing Diverse Research Careers

- How could ResearchComp and ESCO be relevant for this recommendation?

  -This recommendation is not directly or meaningfully relevant for ResearchComp

  - This recommendation is not directly or meaningfully relevant for the ESCO classification

- ### How could this recommendation reduce the precarity of research careers?

  This recommendation ensures that applicants who have had alternative career paths or career breaks are not unfairly penalised in recruitment and selection when applying for job/grant vacancies. Alternative career paths and career breaks could foster intersectoral mobility and allow researchers to gain additional skills/competences which may open up more opportunities and be beneficial for future research positions. This would be especially beneficial to any researchers who may experience career breaks due to parental leave

- ### Which actions could implement this recommendation at RPOs and RFOs?

  - Make general recruitment and selection procedures for vacant positions publicly available

  - Provide individual feedback to candidates on result of a specific recruitment and selection

  - Inform recruiters and selectors on the value of alternative career paths and career breaks

- ### Which challenges could hinder this recommendation at RPOs and RFOs?

  - Current hiring culture is strongly biased against alternative career paths and career breaks

  - Ensuring compliance with new hiring policies may be challenging and require monitoring

  - Changes in local hiring policies may conflict with national hiring regulations and policies

## 4.2. Recommendation 12

*Member States are recommended to encourage respect of collective agreements and effective social dialogue, and to take support action so that employers and funders provide attractive, inclusive and competitive research and working conditions, where researchers are valued, encouraged and supported. Such support action could include:*

*(a) providing commensurate remuneration, work-life balance and flexible working conditions that help bring together personal life, family, caring, health, safety, and overall wellbeing, without prejudice to careers;*

*(b) ensuring gender equality, gender balance, equal opportunities and inclusiveness for researchers from all backgrounds including under-represented and marginalised groups, and promoting among research performing and funding organisations the use, implementation and monitoring of instruments of institutional change, such as inclusive gender equality plans*

*open to intersections between genders and other social categories, in line with the new European Research Area framework and the European Strategy for Universities;*

*(c) safeguarding the freedom of scientific research from any possible limitation or interference, including from foreign actors;*

*(d) offering dedicated support at institutional level to researchers in relation to the fulfilment of administrative duties;*

*(e) taking resolute action to counter the phenomenon of precarity and to support job security and stability. This could, on a voluntary basis, incentivise the establishment of a maximum threshold for the number of fixed-term contracts per organisation in researcher human resources overall. Whenever permanent, long-term or highly recurrent research tasks are being fulfilled, permanent or open-ended contracts are recommended as the appropriate instrument. Researchers under fixed-term contracts should benefit from specific measures – as referred to in point 29 of this Recommendation – that promote their career development and continuity;*

*(f) considering the use of different funding models – e.g. baseline, life-cycle, or project-based –, to allow research organisations to develop more long-term research strategies and engage in more stable commitments towards employees;*

*(g) providing access to adequate social protection irrespective of the form of employment, without prejudice to the right of Member States to define the fundamental principles of their social security systems. Such measures could pertain to the following branches, insofar as they are provided in the Member States:*

  *(1) unemployment benefits;*

  *(2) sickness and healthcare benefits;*

  *(3) maternity leave, paternity leave and parental leave and related benefits;*

  *(4) invalidity benefits;*

*(5) old-age benefits and survivor benefits;*

*(6) benefits in respect of accidents at work and occupational diseases.*

- How could this recommendation be relevant and useful for RPOs and RFOs?

Organisations need to offer attractive working conditions to attract and retain research talents. This naturally includes attractive remuneration packages for researchers. Working conditions should be flexible and encourage a healthy work-life balance. There should be equal opportunities for researchers from all backgrounds and support for gender equality. Academic freedom should be protected from local or foreign limitations or interference. Researchers should be adequately supported in fulfilling their administrative duties. Researchers should be offered (the prospect of) permanent contracts whereby a maximum threshold on the number of (consecutive and total) fixed-term contracts at an organisation could be established and monitored to ensure compliance. Researchers should lastly be offered access to all relevant social protection benefits irrespective of their form of employment (including for unemployment, healthcare/sickness, parental leave, invalidity, old age, surviving a spousal/parental death, and work accidents and diseases). These issues should be internally discussed with all research staff and relevant external stakeholders

- Which principles of the Charter could be relevant for this recommendation?

- Pillar 1 > Principle 2 > Freedom of Scientific Research

- Pillar 1 > Principle 4 > Gender Equality

- Pillar 1 > Principle 5 > Embracing Diversity

- Pillar 2 > Principle 4 > Career Progression

- Pillar 3 > Principle 1 > Working Conditions, Funding, and Salaries

- Pillar 3 > Principle 2 > Stability of Employment

- Pillar 3 > Principle 3 > Contractual and Legal Obligations

- How could ResearchComp and ESCO be relevant for this recommendation?

- This recommendation is not directly or meaningfully relevant for ResearchComp

- This recommendation is not directly or meaningfully relevant for the ESCO classification

**SECURE**
Sustainable Careers for
Researcher Empowerment

**secureproject.eu**

- How could this recommendation reduce the precarity of research careers?

This recommendation is critical in reducing the precarity of research careers as it tackles the core issues of working conditions and duration of contracts for researchers. These issues are linked to core activities and budget allocations of the organisations, whereby any changes to improve these issues will directly affect core activities and budget allocations. Addressing these issues will thus require reallocation or expansion of the available budget

- Which actions could implement this recommendation at RPOs and RFOs?

- Review and internally discuss providing commensurate remuneration for researchers

- Review and improve support for flexible working conditions and work-life balance

- Review and improve support for inclusivity, equal opportunities, and gender equality

- Review and improve support for academic freedom and protection against interference

- Review and improve support to researchers with the fulfilment of administrative duties

- Review and internally discuss providing more permanent contracts to researchers

- Define a maximum threshold for number of fixed-term contracts and monitoring plan

- Review and internally discuss researcher access to relevant social protection benefits

- Which challenges could hinder this recommendation at RPOs and RFOs?

- Changing working conditions and contracts may need to comply with national regulations

- Changing working conditions and contracts may require budget reallocation or expansion

- Changing working conditions and contracts may need cultural change and face resistance

## 4.3. Recommendation 13

*Member States are recommended to ensure researchers' access to updated, comprehensive, user-friendly and clearly understandable information on their social protection rights and obligations, and to ensure that entitlements – whether they are acquired through mandatory or voluntary schemes – are preserved, accumulated and/or transferable across all types of employment and self-employment statuses and across borders, economic sectors, throughout the person's working life or during a certain reference period and between different schemes within a given social protection branch.*

- **How could this recommendation be relevant and useful for RPOs and RFOs?**

  Researchers should always be aware of their social protection rights and obligations. They may, however, not fully understand or know where to find relevant information about their rights and obligations, which may be voluntary or mandatory and be accumulated or transferable, especially given their mobility across organisations, sectors, and countries. Organisations could ensure that all of their researchers are regularly provided updated and clear information on their social protection rights and obligations. This could happen at the recruitment stage for new researchers and at regular intervals for all existing researchers. Individual personalised counselling could be provided to researchers upon request and external specialists could thereby be consulted where there is a lack of available expertise

- **Which principles of the Charter could be relevant for this recommendation?**

  - Pillar 3 > Principle 1 > Working Conditions, Funding, and Salaries
  - Pillar 3 > Principle 3 > Contractual and Legal Obligations

- **How could ResearchComp and ESCO be relevant for this recommendation?**

  - This recommendation is not directly or meaningfully relevant for ResearchComp
  - This recommendation is not directly or meaningfully relevant for the ESCO classification

- **How could this recommendation reduce the precarity of research careers?**

  This recommendation reduces precarity of research careers by ensuring that all researchers (regardless of their background, nationality, and career stage) are aware of their social protection rights and obligations and that they have access to those rights and obligations

- **Which actions could implement this recommendation at RPOs and RFOs?**

  - Raise awareness regularly on social protection rights and obligations to all researchers
  - Provide individual personalised counselling on social protection rights and obligations
  - Collaborate with external specialists in field of social protection rights and obligations

- **Which challenges could hinder this recommendation at RPOs and RFOs?**

  - Ensuring updated and specialist social protection advice could cost time and resources
  - Social protection differences across countries could lead to issues for mobile researchers
  - Ensuring transferability of social protection entitlements could require regulatory changes

## 4.4. Recommendation 14

*Member States that aim to enhance saving in defined contribution supplementary schemes are recommended to promote the use of the solutions provided by the RESAVER pension fund which guarantees the absence of a vesting period and asset transfer fees.*

- **How could this recommendation be relevant and useful for RPOs and RFOs?**

  The Retirement Savings Vehicle for European Research Institutions (RESAVER) Pension Fund [14] is a multi-employer occupational pension scheme for defined supplementary contributions which is open to public and private organisations employing researchers across Europe. The scheme is aimed at geographically mobile researchers and enables these researchers to remain affiliated to the same pension fund when moving across employers and countries. The scheme offers a range of benefits for researchers (such as the absence of a vesting period and asset transfer fees) and provides researchers with an interactive digital platform 'MyRESAVER' where they can easily access their RESAVER and associated pension fund information. The number of participating organisations in the RESAVER consortium is currently quite low and this number will need to grow in future to be attractive to other organisations and researchers. Organisations could raise awareness on pensions and RESAVER among all of their researchers and join the RESAVER consortium

- **Which principles of the Charter could be relevant for this recommendation?**

  - Pillar 1 > Principle 7 > Free Circulation of Researchers

  - Pillar 3 > Principle 1 > Working Conditions, Funding, and Salarie

  - Pillar 3 > Principle 3 > Contractual and Legal Obligations

- **How could ResearchComp and ESCO be relevant for this recommendation?**

  - This recommendation is not directly or meaningfully relevant for ResearchComp

  - This recommendation is not directly or meaningfully relevant for the ESCO classification

- **How could this recommendation reduce the precarity of research careers?**

  Accumulating and transferring pension funds are an important social protection and supplementary support for mobile researchers after their research careers in retirement. Pensions are often overlooked by researchers during their careers and they are typically not

fully aware of the legalities associated with accumulating and transferring pensions across employers and countries. The RESAVER Pension Fund offers support to mobile researchers with their pensions and reduces the precarity of mobile researchers in their retirement. Researchers may also be more likely to accept opportunities in other countries as a result of RESAVER which they might otherwise refuse should their pension contributions be affected

- **Which actions could implement this recommendation at RPOs and RFOs?**

  - Raise awareness about long-term pension planning and RESAVER among researchers

  - Take part in RESAVER Pension Fund and join the consortium of member organisations

- **Which challenges could hinder this recommendation at RPOs and RFOs?**

  - Researchers are not aware of or interested in long-term pension planning and RESAVER

  - National regulations and policies could restrict the uptake and usefulness of RESAVER

  - Low number of participating organisations could limit uptake and usefulness of RESAVER

## 4.5. Recommendation 15

*Member States are recommended to encourage specific measures in support of early-career researchers, corresponding to the R1 and R2 profiles referred to in point 5 of this Recommendation. Considering national circumstances, such specific measures could include:*

*(a) providing First Stage Researchers with social protection and working conditions applicable to researchers in other career stages and with adequate income;*

*(b) providing early-career researchers with financial and social protection incentives;*

*(c) promoting the use of, and supporting, incentives for the recruitment of early-career researchers by employers in all sectors, in particular with permanent or open-ended contracts;*

*(d) promoting and recognising interinstitutional, intersectoral, interdisciplinary and geographical mobility, including virtual mobility;*

*(e) promoting cooperation between academia, research funders and other relevant ecosystem actors, notably industry and other businesses as well as public and non-profit organisations,*

**SECURE**
Sustainable Careers for
Researcher Empowerment

**secureproject.eu**

*with regard to skills needed and skills provided, so as to foster recruitment of highly-skilled researchers meeting the targeted skills needed in the sectors concerned;*

*(f) promoting involvement of early-career researchers into research teams avoiding the demand of tasks unrelated to their scientific training.*

- How could this recommendation be relevant and useful for RPOs and RFOs?
  This recommendation focuses on support measures for the R1-R2 profiles for early-career researchers to improve their working conditions, access to social protection benefits, stability of employment, mobility, skills/competences, and team collaboration. These topics are adequately addressed in other recommendations of the EFfRC (such as Recommendations 2, 5, 6, 12, 13, 14, 25, and 26) and will not be further addressed here

# 5. Pillar 4 - Researchers Skilled for Intersectoral and Interdisciplinary Careers and for Entrepreneurship and Innovation

## 5.1. Recommendation 16

*The goal of the first-stage researcher is to cultivate the research mindset, to nurture flexibility of thought, creativity, and intellectual autonomy through an original, concrete research project. Member States are recommended to take appropriate steps to encourage that doctoral training is geared towards those goals, and furthermore compatible with interoperable careers in all relevant sectors and for the practice of Open Science, including by making use of ResearchComp, the Principles for Innovative Doctoral Training, the European Code of Conduct for Research Integrity, and of any other future initiatives taken for the purpose of strengthening the transversal skills of researchers.*

- How could this recommendation be relevant and useful for RPOs and RFOs?

  Doctoral training typically aims to support doctoral candidates in acquiring relevant skills/competences to become independent, creative, flexible, and resilient researchers so they can complete their PhD and continue their careers in or beyond research and academia. These transversal skills are complementary to the research and discipline-specific skills/competences which doctoral candidates also need to acquire for their research. Doctoral training could support the interoperability of research careers by aligning with key European initiatives for research careers including the Principles for Innovative Doctoral Training [15], European Code of Conduct for Research Integrity [16], Open Science, ResearchComp, and the ESCO classification as well as the new EFfRC and revised Charter

- Which principles of the Charter could be relevant for this recommendation?
  - Pillar 1 > Principle 1 > Ethics and Research Integrity
  - Pillar 1 > Principle 3 > Open Scienc
  - Pillar 4 > Principle 3 > Continuous Professional Development
  - Pillar 4 > Principle 4 > Supervision and Mentoring

- How could ResearchComp and ESCO be relevant for this recommendation?

  - ResearchComp consists of skills/competences and learning outcomes/proficiency levels which are directly linked to research integrity and Open Science

  - The ESCO classification is directly linked to the skills/competences listed in ResearchComp and thus includes relevant classifications for research integrity and Open Science

- How could this recommendation reduce the precarity of research careers?

  Aligning doctoral training and the development of transversal skills/competences with key European initiatives for research careers could help researchers to find more opportunities and adjust more easily to a career beyond academia in other organisations, sectors, and countries. That said, while the importance of research integrity is quite well recognised, the importance of Open Science, especially outside academia, is currently less well recognised

- Which actions could implement this recommendation at RPOs and RFOs?

  - Align doctoral training programmes with Principles for Innovative Doctoral Training
  - Align doctoral training programmes with European Code of Conduct for Research Integrity
  - Integrate policies and practices for Open Science into doctoral training programmes

- Which challenges could hinder this recommendation at RPOs and RFOs?

  - Aligning doctoral training programmes with key initiatives could cost time and resources
  - There may be a lack of expertise in research integrity and Open Science at organisations

## 5.2. Recommendation 17

*The Commission is recommended to act to support and facilitate the use of ResearchComp, promote the exchange of good practices, and consider future revisions of the Competence Framework where needed on the basis of the evolution of the research and innovation system and of the labour market.*

- How could this recommendation be relevant and useful for RPOs and RFOs?

  ResearchComp offers a framework of transversal skills/competences for researchers coupled with learning outcomes and proficiency levels across 7 areas: cognitive abilities, doing research, managing research, managing research tools, self-management, working with others, and making an impact. Researchers are typically not aware of the transversal skills/competences which they need to acquire or have acquired in their research careers. ResearchComp could help researchers to assess and develop their skills/competences and help organisations to tailor their training and career development support to researchers. Organisations could adopt and integrate ResearchComp into relevant policies and practices for researchers. Organisations could also share good practices on ResearchComp and provide recommendations for future revisions of the skills/competences in the framework

- Which principles of the Charter could be relevant for this recommendation?

  - Pillar 4 > Principle 2 > Career Development and Advice

  - Pillar 4 > Principle 3 > Continuous Professional Development

  - Pillar 4 > Principle 4 > Supervision and Mentoring

- How could ResearchComp and ESCO be relevant for this recommendation?

  - This recommendation is on ResearchComp and is thus directly related to ResearchComp

  - The skills/competences in ResearchComp are directly aligned with the ESCO classification

- How could this recommendation reduce the precarity of research careers?

  ResearchComp helps researchers to identify and develop skills/competences which could improve their awareness of their own abilities and help them to more easily find other career opportunities in or outside academia. ResearchComp also helps organisations to understand the skills/competences of researchers and what they could offer organisations

- Which actions could implement this recommendation at RPOs and RFOs?

  - Raise awareness on ResearchComp and transversal skills/competences for researchers

  - Integrate ResearchComp into training and career development support for researchers

  - Integrate ResearchComp into researcher profiles and relevant regulations and policies

  - Collect and share best practices on ResearchComp and transversal skills/competences

SECURE
Sustainable Careers for
Researcher Empowerment

secureproject.eu

- Provide recommendations for future revisions of skills/competences in ResearchComp

- Which challenges could hinder this recommendation at RPOs and RFOs?

  - There may be existing skills/competence frameworks which are being used or mandated

  - Integration of new skills/competences or revised skills/competences is a complex process

## 5.3. Recommendation 18

*Member States are recommended to place emphasis on schemes aiming to strengthen the transversal skills needed by researchers to engage in knowledge valorisation activities and entrepreneurship. Such schemes could include awareness raising activities and trainings on relevant topics, including intellectual assets management, standardisation, industry-academia, academia-public administration sector collaboration, including science for policy activities, and engagement with society.*

- How could this recommendation be relevant and useful for RPOs and RFOs?

  This recommendation aims at strengthening transversal skills/competences for researchers. This topic is adequately addressed in other recommendations of the EFfRC (such as Recommendations 2, 16, 17, 19, 20, 21, and 29) and will not be further addressed here

## 5.4. Recommendation 19

*Member States and the Commission are recommended to encourage interaction and cooperation, including partnerships, between academia, industry, other businesses, public administration, the non-profit sector, and all other relevant ecosystem actors, and to ensure that doctoral training and targeted training are developed or co-developed on the basis of the actual skills needs of the parties concerned, including by building on best practice examples implemented under existing programmes at Union and Member State level.*

*The support of such interaction and cooperation is particularly recommended in areas where specific skills are necessary for operating with state-of-the-art research and technology infrastructures.*

SECURE
Sustainable Careers for
Researcher Empowerment

**secureproject.eu**

- How could this recommendation be relevant and useful for RPOs and RFOs?

  This recommendation focuses on encouraging intersectoral collaboration and mobility as well as doctoral training and the development of intersectoral skills/competences. These topics are adequately addressed in other recommendations of the EFfRC (such as Recommendations 2, 16, 17, 18, 20, 21, and 29) and will not be further addressed here

## 5.5. Recommendation 20

*Member States and the Commission are recommended to take action to foster an innovation and entrepreneurial mindset in researchers, including the necessary skills for investment-seeking, with the objective of allowing those who undertake an entrepreneurial career path to couple their knowledge production capabilities with knowledge valorisation proficiency, turning innovative ideas into business and fostering innovation and progress.*

*A specific focus should be put on the promotion of entrepreneurship and innovation among women and on the creation of women-led spin-offs. The same approach should be envisaged for minority and marginalised groups.*

*Member States could consider measures to mitigate the potential risks for researchers undertaking an entrepreneurial career, including through the possibility to return to their previous career path.*

- How could this recommendation be relevant and useful for RPOs and RFOs?

  Entrepreneurs play an important role in developing new research and innovation products and services for the European market. Researchers could be more encouraged and better supported at their organisations to develop an entrepreneurial mindset and create new start-ups and spin-offs. This is especially true for minority, marginalised, and female researchers who may need extra encouragement and support for entrepreneurship. Organisations could raise awareness about entrepreneurship among their researchers with an inclusive and gender equal approach. Organisations could also offer skills/competence training for entrepreneurship and support for the creation of new start-ups and spin-offs. This should include skills/competences for business and intellectual property management

- Which principles of the Charter could be relevant for this recommendation?

  - Pillar 1 > Principle 4 > Gender Equality

  - Pillar 1 > Principle 5 > Embracing Diversity

  - Pillar 4 > Principle 1 > Valuing Diverse Research Careers

  - Pillar 4 > Principle 2 > Career Development and Advice

  - Pillar 4 > Principle 3 > Continuous Professional Development

  - Pillar 4 > Principle 4 > Supervision and Mentoring


- How could ResearchComp and ESCO be relevant for this recommendation?

  - ResearchComp consists of skills/competences and learning outcomes/proficiency levels which are directly linked to developing an entrepreneurial mindset

  - The ESCO classification is directly linked to the skills/competences listed in ResearchComp and thus includes relevant classifications for developing an entrepreneurial mindset

- How could this recommendation reduce the precarity of research careers?

  Offering relevant training to develop an entrepreneurial mindset and supporting the creation of new start-ups and spin-offs helps researchers not only to create their own opportunities but possibly also new opportunities and career paths for other researchers. Taking an inclusive and gender equal approach to raising awareness on entrepreneurship ensures that more precarious groups are especially encouraged to become entrepreneurs

- Which actions could implement this recommendation at RPOs and RFOs?

  - Raise awareness on entrepreneurship taking an inclusive and gender equal approach

  - Encourage, train, and support researchers for entrepreneurship, start-ups, and spin-offs

  - Create support offices, hubs, and centres for entrepreneurship and technology transfer

- Which challenges could hinder this recommendation at RPOs and RFOs?

  - Researchers are not aware of opportunities for entrepreneurship, start-ups, and spin-offs

  - There may be a lack of expertise in supporting entrepreneurship and technology transfer

  - Local and national regulations and policies could restrict researchers in entrepreneurship

  - Creating entrepreneurship and technology transfer support could cost time and resources

**SECURE**
Sustainable Careers for
Researcher Empowerment

**secureproject.eu**

## 5.6.  Recommendation 21

*Member States are recommended to take action to support the development and provision of targeted training, to encourage up-skilling and re-skilling opportunities for researchers with a lifelong perspective and to foster intersectoral and interdisciplinary mobility. Member States are also recommended to take the necessary steps to promote a fair and transparent validation procedure of formal and informal training opportunities, including on-the-job training.*

- How could this recommendation be relevant and useful for RPOs and RFOs?
  This recommendation aims to provide continuous skills/competence training to researchers with a life-long perspective and focus on intersectoral and interdisciplinary mobility. These topics are adequately addressed in other recommendations of the EFfRC (such as Recommendations 2, 17, 18, 19, 25, and 29) and will not be further addressed here

## 5.7.  Recommendation 22

*The Commission is recommended to take the following action in the context of the development of initiatives fostering cross-sectoral circulation of talents:*

*(a) supporting mutual learning for Member States on the basis of models of intersectoral mobility schemes established by the Commission, in three priority areas:*

*(1) strengthening academia and non-academia cooperation;*

*(2) improving training and lifelong learning for researchers, innovators, and other research and innovation talents;*

*(3) boosting entrepreneurship, transversal skills and engagement among researchers in activities increasing social impact;*

*(b) reinforcing intersectoral mobility components in existing instruments for researchers' mobility, and complementing them with new instruments, where deemed necessary;*

*(c) creating awareness on intersectoral mobility schemes, via a branch of the ERA Talent Platform referred to in point 33 of this Recommendation.*

- How could this recommendation be relevant and useful for RPOs and RFOs?

This recommendation focuses on developing initiatives to support mutual learning (with a focus on skills/competences, entrepreneurship, and academic-non-academic collaboration), reinforce and complement existing schemes, and raise awareness of schemes for intersectoral collaboration and mobility of researchers (linking to the ERA Talent Platform). These topics are adequately addressed in other recommendations of the EFfRC (such as Recommendations 2, 17, 20, 21, 23, and 24) and will not be further addressed here

## 5.8. Recommendation 23

*Member States are recommended to consider establishing national schemes promoting intersectoral mobility in one or more of the three priority areas referred to in point 22 of this Recommendation.*

- How could this recommendation be relevant and useful for RPOs and RFOs?

This recommendation focuses on developing national schemes to promote and support the intersectoral collaboration and mobility of researchers (with a focus on skills/competences, entrepreneurship, and collaboration between the academic and non-academic sectors). These topics are adequately addressed in other recommendations of the EFfRC (such as Recommendations 2, 17, 20, 21, 22, and 24) and will not be further addressed here

## 5.9. Recommendation 24

*Member States are recommended to undertake all necessary effort to promote the elimination of existing structural and administrative barriers which can hamper or obstruct mobility between sectors, including by supporting researchers in overcoming family and personal barriers to mobility, by supporting the interoperability of careers, where applicable, and by facilitating temporary or permanent mobility, without hindering linear research career paths.*

- How could this recommendation be relevant and useful for RPOs and RFOs?

There are many cultural, structural, and administrative barriers to intersectoral mobility and collaboration at organisations which should be identified and considered when promoting

and supporting the intersectoral collaboration and mobility of researchers. These topics are adequately addressed in other recommendations of the EFfRC (such as Recommendations 2, 11, 18, 19, 22, 23, and 26) and will not be further addressed here

## 5.10. Recommendation 25

*Member States and the Commission are recommended to promote interdisciplinary mobility of researchers, including by adequately taking into consideration and addressing hurdles such as lack of recognition and difficulties in securing funding from traditional sources.*

- How could this recommendation be relevant and useful for RPOs and RFOs?

  Collaboration between different research disciplines is becoming more important to address complex societal challenges. Multidisciplinarity aims to address a research problem through the juxtaposition of perspectives from different research disciplines. Interdisciplinarity aims to address a research problem though the combination of perspectives from different research disciplines into an integrated perspective. Transdisciplinarity aims to address a research problem through the combination of perspectives from different research disciplines into an integrated perspective along with the engagement of research stakeholders from the public and private sectors. Organisations could better encourage, train, support, and recognise interdisciplinary collaboration and mobility of researchers

- Which principles of the Charter could be relevant for this recommendation?

  - Pillar 1 > Principle 7 > Free Circulation of Researchers

  - Pillar 4 > Principle 1 > Valuing Diverse Research Careers

  - Pillar 4 > Principle 2 > Career Development and Advice

- How could ResearchComp and ESCO be relevant for this recommendation?

  - ResearchComp consists skills/competences and learning outcomes/proficiency levels which are directly linked to interdisciplinary collaboration and mobility

  - The ESCO classification is directly linked to the skills/competences listed in ResearchComp and thus includes relevant classifications for interdisciplinary collaboration and mobility

- How could this recommendation reduce the precarity of research careers?

  Researchers who are trained in interdisciplinary collaboration and mobility have developed additional skills/competences to their disciplinary and transversal skills/competences and are capable of flexibly working across disciplines and on complex societal challenges. This provides them with more opportunities with finding employment in and outside academia

- Which actions could implement this recommendation at RPOs and RFOs?

  - Encourage, train, and support researchers for interdisciplinary collaboration and mobility

  - Collect and share best practices on supporting interdisciplinary collaboration and mobility

- Which challenges could hinder this recommendation at RPOs and RFOs?

  - Researchers are not aware of opportunities of interdisciplinary collaboration and mobility

  - There may be a lack of expertise in supporting interdisciplinary collaboration and mobility

# 6. Pillar 5 - Career Assessment, Development, and Progression

## 6.1. Recommendation 26

*Member States are recommended to support the recognition of the value of geographical, intersectoral, interinstitutional, inter- and transdisciplinary mobility as important means of enhancement of scientific knowledge and professional development at any stage of a researcher's career. Virtual mobility has been proved as a valid asset and can also be considered. The assessment and reward system should not penalise non-linear, multi-career and hybrid paths.*

- How could this recommendation be relevant and useful for RPOs and RFOs?

  One main way to encourage researchers to engage in international, intersectoral, interdisciplinary, and virtual collaboration and mobility is to acknowledge these activities in assessment. Organisations could thus recognise and reward international, intersectoral, interdisciplinary, and virtual collaboration and mobility in their assessment of researchers

- Which principles of the Charter could be relevant for this recommendation?

  - Pillar 1 > Principle 7 > Free Circulation of Researchers

  - Pillar 2 > Principle 2 > Researchers' Assessment

  - Pillar 2 > Principle 4 > Career Progression

  - Pillar 4 > Principle 1 > Valuing Diverse Research Careers

- How could ResearchComp and ESCO be relevant for this recommendation?

  - This recommendation is not directly or meaningfully relevant for ResearchComp

  - This recommendation is not directly or meaningfully relevant for the ESCO classification

- How could this recommendation reduce the precarity of research careers?

  Researchers are more likely to engage in international, intersectoral, interdisciplinary, and virtual collaboration and mobility if these activities are taken into account in assessment. This would ensure that they acquire extra collaboration and mobility skills/competences on top of their usual disciplinary and transversal skills/competences as well as broaden their

professional experiences and contacts. This would in turn also provide them with more opportunities to find employment across disciplines, organisations, sectors, and countries

- Which actions could implement this recommendation at RPOs and RFOs?

  - Recognise international collaboration and mobility activities in research assessment

  - Recognise intersectoral collaboration and mobility activities in research assessment

  - Recognise interdisciplinary collaboration and mobility activities in research assessment

  - Recognise virtual collaboration and mobility activities in research assessment

- Which challenges could hinder this recommendation at RPOs and RFOs?

  - Researchers are not interested in the different types of collaboration and mobility

  - Researchers are not aware of opportunities for research collaboration and mobility

## 6.2. Recommendation 27

*Member States and the Commission are recommended to promote and support systems for the assessment and reward of researchers that:*

*(a) are based on qualitative unbiased judgement provided by peers and other pertinent experts, supported by the responsible use of quantitative indicators;*

*(b) reward quality and the various potential impacts of their research on society, science and innovation;*

*(c) recognise a diversity of outputs, inter alia publications, datasets, software, methodologies, protocols, patents; a diversity of activities, inter alia mentoring, research supervision, leadership roles, entrepreneurship, FAIR data management – following the principles of Findable, Accessible, Interoperable and Reusable –, peer review, teaching, knowledge valorisation, industry-academia cooperation, support for evidence informed policy-making, interaction with society; and a diversity of practices, inter alia Open Science, early knowledge and data sharing, and open collaboration, in addition to all mobility experiences referred to in point 26 of this Recommendation;*

*(d) ensure that the researcher's professional activity meets high standards of ethics and integrity, applies appropriate conduct of research, and values good practices, including open practices for sharing research results and methodologies whenever possible;*

*(e) use assessment criteria and processes that respect the variety of research disciplines and national contexts;*

*(f) support a diversity of researcher profiles and career paths, and value individual contributions, but also the role of teams, collaborative work, and interdisciplinarity;*

*(g) ensure gender equality, gender balance, equal opportunities and inclusiveness.*

*To ensure coherence in the implementation of the recommendations listed in this point, Member States are encouraged to foster continuous training for the actors involved in the assessment and reward process.*

- How could this recommendation be relevant and useful for RPOs and RFOs?

  There has been a growing movement towards the reform of research assessment which moves beyond the entrenched publish-or-perish mentality and focus on peer-reviewed publications in high impact factor journals and related publication metrics. New research assessment systems could take a peer-reviewed qualitative approach supported by the responsible use of quantitative indicators. New systems could also recognise the diversity of research and non-research roles, activities, and outputs of researchers. This could include the recognition of research managers and research technicians. New systems could lastly recognise activities especially contributing to research integrity, inclusivity and gender equality, Open Science, and societal impact. Research assessors will hereby need to be informed about the added value of reformed research assessment criteria. The reforms in research assessment proposed in this recommendation are currently being developed into new research assessment systems in the OPUS project [17] and GraspOS project [18]

- Which principles of the Charter could be relevant for this recommendation?

  - Pillar 1 > Principle 1 > Ethics and Research Integrity

  - Pillar 1 > Principle 3 > Open Science

- Pillar 1 > Principle 4 > Gender Equality

- Pillar 1 > Principle 5 > Embracing Diversity

- Pillar 2 > Principle 1 > Researchers' Assessment

- Pillar 2 > Principle 4 > Career Progression

- Pillar 4 > Principle 1 > Valuing Diverse Research Careers

- How could ResearchComp and ESCO be relevant for this recommendation?

  - The adoption of ResearchComp at an organisation could support the informing of research assessors about the added value of relevant reformed research assessment criteria

  - This recommendation is not directly or meaningfully relevant for the ESCO classification

- How could this recommendation reduce the precarity of research careers?

  The reform of research assessment will likely include recognising the diversity of roles, activities, and outputs of researchers as well as activities contributing to research integrity, inclusivity and gender equality, Open Science, and societal impact. This broadening of research assessment criteria allows more researchers to be positively recognised and rewarded in research assessment. At the same time, this broadening of research assessment criteria could result in increased competition between candidates for research jobs/grants and other potentially negative and unwanted effects. Organisations should monitor reforms in research assessment criteria for any negative and unwanted effects

- Which actions could implement this recommendation at RPOs and RFOs?

  - Integrate a qualitative and responsible quantitative approach into research assessment

  - Recognise diversity of roles, activities, and outputs of researchers in research assessment

  - Recognise research manager and research management activities in research assessment

  - Recognise research technician and technical support activities in research assessment

  - Recognise research integrity and inclusivity and gender equality in research assessment

  - Recognise Open Science practices and societal impact of research in research assessment

  - Inform research assessors on the added value of reformed research assessment criteria

  - Monitor any reforms in research assessment criteria for negative and unwanted effects

- Which challenges could hinder this recommendation at RPOs and RFOs?

  - Changing research assessment criteria in regulations and policies is a complex process

  - Researchers may be resistant to changes regarding existing research assessment criteria

  - Reforming research assessment criteria could result in negative and unwanted effects

## 6.3. Recommendation 28

*Member States are invited to encourage organisations to join coalitions, alliances or initiatives set up to evolve assessment systems in line with the recommendations listed in point 27 of this Recommendation. Member States are also encouraged to tackle, within their area of competence, national administrative or legal barriers to such evolution of research assessment and help prevent any contradictions or incompatibilities that might exist in the application of the recommendations listed in point 27 of this Recommendation, between the assessment of research, of researchers and of research organisations.*

- How could this recommendation be relevant and useful for RPOs and RFOs?

  There have been many calls and initiatives to reform research assessment over the last decade including the San Francisco Declaration on Research Assessment (DORA) [19], Leiden Manifesto for Research Metrics [20], and Hong Kong Principles [21]. The newly established Coalition for Advancing Research Assessment (CoARA) [22] is implementing an Agreement on Reforming Research Assessment [23] which includes 4 core and 6 supporting commitments for organisations to reform their research assessment systems. Organisations could sign the agreement and join CoARA to align the reform of research assessment as well as share and mutually learn on best practices and challenges for research assessment

- Which principles of the Charter could be relevant for this recommendation?

  - Pillar 2 > Principle 1 > Researchers' Assessment

  - Pillar 2 > Principle 4 > Career Progression

  - Pillar 4 > Principle 1 > Valuing Diverse Research Careers

- How could ResearchComp and ESCO be relevant for this recommendation?

  - This recommendation is not directly or meaningfully relevant for ResearchComp

  - This recommendation is not directly or meaningfully relevant for the ESCO classification

- How could this recommendation reduce the precarity of research careers?

  Aligning the reform of research assessment across organisations, sectors, and countries (such as by signing the agreement and joining CoARA) could support wider interoperability of research careers and research assessment as well as providing researchers with equal opportunities and thus more opportunities across organisations, sectors, and countries

- Which actions could implement this recommendation at RPOs and RFOs?

  - Sign the Agreement on Reforming Research Assessment and join CoARA as a member

  - Identify structural and administrative barriers to reform research assessment systems

  - Collect and share best practices on reforming existing research assessment systems

- Which challenges could hinder this recommendation at RPOs and RFOs?

  - Organisations may not want to commit to signing the agreement and joining CoARA

  - There may not yet be many best practices available on reforming research assessment

6.4. Recommendation 29

*Member States are recommended to promote measures, including advisory and mentoring mechanisms, that make researchers, in particular early-career ones, aware of opportunities available in all relevant sectors and to promote a culture of diversification of careers for better personal and professional development. In this regard, Member States and the Commission are recommended to support the provision of career advisory and support services, e.g. EURAXESS, to stimulate intersectoral, interdisciplinary and geographical mobility, as well as the creation and development of entrepreneurial activities.*

- How could this recommendation be relevant and useful for RPOs and RFOs?

  Providing adequate career support and professional development to researchers is critical to help them develop the skills/competences which they will need in their research and future jobs/grants in and outside academia. This should not only include support for the development of disciplinary and transversal skills/competences but also research career advice and orientation for the labour market as well as professional mentoring by experts. Organisations could improve their research career support and mentoring for researchers

- Which principles of the Charter could be relevant for this recommendation?

  - Pillar 1 > Principle 8 > Sustainability of Research

  - Pillar 2 > Principle 4 > Career Progression

  - Pillar 4 > Principle 1 > Valuing Diverse Research Careers

  - Pillar 4 > Principle 2 > Career Development and Advice

  - Pillar 4 > Principle 3 > Continuous Professional Development

  - Pillar 4 > Principle 4 > Supervision and Mentoring

- How could ResearchComp and ESCO be relevant for this recommendation?

  - The adoption of ResearchComp at an organisation could be utilised for the career support and professional development of relevant skills/competences for researchers

  - This recommendation is not directly or meaningfully relevant for the ESCO classification

- How could this recommendation reduce the precarity of research careers?

  Providing adequate career support and professional development to researchers could help them develop skills/competences to improve their opportunities with finding employment. Offering professional mentoring with experts, especially from outside the organisation, could not only provide researchers with valuable hands-on and practical experience but also key contacts with other organisations which could become employers in the future

- Which actions could implement this recommendation at RPOs and RFOs?

  - Review and improve the career support and professional development for researchers

  - Provide professional mentoring to researchers by experts in and outside the organisation

- Which challenges could hinder this recommendation at RPOs and RFOs?

  - Improving career support and professional development could cost time and resources

  - Organisations may not have experience or contacts with mentors outside the organisation

## 6.5. Recommendation 30

*Member States are recommended to promote a fair, equal, inclusive, transparent, structured and gender-equal career accession and progression system for researchers in academia, up to the top positions. In this respect, Member States are recommended to consider developing tenure-track-like systems, to be understood as defined frameworks where a fixed-term contract has the prospect of a*

54

*progression to a permanent position, subject to positive evaluation.*

- **How could this recommendation be relevant and useful for RPOs and RFOs?**

  TTLMs are a critical means for organisations to ensure that talented researchers are attracted to and retained at organisations and have a clear and agreed career path within the organisations. The TTLMs could in principle start and end at different career stages and focus on early-career or senior researchers. It should always be the case that a researcher on a TTLM progresses to the agreed end position of the TTLM with a positive evaluation. A TTLM should adhere to recognised principles (such as the principles for TTLMs in SECURE) and ensure fair, equal, inclusive, and transparent career progression for TTLM researchers. The flexibility to define TTLMs may be restricted due to national or local regulations. TTLMs should be defined in discussion and collaboration with researchers at the organisations

- **Which principles of the Charter could be relevant for this recommendation?**

  - Pillar 1 > Principle 8 > Sustainability of Research

  - Pillar 2 > Principle 4 > Career Progression

  - Pillar 3 > Principle 1 > Working Conditions, Funding, and Salaries

  - Pillar 3 > Principle 2 > Stability of Employment

  - Pillar 3 > Principle 3 > Contractual and Legal Obligations

  - Pillar 4 > Principle 1 > Valuing Diverse Research Careers

- **How could ResearchComp and ESCO be relevant for this recommendation?**

  - This recommendation is not directly or meaningfully relevant for ResearchComp

  - This recommendation is not directly or meaningfully relevant for the ESCO classification

- **How could this recommendation reduce the precarity of research careers?**

  This recommendation is critical for reducing the precarity of research careers as it is a direct means to reduce fixed-term positions and ensures that researchers have a clear and agreed career path to permanent positions. The percentage of researchers at an organisation which should have permanent positions and be on a TTLM is open for debate. Long-term funding plays a critical role in the success of implementing TTLMs as a substantial budget is required to guarantee permanent employment of TTLM researchers. Organisations could engage with national research-funding bodies on the need for long-term funding for TTLMs

- Which actions could implement this recommendation at RPOs and RFOs?

    - Review regulations and status of TTLMs in national context and locally at organisations

    - Define TTLMs in discussion and close collaboration with researchers at organisations

    - Develop an action plan for future implementation of defined TTLMs at organisations

    - Engage with key stakeholders on TTLMs to collect and share best practices on TTLMs

    - Engage with national research-funding bodies on need for long-term funding for TTLMs

- Which challenges could hinder this recommendation at RPOs and RFOs?

    - National regulations and policies may restrict TTLMs and not be open for improvement

    - Long-term funding may not be available to guarantee the implementation of any TTLMs

# 7. Pillar 6 - Balanced Circulation of Talents and Making the Union an Attractive Destination

## 7.1. Recommendation 31

*Member States are recommended to take resolute action to put in place favourable, attractive and competitive conditions for conducting research and innovation activities, and for the return of researchers from abroad. Such measures could include, but not be limited to:*

> *(a) incentives to make research activities more attractive, taking into consideration the need for a fair competition for talents;*
>
> *(b) simplification of legal and administrative requirements for researchers;*
>
> *(c) investments in the research and innovation system, including support to networking within and beyond the Union, to connect and integrate national research and innovation systems to European research networks and provide higher visibility of national capabilities and high-level research and technology infrastructures;*
>
> *(d) the exchange of best practices with regard to creating an attractive, safe, inclusive, gender-equal and competitive research and innovation environment, even as regards the improvement of remuneration, working conditions and services, and the reduction of administrative and language barriers for foreign and internationally mobile researchers;*
>
> *(e) return and career reintegration grants and attractive positions for returning researchers;*
>
> *(f) the possibility of having dual positions in institutions established in different Member States, thereby fostering knowledge transfer, skills development, collaboration, and preventing talent drain;*
>
> *(g) exploring options for a common approach for the staff of the Research Infrastructures, especially in the case of a European Research Infrastructure Consortium (ERIC).*

*The Commission is recommended to support Member States in their endeavours, including by enabling the implementation of synergies among Union programmes, and Union and national programmes.*

- How could this recommendation be relevant and useful for RPOs and RFOs?

This recommendation aims to make Europe an attractive and competitive destination to attract, circulate, and retain researchers. The measures proposed fall primarily under the responsibility of the countries and European Commission and include more investments in research, simplification of legal and administrative requirements, funding and positions for researchers returning to their home countries, dual country positions, exchange of best practices on attractive and competitive conditions for researchers, and a common approach for staff of European research infrastructures. This recommendation is not directly relevant for RPOs and RFOs and will thus not be further translated into actions for RPOs and RFOs. The topic of balanced circulation of researchers is also addressed in Recommendation 32

## 7.2. Recommendation 32

*The Commission is recommended to take the following actions fostering a more balanced circulation of talents:*

*(a) supporting mutual learning for Member States in view of the reform of their research and innovation systems, including through calls for expression of interest to create a community of practice with training and guidance for Member States on the basis of successful pathways and solutions enabling more balanced talent circulation;*

*(b) monitoring mobility flows, within the Union and with third countries, through an interactive talent circulation map in the observatory on research careers referred to in point 40 of this Recommendation;*

*(c) facilitating transnational ties with the research and innovation diaspora and third country communities and facilitating the attraction or return of talents, via a branch of the ERA Talent Platform referred to in point 33 of this Recommendation;*

*(d) promoting a balanced talent circulation of researchers at Union level, by strengthening the human capital base with more entrepreneurial, managerial and better-trained researchers and innovators.*

- How could this recommendation be relevant and useful for RPOs and RFOs?

This recommendation aims to promote and support a more balanced circulation of research talents to, in, and from Europe. The measures proposed fall primarily under the responsibility of the countries and European Commission and include strengthening the existing human capital base with skilled researchers and innovators, supporting transnational ties with the researcher diaspora, supporting the return of researchers to their home countries (especially through the ERA Talent Platform), monitoring the mobility and circulation of researchers, and mutual learning on balanced talent circulation. This recommendation is not directly relevant for RPOs and RFOs and will thus not be further translated into actions for RPOs and RFOs. The ERA Talent Platform is also addressed in Recommendation 33 and the monitoring of talent circulation in Recommendation 40

# 8. Pillar 7 - Support Actions for Research Careers

## 8.1. Recommendation 33

*The Commission and Member States are recommended to take appropriate measures to strengthen the EURAXESS portals, services, as well as the international dimension, and to develop the ERA Talent Platform as an online one-stop-shop for researchers and institutions in all sectors, with a new governance framework and a coordination role of relevant national bodies and institutions involved in service delivery.*

*The ERA Talent Platform should allow:*

> *(a) researchers to manage their learning and training opportunities and their careers;*

> *(b) research and innovation institutions, employers and funders to conduct networking activities, better manage their pools of talents, collaborate and exchange best practices, while facilitating talents' attraction and retention and improving data for a better understanding of mobility trends across Europe and beyond.*

*Services could be broadened to include talent development and career management services, with a focus on researchers in all relevant sectors of society, including academia.*

- How could this recommendation be relevant and useful for RPOs and RFOs?
  The aim of the existing EURAXESS portal [24] and future ERA Talent Platform is to boost the careers of researchers in Europe by providing relevant information and services to researchers on skills/competences, talent and career development, funding opportunities, and mobility as well as connecting researchers, entrepreneurs, universities, and businesses. Organisations could support the wider uptake of these initiatives by promoting the existing EURAXESS portal and future ERA Talent Platform among their researchers. Organisations could also more widely disseminate their job/grant opportunities through the platforms

- Which principles of the Charter could be relevant for this recommendation?
  - Pillar 1 > Principle 7 > Free Circulation of Researchers
  - Pillar 4 > Principle 1 > Valuing Diverse Research Careers

- Pillar 4 > Principle 2 > Career Development and Advice

- Pillar 4 > Principle 3 > Continuous Professional Development

- How could ResearchComp and ESCO be relevant for this recommendation?

  - ResearchComp could be promoted on the EURAXESS portal and ERA Talent Platform

  - ESCO could be promoted on the EURAXESS portal and ERA Talent Platform

- How could this recommendation reduce the precarity of research careers?

  The existing EURAXESS portal and future ERA Talent Platform are excellent tools to help researchers develop their skills/competences and find collaboration and employment opportunities across organisations, sectors, and countries. More promotion of these two initiatives is necessary to ensure that researchers are aware of and utilise the platforms

- Which actions could implement this recommendation at RPOs and RFOs?

  - Raise awareness on the EURAXESS portal and ERA Talent Platform among researchers

  - Disseminate job/grant opportunities in the EURAXESS portal and ERA Talent Platform

- Which challenges could hinder this recommendation at RPOs and RFOs?

  - Researchers are not aware of the existing EURAXESS portal and new ERA Talent Platform

  - Organisations may need support in utilising the EURAXESS portal and ERA Talent Platform

## 8.2. Recommendation 34

*The Commission is recommended to ensure links and interoperability between the ERA Talent Platform and other relevant Union and national initiatives, including Europass, ESCO and EURES, to provide for an improved governance model of the platform and the underlying network of service centres to better meet the needs of researchers and research performing organisations.*

- How could this recommendation be relevant and useful for RPOs and RFOs?

  This recommendation aims to improve the links and interoperability between the new ERA Talent Platform and other European initiatives which are relevant for research careers including the ESCO classification, European Employment Services (EURES) [25], and Europass [26]. The recommendation also proposes to improve the governance of the ERA Talent Platform and strengthen the network of EURAXESS service centres. The proposed measures

secureproject.eu

fall primarily under the responsibility of the European Commission. This recommendation is not directly relevant for RPOs and RFOs and will thus not be further translated into actions for RPOs and RFOs. The ESCO classification is also addressed in Recommendation 9, ERA Talent Platform in Recommendation 33, and support tools in Recommendation 38

## 8.3. Recommendation 35

*Member States and the Commission are recommended to acknowledge the importance of the endorsement and implementation of the Charter for Researchers referred to in point 36 of this Recommendation.*

- How could this recommendation be relevant and useful for RPOs and RFOs?
  This recommendation aims to recognise the importance of endorsing and implementing the newly revised Charter at organisations in Europe. The proposed measures fall primarily under the responsibility of the countries and European Commission. This recommendation is not directly relevant for RPOs and RFOs and will thus not be further translated into actions for RPOs and RFOs. The Charter is also addressed in Recommendations 36 and 37

## 8.4. Recommendation 36

*The new Charter for Researchers set out in Annex II to this Recommendation should replace the Charter and Code for Researchers set out in the Annex to Recommendation 2005/251/EC. Member States and the Commission are recommended to encourage the endorsement and implementation of the new Charter for Researchers by research employers and funders from all sectors, including through dedicated incentives, in view of making it a structural tool in support of researchers and research careers.*

- How could this recommendation be relevant and useful for RPOs and RFOs?
  The Charter offers a set of principles to define the relationship between researchers and employers/funders as well defining their roles, responsibilities, and entitlements. The newly revised Charter replaces the existing C&C and should thus be adopted by both new organisations and those organisations which are already endorsing and implementing the C&C. Organisations should raise awareness on the revised Charter among their researchers

- Which principles of the Charter could be relevant for this recommendation?

  This recommendation is about the Charter

- How could ResearchComp and ESCO be relevant for this recommendation?

  - The implementation of the Charter could include ResearchComp

  - The implementation of the Charter could include ESCO

- How could this recommendation reduce the precarity of research careers?

  The Charter consists of a set of principles to improve the careers of researchers and reduce the precarity of research careers. The focus of the Charter on diversity and gender equality could especially help to reduce the precarity of female and disadvantaged researchers

- Which actions could implement this recommendation at RPOs and RFOs?

  - Raise awareness on the revised Charter among researchers
  - Endorse and implement the revised Charter at organisations

- Which challenges could hinder this recommendation at RPOs and RFOs?

  - Researchers are not aware of the revised Charter and its implementation
  - Integration of the revised Charter into existing systems is a complex process

## 8.5. Recommendation 37

*The Commission is recommended to adjust the Human Resources Strategy for Researchers, or any future similar implementation mechanism, to the new Charter for Researchers, and to ensure continuity in respect of the institutions that have endorsed the principles of the old Charter and Code for Researchers and have adhered to the Human Resources Strategy for Researchers, notably by considering them as continuing to endorse the Charter for Researchers set out in Annex II to this Recommendation. The Commission is recommended to apply the same transitional measures to the institutions which started the Human Resources Strategy for Researchers process under the old Charter and Code for Researchers.*

- How could this recommendation be relevant and useful for RPOs and RFOs?

  The current HRS4R award is directly linked to the implementation of the existing C&C and will

SECURE
Sustainable Careers for
Researcher Empowerment

secureproject.eu

need to align with the revised Charter whereby a transition period is now in effect. New organisations could apply for the HRS4R award and organisations currently applying for or already granted the HRS4R award could prepare for alignment with the revised Charter

- Which principles of the Charter could be relevant for this recommendation?

  This recommendation is about the HRS4R award and thus directly related to the Charter

- How could ResearchComp and ESCO be relevant for this recommendation?

  - The implementation of the Charter for the HRS4R award could include ResearchComp

  - The implementation of the Charter for the HRS4R award could include ESCO

- How could this recommendation reduce the precarity of research careers?

  The HRS4R award recognises the implementation of the Charter at organisations and aims to improve the careers of researchers and reduce the precarity of research careers. The HRS4R award helps researchers recognise organisations that treat their researchers well

- Which actions could implement this recommendation at RPOs and RFOs?

  - Raise awareness on the HRS4R award and its relevance for researchers

  - Apply formally to the European Commission to receive the HRS4R award

- Which challenges could hinder this recommendation at RPOs and RFOs?

  - Researchers are not aware of the HRS4R award and its relevance for researchers

  - Application for the HRS4R award is a long and strategic and structural procedure

## 8.6. Recommendation 38

*The Commission is recommended to regularly review and adapt all tools in support of research careers, based on the actual needs of researchers, in coordination with Member States and relevant stakeholders.*

- How could this recommendation be relevant and useful for RPOs and RFOs?

  This recommendation aims to regularly review and adapt all relevant national and European tools supporting research careers based on the actual needs of researchers. The proposed measures fall primarily under the responsibility of the countries and European Commission.

This recommendation is not directly relevant for RPOs and RFOs and will thus not be further translated into actions for RPOs and RFOs. The countries and European Commission should consult researchers for their feedback on the tools for research careers. Research career support tools are also addressed in Recommendations 33 and 34

## 8.7. Recommendation 39

*The Commission and Member States are recommended to encourage and support alliances of higher education institutions, such as the European Universities alliances, the whole European higher education, research and innovation sector and all relevant stakeholders, to pilot relevant actions foreseen by this Recommendation on the basis of a voluntary and bottom-up approach.*

- How could this recommendation be relevant and useful for RPOs and RFOs?
  This recommendation aims to encourage and support piloting of the recommendations in the EFfRC. The proposed measures fall primarily under the responsibility of the countries and European Commission while the actual piloting is targeted at organisations in Europe. This first draft of the RCF interprets how each recommendation in the EFfRC is relevant and could be translated into implementation actions for RPOs and RFOs. This recommendation will not be translated further into actions for RPOs and RFOs as it could be enacted by selecting and implementing the actions for RPOs and RFOs in this first draft of the RCF

# 9. Pillar 8 - Monitoring of Research Careers

## 9.1. Recommendation 40

*In addition to the overarching European Research Area monitoring systems, the Commission and Member States are recommended to monitor relevant aspects of research careers in the Union and the implementation of this Recommendation through a dedicated Observatory, to the benefit of the research community, policy makers, public administration and relevant organisations at European and national level. The Observatory should support better understanding of challenges and opportunities by researchers, and it should also promote the attractiveness of Union research performing organisations for the best talents, while guaranteeing the protection of data privacy throughout implementation.*

- How could this recommendation be relevant and useful for RPOs and RFOs?

    This recommendation aims to develop a monitoring mechanism for research careers and the implementation of the EFfRC across Europe. This Research and Innovation Careers Observatory (ReICO) will be developed and maintained from 2024 for six years by the Organisation for Economic Cooperation and Development (OECD) with support from the European Commission [27]. ReICO will collect and analyse data on research careers in Europe including talent development and deployment, supply and demand, dynamics and pathways, and national policies. The proposed measures fall primarily under the responsibility of the countries, OECD, and European Commission. This recommendation is not (yet) directly relevant for RPOs and RFOs and will thus not be further translated into actions for RPOs and RFOs. ReICO is also addressed in Recommendations 41, 42, 43, and 44

## 9.2. Recommendation 41

*The Observatory should carefully consider and identify the type of support data that would be relevant to observe research careers. Where possible, links to existing data should be considered and prioritised in order to reduce administrative burden for Member States and all relevant stakeholders. Member States are recommended to cooperate for the purpose of collecting data relevant for the implementation of the observatory in an efficient and sustainable way.*

- How could this recommendation be relevant and useful for RPOs and RFOs?

  This recommendation aims to identify the data sources and data to be collected by ReICO whereby existing data sources and data should be prioritised. The data sources and data will be identified in the initial stages of ReICO. The proposed measures fall primarily under the responsibility of the countries, OECD, and European Commission. This recommendation is not (yet) directly relevant for RPOs and RFOs and will thus not be further translated into actions for RPOs and RFOs. ReICO is also addressed in Recommendations 40, 42, 43, and 44

## 9.3. Recommendation 42

*The Commission is invited to propose – on the basis of the data provided by the Observatory on research careers – further measures that encourage and promote the development of research careers.*

- How could this recommendation be relevant and useful for RPOs and RFOs?

  This recommendation aims to develop further support actions for research careers based on the data collected by ReICO. The proposed measures fall primarily under the responsibility of the countries, OECD, and European Commission. This recommendation is not (yet) directly relevant for RPOs and RFOs and will thus not be further translated into actions for RPOs and RFOs. ReICO is also addressed in Recommendations 40, 41, 43, and 44

## 9.4. Recommendation 43

*The Commission, in collaboration with Member States, is recommended to consider relevant links between the Observatory on Research Careers and the European Higher Education Sector Observatory proposed in the European Strategy for Universities, where relevant, and thereby enhance synergies between the European Research Area and the European Education Area.*

- How could this recommendation be relevant and useful for RPOs and RFOs?

  This recommendation aims to link ReICO with the European Higher Education Sector Observatory (EHESO) and thereby enhance synergies between the European Research Area (ERA) and European Education Area (EEA). The observatory will collect and analyse data on the progress made to implement the European strategy for universities across Europe

including data on inclusion, learning outcomes, skills/competences, student and labour market needs, employability, transnational cooperation, technology transfer, and innovation ecosystems [28]. The proposed measures fall primarily under the responsibility of the countries, OECD, and European Commission. This recommendation is not (yet) directly relevant for RPOs and RFOs and will thus not be further translated into actions for RPOs and RFOs. ReICO is also addressed in Recommendations 40, 41, 42, and 44

## 9.5. Recommendation 44

*Member States and the Commission are recommended to consider the adaptation to the data needs of the observatory referred to in point 40 of this Recommendation of the data collected in the context of Regulation (EU) 2019/1700.*

- How could this recommendation be relevant and useful for RPOs and RFOs?
  This recommendation aims to align the data collection by ReICO with a European Parliament and European Council regulation on data collection related to persons and households for European statistics [29]. The proposed measures fall primarily under the responsibility of the countries, OECD, and European Commission. This recommendation is not (yet) directly relevant for RPOs and RFOs and will thus not be further translated into actions for RPOs and RFOs. ReICO is also addressed in Recommendations 40, 41, 42, and 43

# 10. Conclusion

The **first draft of the RCF provides an initial response to and interpretation of the new EFfRC** proposed in Council Recommendation C/2023/1640 on A European Framework to Attract and Retain Research, Innovation, and Entrepreneurial Talents in Europe for RPOs and RFOs from the SECURE consortium. The draft RCF builds on key recommendations from the literature reviews conducted in SECURE on RCFs and TTLMs. The draft RCF also draws links to key European initiatives including the newly revised Charter, ResearchComp, and the recently updated ESCO classification.

The **first draft of the RCF provides a systematic interpretation and translation of the 8 pillars and 44 recommendations of the EFfRC** for RPOs and RFOs via 6 key questions per recommendation:

- How could this recommendation be relevant and useful for RPOs and RFOs?
- Which aspects of the Charter could be relevant for this recommendation?
- How could ResearchComp and ESCO be relevant for this recommendation?
- How could this recommendation reduce the precarity of research careers?
- Which actions could implement this recommendation at RPOs and RFOs?
- Which challenges could hinder this recommendation at RPOs and RFOs?

The **EFfRC is targeted primarily at European countries and the European Commission** whereby the strategic recommendations are not always directly translatable into actions for RPOs and RFOs. The first draft of the RCF contextualises each recommendation and provides a list of concrete actions to implement the recommendations at RPOs and RFOs. The actions have been formulated at a level of description to give clear and practical guidance to RPOs and RFOs on how to implement the recommendations, while at the same time allowing flexibility in interpreting and refining the actions to improve research careers according to the strategic interests and needs of the RPOs and RFOs.

The **first draft of the RCF is not yet a full framework but is a step towards a full RCF**. The draft RCF will be opened for public consultation with key stakeholders and the research community. The trial organisations in SECURE will each select, interpret, and implement a set of actions from the full list of possible actions in the RCF during the trials in SECURE. It should be noted that the first version of the RCF has strictly followed the pillar and recommendation structure of the EFfRC, whereby some

recommendations are not directly relevant for RPOs and RFOs, and there are topical overlaps across some pillars and recommendations. Feedback from the consultation and trials will feed into a restructuring and refinement of the RCF for a more coherent and practical final version of the RCF.

# References

[1] Webpage of the Sustainable Careers for Researcher Empowerment (SECURE) project on CORDIS hosted by the European Commission. Link: [https://cordis.europa.eu/project/id/101094902]. Accessed 04 March 2024.

[2] Council of the European Union (2023) *Council Recommendation on a European Framework to Attract and Retain Research, Innovation, and Entrepreneurial Talents in Europe*. Council Recommendation C/2023/1640 of 18 December 2023. Link: [https://op.europa.eu/en/publication-detail/-/publication/5250dd63-a5ec-11ee-b164-01aa75ed71a1]. Accessed 04 March 2024.

[3] Council of the European Union (2023) *European Charter for Researchers*. Published as Annex 2 under the *Council Recommendation on a European Framework to Attract and Retain Research, Innovation, and Entrepreneurial Talents in Europe*. Council Recommendation C/2023/1640 of 18 December 2023. Link: [https://op.europa.eu/en/publication-detail/-/publication/5250dd63-a5ec-11ee-b164-01aa75ed71a1]. Accessed 04 March 2024.

[4] Webpage of the European Competence Framework for Researchers (ResearchComp) hosted by the European Commission. Link: [https://research-and-innovation.ec.europa.eu/jobs-research/researchcomp-european-competence-framework-researchers_en]. Accessed 04 March 2024.

[5] Website of the European Skills, Competences, Qualifications, and Occupations (ESCO) classification hosted by the European Commission. Link: [https://esco.ec.europa.eu]. Accessed 04 March 2024.

[6] Day, Emma, Yolanda Pringle, Cornelia Van Scherpenberg, Claudia Vieira & Clare Viney (2024) *First Draft of SECURE Tenure Track-Like Models*. Deliverable D3.1 of the Sustainable Careers for Researcher Empowerment (SECURE) project. To be published in 2024.

[7] Lebhardt, Fleur, Sebastian Dahle, Erna Karalija, Gareth O'Neill, Sara Pilia & Mostafa Moonir Shawrav (2023) *State-of-the-Art on Research Career Frameworks*. Deliverable D1.1 of the Sustainable Careers for Researcher Empowerment (SECURE) project. To be published in 2024.

[8] Emma Day, Robin Gadbled, Katarina Haluskova, Erna Karalija, Fleur Lebhardt & Raquel Vega (2023) *State-of-the-Art on Tenure Track-Like Models*. Deliverable D1.2 of the Sustainable Careers for Researcher Empowerment (SECURE) project. To be published in 2024.

[9] Council of the European Union (2021) *Council Conclusions on Deepening the European Research Area. Providing Researchers with Attractive and Sustainable Careers and Working Conditions and Making Brain Circulation a Reality*. Council Conclusions 9138/21 of 28 May 2021. Link: [https://www.consilium.europa.eu/media/49980/st09138-en21.pdf]. Accessed 04 March 2024.

[10] European Commission (2022) *Technical Document on a European Framework for Research Careers*. Proposal from the European Commission on a European Framework for Research Careers to the European Research Area and Innovation Committee (ERAC). Unpublished.

[11] European Commission (2023) *Proposal for a Council Recommendation on a European Framework to Attract and Retain Research, Innovation, and Entrepreneurial Talents in Europe*. Commission Recommendation COM/2023/436 of 13 July 2023 Link: [https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2023:0436:FIN]. Accessed 04 March 2024.

[12] Webpage of the European Charter for Researchers and Code of Conduct for the Recruitment of Researchers hosted by the European Commission. Link: [https://euraxess.ec.europa.eu/jobs/charter]. Accessed 04 March 2024.

[13] Webpage of the Human Resources Strategy for Researchers (HRS4R) hosted by the European Commission. Link: [https://euraxess.ec.europa.eu/jobs/hrs4r]. Accessed 04 March 2024.

[14] Website of the RESAVER Pension Fund hosted by the European Commission. Link: [https://www.resaver.eu]. Accessed 04 March 2024.

[15] European Commission (2011) *Principles for Innovative Doctoral Training*. Link: [https://euraxess.ec.europa.eu/sites/default/files/policy_library/principles_for_innovative_doctoral_training.pdf]. Accessed 04 March 2024.

[16] Webpage of the European Code of Conduct for Research Integrity hosted by All European Academies (ALLEA). Link: [https://allea.org/code-of-conduct]. Accessed 04 March 2024.

[17] Webpage of the Open Universal Science (OPUS) project on CORDIS hosted by the European Commission. Link: [https://cordis.europa.eu/project/id/101058471]. Accessed 04 March 2024.

[18] Webpage of the Next Generation Research Assessment to Promote Open Science (GraspOS) project on CORDIS hosted by the European Commission. Link: [https://cordis.europa.eu/project/id/101095129]. Accessed 04 March 2024.

[19] Website of the San Francisco Declaration on Research Assessment (DORA) hosted by the American Society for Cell Biology (ASCB). Link: [https://sfdora.org]. Accessed 04 March 2024.

[20] Website of the Leiden Manifesto for Research Metrics hosted by Leiden University. Link [http://www.leidenmanifesto.org]. Accessed 04 March 2024.

[21] Webpage of the Hong Kong Principles hosted by the World Conference on Research Integrity Foundation (WCRIF). Link: [https://www.wcrif.org/guidance/hong-kong-principles]. Accessed 04 March 2024.

[22] Website of the Coalition for Advancing Research Assessment (CoARA). Link: [https://coara.eu]. Accessed 04 March 2024.

[23] Webpage of the Agreement on Reforming Research Assessment hosted by the Coalition for Advancing Research Assessment (CoARA) Link: [https://coara.eu/agreement/the-agreement-full-text]. Accessed 04 March 2024.

[24] Website of the EURAXESS portal hosted by the European Commission. Link: [https://euraxess.ec.europa.eu]. Accessed 04 March 2024.

[25] Website of the European Employment Services (EURES) portal hosted by the European Commission. Link: [https://europa.eu/eures]. Accessed 04 March 2024.

[26] Website of the Europass portal hosted by the European Commission. Link: [https://europa.eu/europass]. Accessed 04 March 2024.

[27] Organisation for Economic Cooperation and Development (OECD) (2023) *Introducing the Research and Innovation Careers Observatory*. Note from OECD outlining the plan for the initial

launch of the Research and Innovation Careers Observatory (ReICO) and dissemination activities. Unpublished.

[28] European Commission (2022) *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee, and the Committee of the Regions on a European Strategy for Universities*. Commission Communication COM/2022/16 Final of 18 January 2022. Link: [https://op.europa.eu/en/publication-detail/-/publication/ebf108dd-791c-11ec-9136-01aa75ed71a1]. Accessed 04 March 2024.

[29] European Parliament & European Council (2019) *Regulation of the European Parliament and European Council Establishing a Common Framework for European Statistics Relating to Persons and Households Based on Data at Individual Level Collected from Samples*. Parliament and Council Regulation (EU) 2019/1700 of 10 October 2019. Link: [https://op.europa.eu/en/publication-detail/-/publication/9c53922a-eed8-11e9-a32c-01aa75ed71a1]. Accessed 04 March 2024.

**SECURE**
Sustainable Careers for
Researcher Empowerment

**secureproject.eu**

## Annex 1: European Framework for Research Careers

| Pillar 1 |
| :---: |
| **Researchers, Research Managers, and Research Technicians in the European Research Area** |
| **Recommendations 1-6** |

| # | Topic | Recommendation |
| --- | --- | --- |
| 1 | Researchers | 'Researchers' means professionals engaged in the conception or creation of new scientific knowledge based on original concepts or hypotheses. They conduct research and improve or develop concepts, theories, models, infrastructures, techniques, instrumentation, software or operational methods. Researchers may be involved fully or partially in different types of activities – such as basic or applied research, experimental development, operating research equipment in any sector of the economy or society and disseminating and valorising research results. They may also be partially involved in, among others, project management, teaching, mentoring, supporting evidence-informed policy making, open science practices, knowledge and technological transfer activities, and science communication. Researchers identify options for new research and development activities, and plan for and manage them by using high-level skills and knowledge developed through formal education and training or from experience. |
| 2 | Intersectoral Mobility | Researchers can conduct their activities with equal relevance in all sectors performing research and innovation, including academia, industry, business, public administration and the non-profit sector, where their skills, knowledge and attitudes can be beneficial to European society, the research and innovation system, and the economy. |
| 3 | Research Managers | Research management careers can be undertaken by researchers and other professionals to manage and support research and innovation activities. Research management careers should be adequately framed and recognised at the level of the Union, by defining relevant skills and competences, in order to strengthen research managers' professional capacity, to enable the development of relevant training, and to foster comparability. Research managers can perform different tasks, for example: <br><br> (a) streamlining or facilitating the planning, development, management, FAIR data management, administration, monitoring, communication and valorisation of research and innovation; <br><br> (b) ensuring compliance with policy objectives, funding programme requirements, financial rules and legal regulations; <br><br> (c) improving the efficiency and effectiveness of research and innovation projects or systems; <br><br> (d) enhancing the impact of research and innovation on policy and society; |

**S)ECURE**
Sustainable Careers for
Researcher Empowerment

**secureproject.eu**

| | | |
|---|---|---|
| | | (e) supporting the design and implementation of research and innovation policies, programmes and projects. |
| 4 | Research Technicians | Research technicians are professionals whose main tasks require high levels of technical knowledge, training, and experience in one or more fields of engineering, the physical and life sciences, or the social sciences and humanities. They participate in scientific and technical tasks involving the application of concepts and operational methods and the use of research equipment, normally under the supervision of researchers. Research technicians have a crucial support role in the performance of high-level research and innovation. Member States should consider adequately framing and recognising research technicians' careers at national level. |
| 5 | R1-R4 | All researchers, regardless of their status and sector of employment, should be framed in the following profiles:<br><br>(a) R1 – First Stage Researcher: Researchers doing research under supervision up to the point of a PhD or equivalent level of competence and experience;<br><br>(b) R2 – Recognised Researcher: Researchers with a PhD or equivalent level of competence and experience who have not yet established a significant level of independence in developing their own research, attracting funding, or leading a research group;<br><br>(c) R3 – Established Researcher: Researchers with a PhD or equivalent level of competence and experience who are able to independently develop their own research, attract funding, and lead a research group;<br><br>(d) R4 – Leading Researcher: Researchers with a PhD or equivalent level of competence and experience who are recognised as leading their research field by their peers. |
| 6 | R1-R2/<br>R3-R4 | For the purposes of this Recommendation, R1 and R2 profiles should be considered early-career researchers, and R3 and R4 profiles should be considered senior researchers.<br><br>Member States are recommended to encourage the use of references to the profiles in all vacancies specifically addressed to researchers or, where relevant, to invite higher education institutions and research organisations to do so.<br><br>Profiles should not necessarily be considered as stages on a progressive career path.<br><br>A non-exhaustive list of examples of occupations for researchers across sectors along the R1-R4 profiles is set out in Annex I. |

| Pillar 2<br>Recognition, Interoperability, and Comparability of Researchers' Careers<br>Recommendations 7-10 | | |
|---|---|---|
| **#** | **Topic** | **Recommendation** |
| 7 | Recognition/ Interoperability | Member States and the Commission are recommended to promote and support a full recognition of researchers' careers as well as an equal esteem and reward of the different paths regardless of the sector of employment or activity, and to take supportive measures to allow for their full interoperability and comparability across Member States, sectors and institutions. |
| 8 | Alternative Careers | Non-linear, multi-career and hybrid paths could be encouraged and supported by Member States, and should be recognised on a par with linear career paths with multiple professional outcomes. |
| 9 | ESCO Classification | Member States are recommended to implement new versions and updates of the European Skills, Competences, Qualifications and Occupations classification, with specific regard to researchers' occupations and skills. |
| 10 | Human Resources | Member States are recommended to encourage human resources offices in all sectors to map career structures for researchers against the profiles referred to in point 5 of this Recommendation. |

| Pillar 3<br>Recruitment and Working Conditions<br>Recommendations 11-15 | | |
|---|---|---|
| **#** | **Topic** | **Recommendation** |
| 11 | Recruitment/ Selection | Member States are recommended to promote and support open, transparent and merit-based selection and recruitment of candidates, without penalisation for career breaks or non-linear, multi-career, and hybrid paths. |
| 12 | Working Conditions | Member States are recommended to encourage respect of collective agreements and effective social dialogue, and to take support action so that employers and funders provide attractive, inclusive and competitive research and working conditions, where researchers are valued, encouraged and supported. Such support action could include:<br><br>(a) providing commensurate remuneration, work-life balance and flexible working conditions that help bring together personal life, family, caring, health, safety, and overall wellbeing, without prejudice to careers;<br><br>(b) ensuring gender equality, gender balance, equal opportunities and inclusiveness for researchers from all backgrounds including under-represented and marginalised groups, and promoting among |

SECURE
Sustainable Careers for
Researcher Empowerment

**secureproject.eu**

research performing and funding organisations the use, implementation and monitoring of instruments of institutional change, such as inclusive gender equality plans open to intersections between genders and other social categories, in line with the new European Research Area framework and the European Strategy for Universities;

(c) safeguarding the freedom of scientific research from any possible limitation or interference, including from foreign actors;

(d) offering dedicated support at institutional level to researchers in relation to the fulfilment of administrative duties;

(e) taking resolute action to counter the phenomenon of precarity and to support job security and stability. This could, on a voluntary basis, incentivise the establishment of a maximum threshold for the number of fixed-term contracts per organisation in researcher human resources overall. Whenever permanent, long-term or highly recurrent research tasks are being fulfilled, permanent or open-ended contracts are recommended as the appropriate instrument. Researchers under fixed-term contracts should benefit from specific measures – as referred to in point 29 of this Recommendation – that promote their career development and continuity;

(f) considering the use of different funding models – e.g. baseline, life-cycle, or project-based –, to allow research organisations to develop more long-term research strategies and engage in more stable commitments towards employees;

(g) providing access to adequate social protection irrespective of the form of employment, without prejudice to the right of Member States to define the fundamental principles of their social security systems. Such measures could pertain to the following branches, insofar as they are provided in the Member States:

(1) unemployment benefits;

(2) sickness and healthcare benefits;

(3) maternity leave, paternity leave and parental leave and related benefits;

(4) invalidity benefits;

|  |  |  |
|---|---|---|
|  |  | (5) old-age benefits and survivor benefits;<br><br>(6) benefits in respect of accidents at work and occupational diseases. |
| 13 | Rights/ Obligations | Member States are recommended to ensure researchers' access to updated, comprehensive, user-friendly and clearly understandable information on their social protection rights and obligations, and to ensure that entitlements – whether they are acquired through mandatory or voluntary schemes – are preserved, accumulated and/or transferable across all types of employment and self-employment statuses and across borders, economic sectors, throughout the person's working life or during a certain reference period and between different schemes within a given social protection branch. |
| 14 | Pensions/ RESAVER | Member States that aim to enhance saving in defined contribution supplementary schemes are recommended to promote the use of the solutions provided by the RESAVER pension fund which guarantees the absence of a vesting period and asset transfer fees. |
| 15 | R1-R2 Support | Member States are recommended to encourage specific measures in support of early-career researchers, corresponding to the R1 and R2 profiles referred to in point 5 of this Recommendation. Taking into account national circumstances, such specific measures could include:<br><br>(a) providing First Stage Researchers with social protection and working conditions applicable to researchers in other career stages and with adequate income;<br><br>(b) providing early-career researchers with financial and social protection incentives;<br><br>(c) promoting the use of, and supporting, incentives for the recruitment of early-career researchers by employers in all sectors, in particular with permanent or open-ended contracts;<br><br>(d) promoting and recognising interinstitutional, intersectoral, interdisciplinary and geographical mobility, including virtual mobility;<br><br>(e) promoting cooperation between academia, research funders and other relevant ecosystem actors, notably industry and other businesses as well as public and non-profit organisations, with regard to skills needed and skills provided, so as to foster recruitment of highly-skilled researchers meeting the targeted skills needed in the sectors concerned;<br><br>(f) promoting involvement of early-career researchers into research teams avoiding the demand of tasks unrelated to their scientific training. |

**SECURE**
Sustainable Careers for
Researcher Empowerment

**secureproject.eu**

| Pillar 4 | | |
|---|---|---|
| **Researchers Skilled for Intersectoral and Interdisciplinary Careers and for Entrepreneurship and Innovation** | | |
| **Recommendations 16-25** | | |
| **#** | **Topic** | **Recommendation** |
| 16 | Doctoral Training | The goal of the first-stage researcher is to cultivate the research mindset, to nurture flexibility of thought, creativity, and intellectual autonomy through an original, concrete research project. Member States are recommended to take appropriate steps to encourage that doctoral training is geared towards those goals, and furthermore compatible with interoperable careers in all relevant sectors and for the practice of Open Science, including by making use of ResearchComp, the Principles for Innovative Doctoral Training, the European Code of Conduct for Research Integrity, and of any other future initiatives taken for the purpose of strengthening the transversal skills of researchers. |
| 17 | ResearchComp | The Commission is recommended to take action to support and facilitate the use of ResearchComp, promote the exchange of good practices, and consider future revisions of the Competence Framework where needed on the basis of the evolution of the research and innovation system and of the labour market. |
| 18 | Transversal Skills | Member States are recommended to place emphasis on schemes aiming to strengthen the transversal skills needed by researchers to engage in knowledge valorisation activities and entrepreneurship. Such schemes could include awareness raising activities and trainings on relevant topics, including intellectual assets management, standardisation, industry-academia, academia-public administration sector collaboration, including science for policy activities, and engagement with society. |
| 19 | Intersectoral Skills | Member States and the Commission are recommended to encourage interaction and cooperation, including partnerships, between academia, industry, other businesses, public administration, the non-profit sector, and all other relevant ecosystem actors, and to ensure that doctoral training and targeted training are developed or co-developed on the basis of the actual skills needs of the parties concerned, including by building on best practice examples implemented under existing programmes at Union and Member State level.<br><br>The support of such interaction and cooperation is particularly recommended in areas where specific skills are necessary for operating with state-of-the-art research and technology infrastructures. |
| 20 | Entrepreneurship | Member States and the Commission are recommended to take action to foster an innovation and entrepreneurial mindset in researchers, including |

| | | |
|---|---|---|
| | | the necessary skills for investment-seeking, with the objective of allowing those who undertake an entrepreneurial career path to couple their knowledge production capabilities with knowledge valorisation proficiency, turning innovative ideas into business and fostering innovation and progress.<br><br>A specific focus should be put on the promotion of entrepreneurship and innovation among women and on the creation of women-led spin-offs. The same approach should be envisaged for minority and marginalised groups.<br><br>Member States could consider measures to mitigate the potential risks for researchers undertaking an entrepreneurial career, including through the possibility to return to their previous career path. |
| 21 | Lifelong Learning | Member States are recommended to take action to support the development and provision of targeted training, to encourage up-skilling and re-skilling opportunities for researchers with a lifelong perspective and to foster intersectoral and interdisciplinary mobility. Member States are also recommended to take the necessary steps to promote a fair and transparent validation procedure of formal and informal training opportunities, including on-the-job training. |
| 22 | Intersectoral Initiatives | The Commission is recommended to take the following action in the context of the development of initiatives fostering cross-sectoral circulation of talents:<br><br> (a) supporting mutual learning for Member States on the basis of models of intersectoral mobility schemes established by the Commission, in three priority areas:<br><br>  (1) strengthening academia and non-academia cooperation;<br><br>  (2) improving training and lifelong learning for researchers, innovators, and other research and innovation talents;<br><br>  (3) boosting entrepreneurship, transversal skills and engagement among researchers in activities increasing social impact;<br><br> (b) reinforcing intersectoral mobility components in existing instruments for researchers' mobility, and complementing them with new instruments, where deemed necessary;<br><br> (c) creating awareness on intersectoral mobility schemes, via a branch of the ERA Talent Platform referred to in point 33 of this Recommendation. |

SECURE
Sustainable Careers for
Researcher Empowerment

**secureproject.eu**

| 23 | Intersectoral Schemes | Member States are recommended to consider establishing national schemes promoting intersectoral mobility in one or more of the three priority areas referred to in point 22 of this Recommendation. |
| --- | --- | --- |
| 24 | Intersectoral Barriers | Member States are recommended to undertake all necessary effort to promote the elimination of existing structural and administrative barriers which can hamper or obstruct mobility between sectors, including by supporting researchers in overcoming family and personal barriers to mobility, by supporting the interoperability of careers, where applicable, and by facilitating temporary or permanent mobility, without hindering linear research career paths. |
| 25 | Interdisciplinary Mobility | Member States and the Commission are recommended to promote interdisciplinary mobility of researchers, including by adequately taking into consideration and addressing hurdles such as lack of recognition and difficulties in securing funding from traditional sources. |

| **Pillar 5** <br> **Career Assessment, Development, and Progression** <br> **Recommendations 26-30** | | |
| --- | --- | --- |
| **#** | **Topic** | **Recommendation** |
| 26 | Recognition Mobility | Member States are recommended to support the recognition of the value of geographical, intersectoral, interinstitutional, inter- and transdisciplinary mobility as important means of enhancement of scientific knowledge and professional development at any stage of a researcher's career. Virtual mobility has been proved as a valid asset and can also be considered. The assessment and reward system should not penalise non-linear, multi-career and hybrid paths. |
| 27 | Research Assessment | Member States and the Commission are recommended to promote and support systems for the assessment and reward of researchers that: <br><br> (a) are based on qualitative unbiased judgement provided by peers and other pertinent experts, supported by the responsible use of quantitative indicators; <br><br> (b) reward quality and the various potential impacts of their research on society, science and innovation; <br><br> (c) recognise a diversity of outputs, inter alia publications, datasets, software, methodologies, protocols, patents; a diversity of activities, inter alia mentoring, research supervision, leadership roles, entrepreneurship, FAIR data management – following the principles of Findable, Accessible, Interoperable and Reusable –, peer review, teaching, knowledge valorisation, industry-academia cooperation, |

|  |  | support for evidence informed policy-making, interaction with society; and a diversity of practices, inter alia Open Science, early knowledge and data sharing, and open collaboration, in addition to all mobility experiences referred to in point 26 of this Recommendation;<br><br>(d) ensure that the researcher's professional activity meets high standards of ethics and integrity, applies appropriate conduct of research, and values good practices, including open practices for sharing research results and methodologies whenever possible;<br><br>(e) use assessment criteria and processes that respect the variety of research disciplines and national contexts;<br><br>(f) support a diversity of researcher profiles and career paths, and value individual contributions, but also the role of teams, collaborative work, and interdisciplinarity;<br><br>(g) ensure gender equality, gender balance, equal opportunities and inclusiveness.<br><br>To ensure coherence in the implementation of the recommendations listed in this point, Member States are encouraged to foster continuous training for the actors involved in the assessment and reward process. |
|----|----|----|
| 28 | Assessment Initiatives | Member States are invited to encourage organisations to join coalitions, alliances or initiatives set up to evolve assessment systems in line with the recommendations listed in point 27 of this Recommendation. Member States are also encouraged to tackle, within their area of competence, national administrative or legal barriers to such evolution of research assessment and help prevent any contradictions or incompatibilities that might exist in the application of the recommendations listed in point 27 of this Recommendation, between the assessment of research, of researchers and of research organisations. |
| 29 | Career Support | Member States are recommended to promote measures, including advisory and mentoring mechanisms, that make researchers, in particular early-career ones, aware of opportunities available in all relevant sectors and to promote a culture of diversification of careers for better personal and professional development. In this regard, Member States and the Commission are recommended to support the provision of career advisory and support services, e.g. EURAXESS, to stimulate intersectoral, interdisciplinary and geographical mobility, as well as the creation and development of entrepreneurial activities. |
| 30 | Tenure Track | Member States are recommended to promote a fair, equal, inclusive, transparent, structured and gender-equal career accession and progression |

| | | system for researchers in academia, up to the top positions. In this respect, Member States are recommended to consider developing tenure-track-like systems, to be understood as defined frameworks where a fixed-term contract has the prospect of a progression to a permanent position, subject to positive evaluation. |
|---|---|---|

| **Pillar 6** **Balanced Circulation of Talents and Making the Union an Attractive Destination** **Recommendations 31-32** | | |
|---|---|---|
| **#** | **Topic** | **Recommendation** |
| 31 | Competitive Union | Member States are recommended to take resolute action to put in place favourable, attractive and competitive conditions for conducting research and innovation activities, and for the return of researchers from abroad. Such measures could include, but not be limited to: <br><br>(a) incentives to make research activities more attractive, taking into consideration the need for a fair competition for talents; <br><br>(b) simplification of legal and administrative requirements for researchers; <br><br>(c) investments in the research and innovation system, including support to networking within and beyond the Union, to connect and integrate national research and innovation systems to European research networks and provide higher visibility of national capabilities and high-level research and technology infrastructures; <br><br>(d) the exchange of best practices with regard to creating an attractive, safe, inclusive, gender-equal and competitive research and innovation environment, even as regards the improvement of remuneration, working conditions and services, and the reduction of administrative and language barriers for foreign and internationally mobile researchers; <br><br>(e) return and career reintegration grants and attractive positions for returning researchers; <br><br>(f) the possibility of having dual positions in institutions established in different Member States, thereby fostering knowledge transfer, skills development, collaboration, and preventing talent drain; <br><br>(g) exploring options for a common approach for the staff of the Research Infrastructures, especially in the case of a European |

SECURE
Sustainable Careers for
Researcher Empowerment

**secureproject.eu**

| | | Research Infrastructure Consortium (ERIC). |
|---|---|---|
| | | The Commission is recommended to support Member States in their endeavours, including by enabling the implementation of synergies among Union programmes, and Union and national programmes. |
| 32 | Balanced Circulation | The Commission is recommended to take the following actions fostering a more balanced circulation of talents:<br><br>(a) supporting mutual learning for Member States in view of the reform of their research and innovation systems, including through calls for expression of interest to create a community of practice with training and guidance for Member States on the basis of successful pathways and solutions enabling more balanced talent circulation;<br><br>(b) monitoring mobility flows, within the Union and with third countries, through an interactive talent circulation map in the observatory on research careers referred to in point 40 of this Recommendation;<br><br>(c) facilitating transnational ties with the research and innovation diaspora and third country communities and facilitating the attraction or return of talents, via a branch of the ERA Talent Platform referred to in point 33 of this Recommendation;<br><br>(d) promoting a balanced talent circulation of researchers at Union level, by strengthening the human capital base with more entrepreneurial, managerial and better-trained researchers and innovators. |

| Pillar 7<br>**Support Actions for Research Careers**<br>**Recommendations 33-39** | | |
|---|---|---|
| **#** | **Topic** | **Recommendation** |
| 33 | Talent Platforms | The Commission and Member States are recommended to take appropriate measures to strengthen the EURAXESS portals, services, as well as the international dimension, and to develop the ERA Talent Platform as an online one-stop-shop for researchers and institutions in all sectors, with a new governance framework and a coordination role of relevant national bodies and institutions involved in service delivery.<br><br>The ERA Talent Platform should allow: |

| | | |
|---|---|---|
| | | (a) researchers to manage their learning and training opportunities and their careers; |
| | | (b) research and innovation institutions, employers and funders to conduct networking activities, better manage their pools of talents, collaborate and exchange best practices, while facilitating talents' attraction and retention and improving data for a better understanding of mobility trends across Europe and beyond. |
| | | Services could be broadened to include talent development and career management services, with a focus on researchers in all relevant sectors of society, including academia. |
| 34 | Talent Initiatives | The Commission is recommended to ensure links and interoperability between the ERA Talent Platform and other relevant Union and national initiatives, including Europass, ESCO and EURES, to provide for an improved governance model of the platform and the underlying network of service centres to better meet the needs of researchers and research performing organisations. |
| 35 | Charter Importance | Member States and the Commission are recommended to acknowledge the importance of the endorsement and implementation of the Charter for Researchers referred to in point 36 of this Recommendation. |
| 36 | Charter Encouragement | The new Charter for Researchers set out in Annex II to this Recommendation should replace the Charter and Code for Researchers set out in the Annex to Recommendation 2005/251/EC. Member States and the Commission are recommended to encourage the endorsement and implementation of the new Charter for Researchers by research employers and funders from all sectors, including through dedicated incentives, in view of making it a structural tool in support of researchers and research careers. |
| 37 | HRS4R/ Charter | The Commission is recommended to adjust the Human Resources Strategy for Researchers, or any future similar implementation mechanism, to the new Charter for Researchers, and to ensure continuity in respect of the institutions that have endorsed the principles of the old Charter and Code for Researchers and have adhered to the Human Resources Strategy for Researchers, notably by considering them as continuing to endorse the Charter for Researchers set out in Annex II to this Recommendation. The Commission is recommended to apply the same transitional measures to the institutions which started the Human Resources Strategy for Researchers process under the old Charter and Code for Researchers. |
| 38 | Support Tools | The Commission is recommended to regularly review and adapt all tools in support of research careers, based on the actual needs of researchers, in coordination with Member States and relevant stakeholders. |
| 39 | Pilot Actions | The Commission and Member States are recommended to encourage and support alliances of higher education institutions, such as the European Universities alliances, the whole European higher education, research and |

| | | innovation sector and all relevant stakeholders, to pilot relevant actions foreseen by this Recommendation on the basis of a voluntary and bottom-up approach. |
|---|---|---|

<table>
<tr><td colspan="3" align="center"><strong>Pillar 8<br>Monitoring of Research Careers<br>Recommendations 40-44</strong></td></tr>
<tr><td><strong>#</strong></td><td><strong>Topic</strong></td><td><strong>Recommendation</strong></td></tr>
<tr><td>40</td><td>ReICO</td><td>In addition to the overarching European Research Area monitoring systems, the Commission and Member States are recommended to monitor relevant aspects of research careers in the Union and the implementation of this Recommendation through a dedicated Observatory, to the benefit of the research community, policy makers, public administration and relevant organisations at European and national level. The Observatory should support better understanding of challenges and opportunities by researchers, and it should also promote the attractiveness of Union research performing organisations for the best talents, while guaranteeing the protection of data privacy throughout implementation.</td></tr>
<tr><td>41</td><td>ReICO<br>Data</td><td>The Observatory should carefully consider and identify the type of support data that would be relevant to observe research careers. Where possible, links to existing data should be considered and prioritised in order to reduce administrative burden for Member States and all relevant stakeholders. Member States are recommended to cooperate for the purpose of collecting data relevant for the implementation of the observatory in an efficient and sustainable way.</td></tr>
<tr><td>42</td><td>ReICO<br>Results</td><td>The Commission is invited to propose – on the basis of the data provided by the Observatory on research careers – further measures that encourage and promote the development of research careers.</td></tr>
<tr><td>43</td><td>ReICO/<br>EHESO</td><td>The Commission, in collaboration with Member States, is recommended to consider relevant links between the Observatory on Research Careers and the European Higher Education Sector Observatory proposed in the European Strategy for Universities, where relevant, and thereby enhance synergies between the European Research Area and the European Education Area.</td></tr>
<tr><td>44</td><td>ReICO/<br>Regulations</td><td>Member States and the Commission are recommended to consider the adaptation to the data needs of the observatory referred to in point 40 of this Recommendation of the data collected in the context of Regulation (EU) 2019/1700.</td></tr>
</table>

## Annex 2: European Charter for Researchers

<table>
<tr><td colspan="3" align="center"><b>Pillar 1<br>Ethics, Integrity, Gender and Open Science<br>Principles 1-8</b></td></tr>
<tr><td colspan="3">This pillar gathers the fundamental principles of the Charter for Researchers and its commitment towards supporting excellence in research, understood in this context as fostering the best possible research teams and projects, free from gender and other biases. The principles under this pillar are expected to contribute to the foundations of the vision of a revitalised European Research Area, and to inspire European researchers, research employers, funders and policy makers. Because of the transversal nature of all these values, they are expected to be mainstreamed and taken into consideration in the deployment of the rest of the principles.</td></tr>
<tr><td><b>#</b></td><td><b>Topic</b></td><td><b>Recommendation</b></td></tr>
<tr><td>1</td><td>Ethic and Research Integrity</td><td>Researchers should comply with strict ethics rules and approach their work with honesty; reliability; objectivity; impartiality and independence; open communication; duty of care; fairness and responsibility for future science generations. These are the foundations of responsible and trustworthy research free from undue influence (including foreign interference and conflict of interest). They are a prerequisite for achieving excellence, and they underpin the responsibility of researchers to guard against biases and methodological shortcuts.<br><br>Researchers should adhere to the recognised ethical practices and fundamental ethical principles appropriate to their discipline(s) as well as to ethical standards as documented in the different national, sectoral or institutional Codes of Ethics.<br><br>The primary responsibility for research integrity is with researchers themselves. Researchers should be supported by an institutional culture of research integrity to create and respect rules, procedures and guidelines as well as training and mentoring based on the exchange of best practices.<br><br>In order to foster good research practices and a culture of research integrity, a number of dimensions need to be considered by all stakeholders involved, such as research integrity in research environments; training and capacity building on research integrity; research processes and policies embedding research integrity; data, publication, dissemination, review, evaluation and editing policies. Equally, mechanisms to identify, report and deal with research misconducts should be put in place.<br><br>Researchers should avoid plagiarism of any kind. Particular attention should be paid to the principles of joint ownership when research is carried out in collaboration with supervisors and/or other researchers – as appropriate to</td></tr>
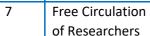</table>

| | | |
|---|---|---|
| | | the discipline – as well as to intellectual property rules. This should apply at all stages of the research process including conception, preparation of funding applications and the development and delivery of results. The need to validate observations by showing that findings are reproducible should not be interpreted as plagiarism, provided that the data to be confirmed are explicitly referenced.<br><br>The values of ethics and integrity are also of great importance when researchers are in a supervisory role. These should be applied promptly to ensure a safe, inclusive and gender equal research environment for all involved and especially when discrimination, sexual or moral harassment, hindrance to learning or research work, or unjustified personal appropriation of data or results occur. |
| 2 | Freedom of Scientific Research | The freedom of scientific research is a common core value and principle for research cooperation within the European Research Area and with international partners. Researchers should focus their research on the good of humanity and expanding the frontiers of human knowledge, while enjoying freedom of thought, opinion and expression, the freedom to define research questions, the freedom to identify methods by which problems are solved, the freedom to choose and develop theories, the freedom to question accepted wisdom and bring forward new ideas and the freedom to associate in professional or representative academic bodies. Researchers should have the right to disseminate and publish the results of their research including through training and teaching. Researchers should, however, recognise the limitations to this freedom that could arise because of particular research circumstances – including supervision/guidance/management – or legal or operational constraints, e.g. intellectual property rights, budgetary or infrastructural reasons. |
| 3 | Open Science | Researchers should target engagement in all aspects of Open Science1 and be facilitated by their employers and funders in this regard. They should share their results openly, e.g. through open and FAIR-Findable, Accessible, Interoperable and Reusable data, open access publications, and open software, models and algorithms. They should take measures to ensure reproducibility of research results. They should aim at practicing Open Science methodologies and at engaging in open peer review. Employers and funders should support, provide the necessary tools and infrastructure, and reward a true Open Science culture across the Union, including mainstreaming open access to scholarly publications, research data and other research outputs – i.e. following the 'as open as possible, as closed as necessary' principle – and the diffusion and uptake of Open Science principles and practices, while considering differences among disciplines and cultural differences, including multilingualism, supporting the development of Open Science skills, and further developing and integrating the underpinning digital infrastructure and service. |

| | | |
|---|---|---|
| | | *Citizen Science*<br><br>Researchers should incorporate citizen science into their projects as much as possible and where relevant. This means involving citizens in the concept, design and implementation of research projects in STEM and SSH. This is an ideal means to democratise science, build trust in science, and leverage the vast societal intelligence and capabilities to conduct excellent research and innovation. |
| 4 | Gender Equality | All stakeholders should foster gender equality and gender balance in research teams, managerial and decision-making bodies, recruitment and promotion committees, and advisory groups. This includes fostering the integration of the gender dimension in research, teaching and innovation content in order to improve the scientific quality, excellence, and societal relevance of the produced knowledge. Gender equality also aims at combating gender-based violence and sexual harassment. Gender equality should be understood from an intersectional perspective, where different systems of power among gender and other social categories and identities intersect and reinforce each other. Sustainable institutional changes, channelled through Gender Equality plans1 or similar, that allow for proper reporting of infringements and include monitoring and evaluation systems, are adequate mechanisms to promote gender equality.<br><br>A key component of the transformation of an organisation's culture for advancing gender equality is work-life balance. Work-life balance is relevant for both women and men and involves ensuring that all staff are properly supported to advance their career alongside personal responsibilities that they may hold outside of the workplace, including caring responsibilities. |
| 5 | Embracing Diversity | A core principle of the European Research Area is to take account of diversity in the broad sense, including, inter alia, gender, racial or ethnic origin, religion or belief, social diversity, disability, age, sexual orientation and combating discrimination on all grounds. Employers and funders should embrace diversity in their researchers, since different life experiences add valuable perspectives to research projects. Also, diversity in participants can inform research results applying to and enriching the diverse societies we live in. Acknowledging unconscious biases, for instance in hiring, promoting and reviewing tasks, and compensating for them where possible is also needed, particularly in the realm of science. |
| 6 | The Researcher | All researchers are engaged in the conception or creation of new scientific knowledge based on original concepts or hypotheses. Researchers are professionals whose work should be valued, independently of the sector in which they operate. This should commence at the beginning of their careers, namely at postgraduate level, and should include all levels, regardless of their classification at national level. |

| | | |
|---|---|---|
| | | Employers and funders should encourage and support non-linear and multi-career paths, to be understood as paths characterised by geographical, disciplinary, intersectoral, and inter-organisational mobility – e.g. secondments. They should also encourage hybrid paths combining simultaneously different sectors, which should be considered on a par with linear career paths. |
| | | *Professional Attitude* |
| | | Researchers should be familiar with the strategic goals governing their research environment and funding mechanisms and should seek all necessary approvals before starting their research or accessing the resources provided. Researchers should make every effort to ensure that their research is relevant to society by allowing a better understanding of the world, and does not needlessly duplicate research previously carried out elsewhere. This involves efficient research results' valorisation. |
| | | There should be clear communication among researchers and employers, funders, or supervisors when a research project is delayed, redefined or completed; notice should be given if a research project is to be terminated early or suspended for any reason. |
| | | *Accountability* |
| | | Being accountable means taking responsibility for one's actions when carrying out research. Researchers need to be aware that they are accountable towards their employers, funders or other related public or private bodies as well as, on more ethical grounds, towards society. Researchers funded by public funds are also accountable for the efficient use of taxpayers' money. Consequently, they should adhere to the principles of sound, transparent and efficient financial management and cooperate during any authorised audits of their research, whether undertaken by their employers/funders or by ethics committees. This expectation requires them to serve as examples of ethical behaviour for their peers and for the broader society. |
| | | Methods of collection and analysis, the outputs and, where applicable, details of the data should be open to internal and external scrutiny, whenever necessary and as requested by the appropriate authorities. This is also important to make the data open and help ensure the reproducibility of results. |
| 7 | Free Circulation of Researchers | Employers and funders should promote free circulation of researchers, scientific knowledge and technology, while attracting talent and avoiding potential talent drain. They should recognise the value of geographical, inter-institutional, intersectoral, interdisciplinary and transdisciplinary mobility as important means of enhancing knowledge and professional |

SECURE
Sustainable Careers for
Researcher Empowerment

**secureproject.eu**

| # | Topic | Recommendation |
|---|---|---|
| | | development at any stage of a researcher's career and fully value and acknowledge any mobility experience within their career progression/appraisal system. Virtual mobility has been proved as a valid asset and can also be considered. This also requires that the necessary administrative instruments be put in place to allow the portability of both grants and social security provisions, in accordance with national legislation. |
| 8 | Sustainability of Research | Researchers, employers and funders should promote the sustainable implementation of research activities in line with current and future policy initiatives adopted to progress society such as the European Green Deal, the United Nation's 2030 Agenda and the Sustainable Development Goals. Researchers should be supported by an institutional culture of sustainable research management, as well as training and mentoring based on the exchange of best practices. They should take the lead in reducing their carbon emissions in a way that sets a positive example to others within the research community.<br><br>The European Commission's 'MSCA Green Charter', developed in the framework of the Marie Skłodowska-Curie Actions (MSCA), can be used as reference point. |

| Pillar 2<br>Researchers' Assessment, Recruitment and Progression<br>Principles 1-4 | | |
|---|---|---|
| Researchers' assessment should ensure an equal recognition and reward of researchers' careers regardless of the sector of employment or activity and follow an unbiased talent-based approach. Fair recruitment and selection of researchers' policies are fundamental for achieving an open labour market for researchers, contributing to the advancement of the European Research Area. | | |
| **#** | **Topic** | **Recommendation** |
| 1 | Researcher's Assessment | Researchers' assessment should enable evaluating the performance of researchers and research to achieve the highest quality and impact. This requires recognition of increasingly diverse activities, practices and research outputs. Consequently, assessment should be based primarily on qualitative judgement, for which peer review and review by other pertinent experts is central, supported by the responsible use of quantitative indicators. Contributions to innovation should also be recognised, particularly for candidates from an industrial background.<br><br>Employers and funders should support a system for the assessment and reward of researchers that considers the overall quality of their impact on society, science and innovation, the diversity of activities performed, Open Science practices, and the value of geographical, interdisciplinary and intereurqaxesssectoral mobility. Such a system should: |

**secureproject.eu**

| | | |
|---|---|---|
| | | (a) be based on qualitative unbiased judgement provided by peers and pertinent experts, supported by the responsible use of quantitative indicators;<br><br>(b) reward quality and the various potential impacts of research on society, science and innovation;<br><br>(c) recognise a diversity of outputs, inter alia publications, datasets, software, methodologies, protocols, patents, models, theories, algorithms, workflows, exhibitions, strategies, policy contributions; a diversity of activities, inter alia mentoring, research supervision, leadership roles, entrepreneurship, FAIR data management – following the principles Findable, Accessible, Interoperable and Reusable –, peer review, teaching, knowledge valorisation, industry-academia cooperation, support for evidence-informed policy-making, interaction with society, management and leadership, supervision, teamwork, services to society, science communication and methodological rigor; and a diversity of practices, inter alia Open Science, early knowledge and data sharing, and open collaboration, in addition to all mobility experiences including geographical, intersectoral, inter-institutional, inter- and transdisciplinary;<br><br>(d) ensure that researchers' activity meets high standards of ethics and integrity, applies appropriate conduct of research, and values good practices, including open practices for sharing research results and methodologies, whenever possible;<br><br>(e) use assessment criteria and processes that respect the variety of research disciplines and national contexts;<br><br>(f) support a diversity of researcher profiles and career paths, and value individual contributions, but also the role of teams, collaborative work, and interdisciplinarity;<br><br>(g) ensure gender balance, gender equality, equal opportunities and inclusiveness.<br><br>To ensure coherence in the implementation of these principles, employers and funders should foster continuous training for the actors involved in the assessment and reward process. |
| 2 | Recruitment | In accordance with the principles of academic freedom and institutional autonomy, employers and funders are recommended to establish |

| | | |
|---|---|---|
| | | recruitment and selection procedures which are open, transparent and merit-based, without penalisation for career breaks or non-linear, multi-career and hybrid paths. They should seek excellence, gender equality, diversity, and be tailored to the type of position advertised. Advertisements should include a comprehensive description of the knowledge and competencies required, including a description of the working conditions and entitlements, career development prospects and an overview of the timeline. Candidates should be informed, prior to the selection, about the recruitment process and the selection criteria, the number of available positions and career development prospects. Committee members should also be made aware of and trained about fair recruitment principles. |
| | | *Variations in the Chronological Order of CVs* <br> Career breaks or variations in the chronological order of CVs should not be penalised, but regarded as an evolution of a career, and consequently, as a potentially valuable contribution to the professional development of researchers towards a multi-dimensional career track. Candidates should therefore be allowed to submit evidence-based CVs, reflecting a representative array of achievements and qualifications appropriate to the post for which they are applying. |
| | | *Seniority* <br> The level of qualifications required should be in line with the needs of the position and not set as a barrier to entry. Evaluation of qualifications should focus on judging the achievements of the person rather than their circumstances or the reputation of the institution where the qualifications were acquired. As professional qualifications may be acquired at an early stage of a long career, the pattern of lifelong professional development should also be encouraged and recognised. |
| 3 | Selection | As part of recruitment, the selection process should take into consideration the whole range of experience of the candidates. While focusing on their overall potential as researchers, their creativity – as assessed on the basis of their innovative research methods, approaches and outputs – and level of independence should also be considered. Selection committees should bring together diverse expertise, competences and experience relevant to assess the candidate. Selection committees should also have adequate gender balance and, where appropriate and feasible, include members from different sectors – public and private – and disciplines, and from other countries. Whenever possible, a wide range of selection practices should be used, such as external expert assessment and face-to-face and online interviews. Members of selection panels should be adequately trained especially for minimising gender bias or any other possible unconscious biases. All candidates should be informed after the selection process about the strengths and weaknesses of their application. |

| | | |
|---|---|---|
| | | *Non-discrimination*<br>Employers and funders of researchers should not discriminate against researchers in any way based on gender, age, ethnic, national or social origin, religion or belief, sexual orientation, language, disability, political opinion, social or economic condition. |
| 4 | Career Progression | Employers and funders should introduce for all researchers, including senior researchers, evaluation/appraisal systems for assessing the performance of their duties on a regular basis and in a transparent manner by an independent – and, in the case of senior researchers, preferably international – committee. Non-linear and multi-career paths, characterised by geographical, sectoral, and inter-organisational mobility, or hybrid paths, characterised by the simultaneous combination of sectors, deserve full recognition and consideration on a par with linear career paths – to be understood as careers following a straight line of progression from one position to another, usually within the same field or discipline.<br><br>Such evaluation and appraisal procedures should take due account of researchers' overall potential, their research creativity, their research output – e.g. publications, data, software, models, algorithms, methods, protocols, patents, policy contributions –, their activities – e.g. management and leadership, teaching/lecturing, peer review, supervision, mentoring, entrepreneurship, knowledge valorisation, national or international collaboration, administrative duties, service to society, science communication and interaction with society –, their research behaviour – e.g. ethics and integrity practice, methodological rigour, early knowledge and data sharing, open collaboration – and their mobility, and should be taken into consideration in the context of career progression.<br><br>A transparent, structured, inclusive and gender-equal career accession and progression system is needed to reinforce careers in academia, up to the top positions. The development of tenure-track-like systems – to be understood as defined frameworks where a fixed-term contract has the prospect of a progression to a permanent position subject to positive evaluation – could be considered for this purpose at the level of the Member States and research performing organisations.<br><br>*Co-authorship*<br>Co-authorship should be viewed positively by institutions when evaluating staff, as evidence of a constructive approach to the conduct of research. Employers and funders should therefore develop strategies, practices and procedures to provide researchers, including those at the beginning of their research careers, with the necessary framework conditions so that they can enjoy the right to be recognised, listed and/or quoted, in the context of their |

actual contributions, as co-authors of papers, co-inventors of patents, etc., or to publish their own research results independently from their supervisors. They should also offer training and workshops to researchers, especially early-career researchers, on ethical authorship practices, including the understanding of individual contributions and their rights and responsibilities.

*Recognition of Mobility Experience*
Any relevant mobility experience, e.g. a stay in another country/region or in another research setting – public or private – or a change from one discipline or sector to another, whether as part of the initial research training or at a later stage of the research career, or virtual mobility experience should be considered as a valuable contribution to the professional development of a researcher.

| | |
|---|---|
| **Pillar 3**<br>**Working Conditions and Practices**<br>**Principles 1-4** | |
| Improving researchers' working conditions should be at the core of the Union policy framework for research careers. Within this area several actions are proposed to contribute to the stability of employment and to the definition of researchers' labour rights and obligations, subject to national legislation and circumstances. The need for employers and funders to develop a research culture for research excellence and facilitate a thriving researcher community is also emphasised. | |

| # | Topic | Recommendation |
|---|---|---|
| 1 | Working Conditions, Funding, and Salaries | Employers and funders should ensure that the working conditions for researchers, including those with disabilities, provide, where appropriate, the flexibility and accessibility deemed essential for successful research performance, in accordance with existing national legislation and circumstances, and with national or sectoral collective-bargaining agreements. They should aim to provide working conditions for combining personal life, family, caring, health, safety, and overall wellbeing, without prejudice to research careers. Particular attention should be paid, inter alia, to flexible working hours, part-time working, remote working and sabbatical leave, as well as to the necessary financial and administrative provisions governing such arrangements. Employers should provide working conditions and environment that promote the mental health and physical wellbeing of researchers, including appropriate procedures for preventing and tackling gender-based violence, including sexual harassment.<br><br>*Research Environment*<br>Employers and 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, and the highest level of health and safety in line with Union, national and sectoral regulations. Funders should ensure that adequate resources are provided in support of the agreed work programme. In particular, it is important to have qualified support staff – e.g. research managers and administrators. *Complaints/Appeals* Employers and funders of researchers should establish, in compliance with relevant national, Union or international law, rules and regulations, appropriate procedures, possibly in the form of an impartial ombudsperson, to deal with complaints/appeals of researchers, including those concerning conflicts among supervisors and First Stage (R1)/Recognised (R2) researchers. Such procedures should provide all research staff with confidential and informal assistance in resolving work-related conflicts, disputes, and grievances, with the aim of promoting fair and equitable treatment within the institution and improving the overall quality of working conditions and environment. *Participation in Organisation Governance* Employers and funders of researchers should recognise 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, to protect and promote their individual and collective interests and to actively contribute to the workings of the institution. *Funding and Salaries* Employers and funders of researchers should ensure that researchers, irrespective of their status, enjoy fair and attractive remuneration conditions – funding and salaries – with adequate and equitable social security provisions – including sickness, healthcare and parental benefits, pension rights and unemployment benefits, old-age and survivor's benefits, invalidity benefits and benefits in respect of accidents at work and occupational disease – in accordance with existing national legislation and with national or sectoral collective bargaining agreements. This should include researchers at all career stages, including First Stage Researchers (R1), commensurate with their legal status, performance and level of qualifications and responsibilities. Researchers should be made aware of their rights and obligations when it comes to understanding how their salaries are being taxed, and should be provided with transparent information on social protection rights such as national pension rights. |
| 2 | Stability of Employment | Employers and funders should take resolute actions to counter the phenomenon of precarity and to support job security and stability. This could, on a voluntary basis, include the establishment of a maximum threshold for the number of fixed-term contracts per organisation in the |

| | | |
|---|---|---|
| | | overall researchers' human resources. Whenever permanent, long-term or highly recurrent research tasks are being fulfilled, permanent or open-ended contracts are recommended as the appropriate instrument. Researchers under fixed-term contracts should benefit from specific career development and advisory services to ensure career continuity.<br><br>*Early-career Researchers (R1-R2)*<br>Precarity of employment is a particular issue in academia. To counter this situation is recommended the implementation – subject to national legislation and circumstances – of specific measures in support of early-career researchers with regard to providing First Stage researchers (R1) with social protection and working conditions applicable to researchers in other career stages and with adequate income, promoting involvement of early-career researchers into research teams avoiding the demand of tasks unrelated to their scientific training and recognising inter-institutional, intersectoral, interdisciplinary and geographical mobility, including virtual mobility. Additionally, appointing institutions should establish clear rules and explicit guidelines for the recruitment and appointment of recognised researchers (R2), including the maximum duration and the objectives of these appointments. Such guidelines should consider time spent in prior postdoctoral appointments at other institutions and take into consideration that the postdoctoral status should be transitional, with the primary purpose of providing additional professional development opportunities for a research career in the context of long-term career prospects with fixed-term contract or tenure.<br><br>Employers and funders should make their best effort as regards informing early-career researchers about career opportunities, within and beyond academia, offering broad professional development, especially during the R2 stage, more transparent and predictable career prospects, and work-based learning opportunities in a diversity of sectors. |
| 3 | Contractual and Legal Obligations | Researchers at all levels should be familiar with the national, sectoral or institutional regulations governing training and working conditions. This includes intellectual property rights regulations, and the requirements and conditions of any sponsor or funders, independently of the nature of their contract. Employers and funders should provide copies of these documents in English. Researchers should adhere to such regulations by delivering the required results – e.g. thesis, publications, patents, reports, new products, etc. – as set out in the terms and conditions of the contract or equivalent document.<br>Given the increasing focus on knowledge security, researchers should always adopt safe working practices, in line with relevant national and Union legislation, including taking the necessary precautions for health and safety and for recovery from cybersecurity attacks, and information technology |

| | | |
|---|---|---|
| | | disasters, e.g. by preparing proper back-up strategies. They should also be familiar with the current national and Union legal requirements regarding data protection and confidentiality protection requirements and undertake the necessary steps to always fulfil them. |
| 4 | Dissemination and Exploitation of Results | Open Science should be practiced by all researchers to ensure, in compliance with their contractual arrangements, that the results of their research are disseminated, made openly available and exploited, e.g. communicated, transferred into other research settings and, if appropriate, commercialised. Senior researchers are expected to take a lead in ensuring that research is fruitful and that results are either exploited commercially and/or made accessible to the public whenever the opportunity arises.<br><br>Researchers should be facilitated in this regard by their employers and funders through the relevant skills training and access to the appropriate funding, infrastructure and support. The engagement of researchers in Open Science practices should be recognised, incentivised and rewarded by employers and funders in recruitment, career progression and funding programme assessment.<br><br>*Intellectual Assets including Intellectual Property Rights*<br>Employers and funders should ensure that researchers at all career stages are adequately compensated for the benefits resulting from the exploitation – if any – of their research and innovation activities results, where appropriate by guaranteeing co-ownership of the intellectual property rights such as copyright. Employers and funders should address this explicitly in their intellectual assets management strategy and should make the strategy publicly available. The intellectual assets management strategy should cover the creation, management, ownership and utilisation of all types of intellectual assets – including peer-reviewed publications, data, know-how, standards –, and support Open Science practices.<br><br>The strategy should explicitly refer to ownership provisions and access rights to researchers and/or, where applicable, to their employers or other parties, including industry partners, as possibly provided for under specific collaboration agreements or other types of agreement.<br><br>*Public Engagement*<br>Researchers should ensure that their research activities are made known to society at large in such a way that they can be understood by non-specialists, thereby improving the public's understanding of science. Direct engagement with civil society and citizens will help researchers to better understand public interest in priorities for research and the public's concerns, and to harness the potential of co-design and co-creation with society where relevant. |

**SECURE**
Sustainable Careers for
Researcher Empowerment

**secureproject.eu**

| Pillar 4 Research Careers and Talent Development Principles 1-4 | | |
|---|---|---|
| The research community is diverse in talents, skills, competences and capacities and roles. The more these talents are fostered and developed, the better the research quality and societal relevance of the produced knowledge. Encouraging continuous professional development along with skills training is needed to maintain competence and provide researchers with a broad range of career opportunities in the public and private sectors. | | |
| **#** | **Topic** | **Recommendation** |
| 1 | Valuing Diverse Research Careers | Employers and funders should recognise that researchers may have highly diverse careers both in research and in other functions. Diversification typically includes mobility in all its forms: inter/intra-national, intersectoral, inter-institutional, inter- and transdisciplinary and virtual mobility. This requires more talent-based and diversity-sensitive quality assessment, fostering responsible use of metrics, considering diverse contributions and their potential impacts, diverse activities and practices like teaching and skills, peer review, management and leadership, supervision, mentoring, knowledge valorisation, and technology transfer activities, entrepreneurship and collaboration with industry, developing evidence-informed policymaking activities, science communication and interaction with society, and Open Science practices, team science, among others as well as mobility.

Employers and funders should put measures in place to make researchers, in particular early-career ones, aware of opportunities available in all relevant sectors and to promote a culture of diversification of careers for better personal and professional development. This will require career advisory, mentoring and support services to stimulate intersectoral, interdisciplinary and geographical mobility, as well as the creation and development of entrepreneurial activities. |
| 2 | Career Development and Advice | Employers and 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. In this context, researchers should be supported to develop an individual career plan to identify the necessary training and research required to attain their career goals. 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 and be proactive and responsible for their career development. |

| | | |
|---|---|---|
| | | Employers and funders should ensure, either in the institutions concerned or through collaboration with other structures, accessible and up-to-date career guidance and job placement assistance providing information, guidance and support for career development both within and beyond the institution concerned. This should be offered to researchers at all stages of their careers, regardless of their contractual situation. |
| 3 | Continuous Professional Development | Researchers at all career stages should seek proactively and be given opportunities by their employer/funder to continually improve themselves by regularly updating and expanding their skills and competencies. This may be achieved by a variety of means including, but not restricted to, formal training, workshops, conferences and e-learning or collaboration within a team and the respective networks. Particular attention should be paid to the training of First Stage Researchers (R1), the majority of whom are PhD candidates at the beginning of their research career. _Access to Research Training and Continuous Development_ Employers and funders should ensure that all researchers at any stage of their career, regardless of their contractual situation, are given the opportunity for professional development and for improving their employability through access to measures for the continuing development of skills and competencies. Employers and funders should take action to support the development and provision of targeted training, to encourage up-skilling and re-skilling opportunities for researchers with a lifelong learning perspective and to foster intersectoral and interdisciplinary mobility. Such measures should be regularly assessed for their accessibility, take-up and effectiveness in improving competencies, skills and employability. Employers and funders should attribute adequate relevance to the need to foster entrepreneurial competences in researchers, with the objective of allowing those who undertake an entrepreneurial career path to couple their knowledge production capabilities with knowledge valorisation proficiency, turning innovative ideas into business and fostering innovation and progress. Employers and funders should take steps to ensure that doctoral training is compatible with interoperable careers in all relevant sectors and for the practice of Open Science, including by making use of the European Competence Framework for Researchers (ResearchComp), the Principles for Innovative Doctoral Training, the European Code of Conduct for Research Integrity, and of any other future initiatives taken for the purpose of strengthening transversal skills of researchers. |

| | | |
|---|---|---|
| | | *Validation of Skills*<br>As part of broadening researchers' skills sets, employers and funders should provide for the appropriate assessment and evaluation of formal and informal training, including on-the-job skills and training, particularly within the context of international, intersectoral and interdisciplinary mobility. The assessment should be done in a fair and transparent manner within a reasonable timeframe.<br><br>*Teaching*<br>Teaching is an essential means for the structuring and dissemination of knowledge and is a valuable option within a researcher's career path. Teaching should benefit from and make use of scientific knowledge and promote research interest among students. Involvement of researchers in teaching should be fully supported and recognised, and might vary at different moments within a career. Special attention should be paid to researchers at the beginning of their careers, ensuring that they are rightly supported and that teaching responsibilities – including lecturing, tutoring, supervising and mentoring – are compatible with their research activities or research training.<br><br>Employers and funders should ensure that teaching duties are adequately remunerated and considered in the evaluation/appraisal systems from an early stage of researchers' careers. It should also be ensured that time devoted by senior members of staff to the training and mentoring of early-career researchers – R1, R2 – is counted as part of their teaching commitment. Suitable training should be provided for teaching and coaching activities as part of the initial training and professional development of researchers. |
| 4 | Supervision and Mentoring | Proper people and team management are crucial in research working environments as science is by definition a joint endeavour. The necessary training, tools and evaluation mechanisms should be put in place so as to ensure that senior and leading researchers manage their staff and teams in a fair and non-discriminatory manner, free of gender bias and other types of biases – such as biases based on religion, sexual orientation, race, ethnicity, socioeconomic background, etc. –, and establish fruitful and cooperative working relationships with their peers. This should contribute to healthy, fair, creative environments where every individual is respected, duly motivated, recognised and their well-being fostered.<br><br>Employers and funders should ensure that a person or a group of persons is clearly identified to whom First Stage (R1) and Recognised (R2) researchers can refer for the performance of their duties and should inform researchers accordingly. |

SECURE
Sustainable Careers for
Researcher Empowerment

**secureproject.eu**

Such arrangements should clearly stipulate that the proposed supervisor have an adequate level of expertise in supervising research and have the time and commitment to offer the research trainee appropriate support; moreover, they should provide for the necessary progress and review procedures, as well as for the necessary feedback mechanisms.

Specific provisions for the integration, research support and career development of researchers, for their mentoring and wellbeing, for communication and conflict resolution as well as for the training and professional development of supervisors are provided in the MSCA Guidelines on Supervision. The MSCA Guidelines on Supervision are a set of recommendations for individuals and institutions who receive MSCA funding. The Guidelines promote effective supervision, mentoring and appropriate career guidance.

*Relations with Supervisors*
Researchers in their training phase should have a structured and regular relationship with their supervisor(s) and faculty/departmental representative(s) and take full advantage of their relationship with them. Supervisors should also actively support especially early-stage researchers by organising feedback meetings with them and promoting training activities relevant to their work.

This includes keeping records of all work progress and research findings, obtaining feedback by means of reports and seminars, applying such feedback and working in accordance with agreed schedules, milestones, deliverables and/or research outputs.

*Senior Researchers*
Senior researchers – R3 and R4 – should devote particular attention to their multi-faceted role as supervisors, mentors, career advisors, leaders, project coordinators, managers or science communicators. They should perform these tasks to the highest professional standards and have access to the appropriate training. Regarding their role as supervisors or mentors of researchers, senior researchers should build up a constructive and positive relationship with First Stage (R1) and Recognised (R2) researchers, in order to set the conditions for efficient transfer of knowledge and for the further successful development of their careers. Supporting the career development of R1 and R2 researchers in communicating experience and values in a trusted and confidential environment is a high-responsibility role.

## Annex 3: Relevance of Recommendations for Organisations

| Pillar 1 | | |
|---|---|---|
| Researchers, Research Managers, and Research Technicians in the European Research Area Recommendations 1-6 | | |
| # | Topic | Relevance of Recommendations for Organisations |
| 1 | Researchers | Different organisations may adopt a different definition of 'researcher' depending on their own internal or even national regulations and policies. Differing definitions of 'researcher' can limit interoperability and comparability across organisations, sectors, and countries. The semantic meaning of 'researcher' can also differ across languages and translations. This recommendation provides a common definition which can be used across languages, organisations, sectors, and countries. Organisations could adopt this definition of 'researcher' or at least clearly communicate on their own definition of 'researcher'. Researchers could also be made explicitly aware of all of the expected activities as well as formal rights and obligations associated with their role of researcher at their organisations |
| 2 | Intersectoral Mobility | Research is not restricted to the academic sector but takes place in collaboration with and across the public and private sectors. Researchers thus not only work in different sectors but collaborate and move across sectors. While researchers traditionally expect to stay in academia, many need to find employment elsewhere, where there are new opportunities and attractive working conditions for careers in and beyond research. Yet, researchers are often not trained and supported for intersectoral collaboration and mobility. The public and private sectors furthermore do not always recognise the skills/competences of researchers. Organisations could thus encourage and support collaboration and mobility across sectors |
| 3 | Research Managers | The term 'research manager' refers to research management staff who are not necessarily conducting research but who manage and support research and researchers. They have often been researchers themselves and completed a PhD. Relevant research management and support functions may already exist in different forms at RPOs and RFOs, but the term or function of 'research manager' may not be clearly defined or recognised. Organisations could improve the profile of research managers by more clearly defining, recognising, and supporting research managers and research management activities at their organisations |
| 4 | Research Technicians | The term 'research technician' refers to research support staff who are not directly conducting research but who provide technical support for research and researchers. They have often been researchers themselves and completed a PhD. Relevant technical support functions may already exist in different forms at RPOs and RFOs, but the term or function of 'research technician' may not be clearly defined or recognised. Organisations could improve the profile of research technicians by more clearly defining, |

| # | Topic | Relevance of Recommendations for Organisations |
|---|-------|------------------------------------------------|
| | | recognising, and supporting research technicians and technical support activities within their organisations |
| 5 | R1-R4 | Organisations may deploy different classifications/nomenclatures for researchers at their organisations. The R1-R4 profiles provide a common framework for classifying researchers which can be used interoperably across organisations, sectors, and countries. The R1-R4 profiles are not restricted to academic researchers or researchers obtaining or having obtained a PhD but include researchers in the public and private sectors as well as researchers without a PhD but with equivalent levels of competence and experience. The R1-R4 profiles also allow organisations to target job/grant advertisements to a specific R1-R4 profile. Organisations could adopt the R1-R4 profiles or map existing classifications/ nomenclatures onto the profiles and refer to the R1-R4 profiles in relevant communications |
| 6 | R1-R2/ R3-R4 | Organisations adopting the R1-R4 profiles or mapping their existing profiles for researchers onto the R1-R4 profiles could group and differentiate the R1-R2 profiles for early-career researchers and R3-R4 categories for senior researchers. These two researcher groups have different rights and obligations and typically face different challenges in their careers, whereby this grouping allows organisations to tailor their career support to the two groups. While the recommendation notes that the R1-R4 profiles are not necessarily stages in a career path, the profiles clearly suggest that progression is sequential along a career path |

| Pillar 2 Recognition, Interoperability, and Comparability of Researchers' Careers Recommendations 7-10 | | |
|---|---|---|
| **#** | **Topic** | **Relevance of Recommendations for Organisations** |
| 7 | Recognition/ Interoperability | Organisations and researchers are not fully aware of the diversity in research careers in and outside academia. The many functions in research careers are often also not recognised or rewarded equally or commensurate with their required skills/competences and expertise. There are further discrepancies in salaries, working conditions, and social benefits across organisations, sectors, and countries. Existing academic culture at organisations moreover already consists of enshrined norms and views on research careers, whereby structural changes at organisations need to be accompanied by cultural changes. Organisations thus need to raise awareness on the diversity and opportunities in research careers and ensure attractive salaries, working conditions, and social benefits for all of their research staff. Organisations could also improve interoperability and comparability of research careers by adopting, interpreting, and implementing many of the recommendations from the EFfRC |

SECURE
Sustainable Careers for
Researcher Empowerment

**secureproject.eu**

| 8 | Alternative Careers | Career paths in academia are typically linear whereby researchers aim to stay doing research at universities and progress from early-career to senior researchers. This often entails staying long-term at the same university with the goal of attaining a professorship. Vertical, horizontal, and hybrid career paths are typically the norm outside academia. Organisations could raise awareness and better recognise non-linear and hybrid career paths for research staff especially in the recruitment and career development of staff. Such support measures could be aimed at both early-career and senior researchers. Academic organisations could hereby learn from existing good practices in the non-academic sector |
| --- | --- | --- |
| 9 | ESCO Classification | The ESCO classification identifies and categorises skills/competences, occupations, and qualifications which are relevant for the European labour market. The ESCO classification is especially useful for identifying and categorising skills/competences, occupations, and qualifications for the research profession. The ESCO classification further supports the interoperability and comparability of research careers across organisations, sectors, and countries, and can thus help researchers more easily find opportunities for their careers. Organisations could adopt (updates of) the ESCO classification in their classification/tagging of research job/grant advertisements and offer recommendations on future ESCO updates |
| 10 | Human Resources | Human resources offices could (but may not always necessarily) be the most suited to interpret the R1-R4 profiles and map them onto and eventually integrate them into existing research career structures at their organisations. Any such mapping is complicated due to the wide diversity and disparity of research career occupations and associated titles within and across sectors. Many organisations are also intersectorally engaged in local innovation ecosystems, which form natural contact points between organisations and sectors. Human resources officers could engage with each other to discuss adoption of the R1-R4 profiles and mutually learn on best practices and challenges with implementation of the profiles |

| Pillar 3 Recruitment and Working Conditions Recommendations 11-15 | | |
| --- | --- | --- |
| **#** | **Topic** | **Relevance of Recommendations for Organisations** |
| 11 | Recruitment/ Selection | The recruitment and especially selection procedures for job/grant positions are not always open or fully transparent for the candidates applying to the job/grant positions. Alternative career paths such as non-linear, hybrid, and multi-career paths are usually not valued and often penalised in the recruitment and selection of candidates for academic positions. The same applies for career breaks where a candidate has a substantial break in the continuity of their employment or career path. Organisations could be more |

| | | open about their recruitment and selection procedures, especially when posting job/grant vacancies and in advance of the recruitment and selection of candidates. Organisations could also be more transparent to candidates with individual feedback (upon request) on the result of a specific recruitment and selection. Organisations could lastly inform their recruiters and selectors to recognise the added value of alternative career paths and career breaks and thereby be mindful of unconscious bias against alternative career paths and career breaks |
|---|---|---|
| 12 | Working Conditions | Organisations need to offer attractive working conditions to attract and retain research talents. This naturally includes attractive remuneration packages for researchers. Working conditions should be flexible and encourage a healthy work-life balance. There should be equal opportunities for researchers from all backgrounds and support for gender equality. Academic freedom should be protected from local or foreign limitations or interference. Researchers should be adequately supported in fulfilling their administrative duties. Researchers should be offered (the prospect of) permanent contracts whereby a maximum threshold on the number of (consecutive and total) fixed-term contracts at an organisation could be established and monitored to ensure compliance. Researchers should lastly be offered access to all relevant social protection benefits irrespective of their form of employment (including for unemployment, healthcare/sickness, parental leave, invalidity, old age, surviving a spousal/parental death, and work accidents and diseases). These issues should be internally discussed with all research staff and relevant external stakeholders |
| 13 | Rights/ Obligations | Researchers should always be aware of their social protection rights and obligations. They may, however, not fully understand or know where to find relevant information about their rights and obligations, which may be voluntary or mandatory and be accumulated or transferable, especially given their mobility across organisations, sectors, and countries. Organisations could ensure that all of their researchers are regularly provided updated and clear information on their social protection rights and obligations. This could happen at the recruitment stage for new researchers and at regular intervals for all existing researchers. Individual personalised counselling could be provided to researchers upon request and external specialists could thereby be consulted where there is a lack of available expertise |
| 14 | Pensions/ RESAVER | The Retirement Savings Vehicle for European Research Institutions (RESAVER) Pension Fund is a multi-employer occupational pension scheme for defined supplementary contributions which is open to public and private organisations employing researchers across Europe. The scheme is aimed at geographically mobile researchers and enables these researchers to remain affiliated to the same pension fund when moving across employers and countries. The scheme offers a range of benefits for researchers (such as the absence of a vesting period and asset transfer fees) and provides |

| | | researchers with an interactive digital platform 'MyRESAVER' where they can easily access their RESAVER and associated pension fund information. The number of participating organisations in the RESAVER consortium is currently quite low and this number will need to grow in future to be attractive to other organisations and researchers. Organisations could raise awareness on pensions and RESAVER among all of their researchers and join the RESAVER consortium |
|---|---|---|
| 15 | R1-R2 Support | This recommendation focuses on support measures for the R1-R2 profiles for early-career researchers to improve their working conditions, access to social protection benefits, stability of employment, mobility, skills/competences, and team collaboration. These topics are adequately addressed in other recommendations of the EFfRC (such as Recommendations 2, 5, 6, 12, 13, 14, 25, and 26) and will not be further addressed here |

| **Pillar 4** |
|---|
| **Researchers Skilled for Intersectoral and Interdisciplinary Careers and for Entrepreneurship and Innovation** |
| **Recommendations 16-25** |

| # | Topic | Relevance of Recommendations for Organisations |
|---|---|---|
| 16 | Doctoral Training | Doctoral training typically aims to support doctoral candidates in acquiring relevant skills/competences to become independent, creative, flexible, and resilient researchers so they can complete their PhD and continue their careers in or beyond research and academia. These transversal skills are complementary to the research and discipline-specific skills/competences which doctoral candidates also need to acquire for their research. Doctoral training could support the interoperability of research careers by aligning with key European initiatives for research careers including the Principles for Innovative Doctoral Training, European Code of Conduct for Research Integrity, Open Science, ResearchComp, and the ESCO classification as well as the new EFfRC and revised Charter |
| 17 | ResearchComp | ResearchComp offers a framework of transversal skills/competences for researchers coupled with learning outcomes and proficiency levels across 7 areas: cognitive abilities, doing research, managing research, managing research tools, self-management, working with others, and making an impact. Researchers are typically not aware of the transversal skills/competences which they need to acquire or have acquired in their research careers. ResearchComp could help researchers to assess and develop their skills/competences and help organisations to tailor their training and career development support to researchers. Organisations could adopt and integrate ResearchComp into relevant policies and practices for researchers. Organisations could also share good practices on ResearchComp and provide recommendations for future revisions of the |

| | | skills/competences in the framework |
|---|---|---|
| 18 | Transversal Skills | This recommendation aims at strengthening transversal skills/competences for researchers. This topic is adequately addressed in other recommendations of the EFfRC (such as Recommendations 2, 16, 17, 19, 20, 21, and 29) and will not be further addressed here |
| 19 | Intersectoral Skills | This recommendation focuses on encouraging intersectoral collaboration and mobility as well as doctoral training and the development of intersectoral skills/competences. These topics are adequately addressed in other recommendations of the EFfRC (such as Recommendations 2, 16, 17, 18, 20, 21, and 29) and will not be further addressed here |
| 20 | Entrepreneurship | Entrepreneurs play an important role in developing new research and innovation products and services for the European market. Researchers could be more encouraged and better supported at their organisations to develop an entrepreneurial mindset and create new start-ups and spin-offs. This is especially true for minority, marginalised, and female researchers who may need extra encouragement and support for entrepreneurship. Organisations could raise awareness about entrepreneurship among their researchers with an inclusive and gender equal approach. Organisations could also offer skills/competence training for entrepreneurship and support for the creation of new start-ups and spin-offs. This should include skills/competences for business and intellectual property management |
| 21 | Lifelong Learning | This recommendation aims to provide continuous skills/competence training to researchers with a life-long perspective and focus on intersectoral and interdisciplinary mobility. These topics are adequately addressed in other recommendations of the EFfRC (such as Recommendations 2, 17, 18, 19, 25, and 29) and will not be further addressed here |
| 22 | Intersectoral Initiatives | This recommendation focuses on developing initiatives to support mutual learning (with a focus on skills/competences, entrepreneurship, and academic-non-academic collaboration), reinforce and complement existing schemes, and raise awareness of schemes for intersectoral collaboration and mobility of researchers (linking to the ERA Talent Platform). These topics are adequately addressed in other recommendations of the EFfRC (such as Recommendations 2, 17, 20, 21, 23, and 24) and will not be further addressed here |
| 23 | Intersectoral Schemes | This recommendation focuses on developing national schemes to promote and support the intersectoral collaboration and mobility of researchers (with a focus on skills/competences, entrepreneurship, and collaboration between the academic and non-academic sectors). These topics are adequately addressed in other recommendations of the EFfRC (such as Recommendations 2, 17, 20, 21, 22, and 24) and will not be further addressed here |
| 24 | Intersectoral Barriers | There are many cultural, structural, and administrative barriers to intersectoral mobility and collaboration at organisations which should be identified and taken into account when promoting and supporting the |

| | | intersectoral collaboration and mobility of researchers. These topics are adequately addressed in other recommendations of the EFfRC (such as Recommendations 2, 11, 18, 19, 22, 23, and 26) and will not be further addressed here |
|---|---|---|
| 25 | Interdisciplinary Mobility | Collaboration between different research disciplines is becoming more important to address complex societal challenges. Multidisciplinarity aims to address a research problem through the juxtaposition of perspectives from different research disciplines. Interdisciplinarity aims to address a research problem though the combination of perspectives from different research disciplines into an integrated perspective. Transdisciplinarity aims to address a research problem through the combination of perspectives from different research disciplines into an integrated perspective along with the engagement of research stakeholders from the public and private sectors. Organisations could better encourage, train, support, and recognise interdisciplinary collaboration and mobility of researchers |

| Pillar 5<br>Career Assessment, Development, and Progression<br>Recommendations 26-30 | | |
|---|---|---|
| **#** | **Topic** | **Relevance of Recommendations for Organisations** |
| 26 | Recognition Mobility | One main way to encourage researchers to engage in international, intersectoral, interdisciplinary, and virtual collaboration and mobility is to acknowledge these activities in assessment. Organisations could thus recognise and reward international, intersectoral, interdisciplinary, and virtual collaboration and mobility in their assessment of researchers |
| 27 | Research Assessment | There has been a growing movement towards the reform of research assessment which moves beyond the entrenched publish-or-perish mentality and focus on peer-reviewed publications in high impact factor journals and related publication metrics. New research assessment systems could take a peer-reviewed qualitative approach supported by the responsible use of quantitative indicators. New systems could also recognise the diversity of research and non-research roles, activities, and outputs of researchers. This could include the recognition of research managers and research technicians. New systems could lastly recognise activities especially contributing to research integrity, inclusivity and gender equality, Open Science, and societal impact. Research assessors will hereby need to be informed about the added value of reformed research assessment criteria. The reforms in research assessment proposed in this recommendation are currently being developed into new research assessment systems in the OPUS project and GraspOS project |
| 28 | Assessment Initiatives | There have been many calls and initiatives to reform research assessment over the last decade including the San Francisco Declaration on Research |

| # | Topic | Relevance of Recommendations for Organisations |
|---|-------|------------------------------------------------|
| | | Assessment (DORA), Leiden Manifesto for Research Metrics, and Hong Kong Principles. The newly established Coalition for Advancing Research Assessment (CoARA) is implementing an Agreement on Reforming Research Assessment which includes 4 core and 6 supporting commitments for organisations to reform their research assessment systems. Organisations could sign the agreement and join CoARA to align the reform of research assessment as well as share and mutually learn on best practices and challenges for research assessment |
| 29 | Career Support | Providing adequate career support and professional development to researchers is critical to help them develop the skills/competences which they will need in their research and future jobs/grants in and outside academia. This should not only include support for the development of disciplinary and transversal skills/competences but also research career advice and orientation for the labour market as well as professional mentoring by experts. Organisations could improve their research career support and mentoring for researchers |
| 30 | Tenure Track | TTLMs are a critical means for organisations to ensure that talented researchers are attracted to and retained at organisations and have a clear and agreed career path within the organisations. The TTLMs could in principle start and end at different career stages and focus on early-career or senior researchers. It should always be the case that a researcher on a TTLM progresses to the agreed end position of the TTLM with a positive evaluation. A TTLM should adhere to recognised principles (such as the principles for TTLMs in SECURE) and ensure fair, equal, inclusive, and transparent career progression for TTLM researchers. The flexibility to define TTLMs may be restricted due to national or local regulations. TTLMs should be defined in discussion and collaboration with researchers at the organisations |

| Pillar 6<br>**Balanced Circulation of Talents and Making the Union an Attractive Destination**<br>**Recommendations 31-32** | | |
|---|---|---|
| **#** | **Topic** | **Relevance of Recommendations for Organisations** |
| 31 | Competitive Union | This recommendation aims to make Europe an attractive and competitive destination to attract, circulate, and retain researchers. The measures proposed fall primarily under the responsibility of the countries and European Commission and include more investments in research, simplification of legal and administrative requirements, funding and positions for researchers returning to their home countries, dual country positions, exchange of best practices on attractive and competitive conditions for researchers, and a common approach for staff of European research infrastructures. This recommendation is not directly relevant for |

**secureproject.eu**

| | | RPOs and RFOs and will thus not be further translated into actions for RPOs and RFOs. The topic of balanced circulation of researchers is also addressed in Recommendation 32 |
|---|---|---|
| 32 | Balanced Circulation | This recommendation aims to promote and support a more balanced circulation of research talents to, in, and from Europe. The measures proposed fall primarily under the responsibility of the countries and European Commission and include strengthening the existing human capital base with skilled researchers and innovators, supporting transnational ties with the researcher diaspora, supporting the return of researchers to their home countries (especially through the ERA Talent Platform), monitoring the mobility and circulation of researchers, and mutual learning on balanced talent circulation. This recommendation is not directly relevant for RPOs and RFOs and will thus not be further translated into actions for RPOs and RFOs. The ERA Talent Platform is also addressed in Recommendation 33 and the monitoring of talent circulation in Recommendation 40 |

| Pillar 7<br>Support Actions for Research Careers<br>Recommendations 33-39 | | |
|---|---|---|
| **#** | **Topic** | **Relevance of Recommendations for Organisations** |
| 33 | Talent Platforms | The aim of the existing EURAXESS portal and future ERA Talent Platform is to boost the careers of researchers in Europe by providing relevant information and services to researchers on skills/competences, talent and career development, funding opportunities, and mobility as well as connecting researchers, entrepreneurs, universities, and businesses. Organisations could support the wider uptake of these initiatives by promoting the existing EURAXESS portal and future ERA Talent Platform among their researchers. Organisations could also more widely disseminate their job/grant opportunities through the platforms |
| 34 | Talent Initiatives | This recommendation aims to improve the links and interoperability between the new ERA Talent Platform and other European initiatives which are relevant for research careers including the ESCO classification, European Employment Services (EURES), and Europass. The recommendation also proposes to improve the governance of the ERA Talent Platform and strengthen the network of EURAXESS service centres. The proposed measures fall primarily under the responsibility of the European Commission. This recommendation is not directly relevant for RPOs and RFOs and will thus not be further translated into actions for RPOs and RFOs. The ESCO classification is also addressed in Recommendation 9, ERA Talent Platform in Recommendation 33, and support tools in Recommendation 38 |
| 35 | Charter Importance | This recommendation aims to recognise the importance of endorsing and implementing the newly revised Charter at organisations in Europe. The |

| # | Topic | Relevance of Recommendations for Organisations |
|---|-------|------------------------------------------------|
|  |  | proposed measures fall primarily under the responsibility of the countries and European Commission. This recommendation is not directly relevant for RPOs and RFOs and will thus not be further translated into actions for RPOs and RFOs. The Charter is also addressed in Recommendations 36 and 37 |
| 36 | Charter Encouragement | The Charter offers a set of principles to define the relationship between researchers and employers/funders as well defining their roles, responsibilities, and entitlements. The newly revised Charter replaces the existing C&C and should thus be adopted by both new organisations and those organisations which are already endorsing and implementing the C&C. Organisations should raise awareness on the revised Charter among their researchers |
| 37 | HRS4R/ Charter | The current HRS4R award is directly linked to the implementation of the existing C&C and will need to align with the revised Charter whereby a transition period is now in effect. New organisations could apply for the HRS4R award and organisations currently applying for or already granted the HRS4R award could prepare for alignment with the revised Charter |
| 38 | Support Tools | This recommendation aims to regularly review and adapt all relevant national and European tools supporting research careers based on the actual needs of researchers. The proposed measures fall primarily under the responsibility of the countries and European Commission. This recommendation is not directly relevant for RPOs and RFOs and will thus not be further translated into actions for RPOs and RFOs. The countries and European Commission should consult researchers for their feedback on the tools for research careers. Research career support tools are also addressed in Recommendations 33 and 34 |
| 39 | Pilot Actions | This recommendation aims to encourage and support piloting of the recommendations in the EFfRC. The proposed measures fall primarily under the responsibility of the countries and European Commission while the actual piloting is targeted at organisations in Europe. This first draft of the RCF interprets how each recommendation in the EFfRC is relevant and could be translated into implementation actions for RPOs and RFOs. This recommendation will not be translated further into actions for RPOs and RFOs as it could be enacted by selecting and implementing the actions for RPOs and RFOs in this first draft of the RCF |

| **Pillar 8** <br> **Monitoring of Research Careers** <br> **Recommendations 40-44** | | |
|---|---|---|
| **#** | **Topic** | **Relevance of Recommendations for Organisations** |
| 40 | ReICO | This recommendation aims to develop a monitoring mechanism for research careers and the implementation of the EFfRC across Europe. This Research and Innovation Careers Observatory (ReICO) will be developed and |

**S∫ECURE**
Sustainable Careers for
Researcher Empowerment

**secureproject.eu**

| | | |
|---|---|---|
| | | maintained from 2024 for six years by the Organisation for Economic Cooperation and Development (OECD) with support from the European Commission. ReICO will collect and analyse data on research careers in Europe including talent development and deployment, supply and demand, dynamics and pathways, and national policies. The proposed measures fall primarily under the responsibility of the countries, OECD, and European Commission. This recommendation is not (yet) directly relevant for RPOs and RFOs and will thus not be further translated into actions for RPOs and RFOs. ReICO is also addressed in Recommendations 41, 42, 43, and 44 |
| 41 | ReICO Data | This recommendation aims to identify the data sources and data to be collected by ReICO whereby existing data sources and data should be prioritised. The data sources and data will be identified in the initial stages of ReICO. The proposed measures fall primarily under the responsibility of the countries, OECD, and European Commission. This recommendation is not (yet) directly relevant for RPOs and RFOs and will thus not be further translated into actions for RPOs and RFOs. ReICO is also addressed in Recommendations 40, 42, 43, and 44 |
| 42 | ReICO Results | This recommendation aims to develop further support actions for research careers based on the data collected by ReICO. The proposed measures fall primarily under the responsibility of the countries, OECD, and European Commission. This recommendation is not (yet) directly relevant for RPOs and RFOs and will thus not be further translated into actions for RPOs and RFOs. ReICO is also addressed in Recommendations 40, 41, 43, and 44 |
| 43 | ReICO/ EHESO | This recommendation aims to link ReICO with the European Higher Education Sector Observatory (EHESO) and thereby enhance synergies between the European Research Area (ERA) and European Education Area (EEA). The observatory will collect and analyse data on the progress made to implement the European strategy for universities across Europe including data on inclusion, learning outcomes, skills/competences, student and labour market needs, employability, transnational cooperation, technology transfer, and innovation ecosystems. The proposed measures fall primarily under the responsibility of the countries, OECD, and European Commission. This recommendation is not (yet) directly relevant for RPOs and RFOs and will thus not be further translated into actions for RPOs and RFOs. ReICO is also addressed in Recommendations 40, 41, 42, and 44 |
| 44 | ReICO/ Regulations | This recommendation aims to align the data collection by ReICO with a European Parliament and European Council regulation on data collection related to persons and households for European statistics. The proposed measures fall primarily under the responsibility of the countries, OECD, and European Commission. This recommendation is not (yet) directly relevant for RPOs and RFOs and will thus not be further translated into actions for RPOs and RFOs. ReICO is also addressed in Recommendations 40, 41, 42, and 43 |

## Annex 4: Charter Principles Relevant for Recommendations

| | Pillar 1 | |
|---|---|---|
| | **Researchers, Research Managers, and Research Technicians in the European Research Area** | |
| | **Recommendations 1-6** | |
| **#** | **Topic** | **Charter Principles Relevant for Recommendations** |
| 1 | Researchers | - Pillar 1 > Principle 6 > The Researcher <br> - Pillar 4 > Principle 1 > Valuing Diverse Research Careers |
| 2 | Intersectoral Mobility | - Pillar 1 > Principle 6 > The Researcher <br> - Pillar 1 > Principle 7 > Free Circulation of Researchers <br> - Pillar 2 > Principle 1 > Researchers' Assessment <br> - Pillar 4 > Principle 1 > Valuing Diverse Research Careers <br> - Pillar 4 > Principle 2 > Career Development and Advice |
| 3 | Research Managers | - Pillar 1 > Principle 6 > The Researcher <br> - Pillar 2 > Principle 1 > Researchers' Assessment <br> - Pillar 4 > Principle 1 > Valuing Diverse Research Careers <br> - Pillar 4 > Principle 2 > Career Development and Advice |
| 4 | Research Technicians | - Pillar 1 > Principle 6 > The Researcher <br> - Pillar 2 > Principle 1 > Researchers' Assessment <br> - Pillar 4 > Principle 1 > Valuing Diverse Research Careers <br> - Pillar 4 > Principle 2 > Career Development and Advice |
| 5 | R1-R4 | - Pillar 1 > Principle 6 > The Researcher <br> - Pillar 2 > Principle 4 > Career Progression <br> - Pillar 3 > Principle 2 > Stability of Employment |
| 6 | R1-R2/ R3-R4 | - Pillar 1 > Principle 6 > The Researcher <br> - Pillar 2 > Principle 4 > Career Progression <br> - Pillar 3 > Principle 2 > Stability of Employment <br> - Pillar 4 > Principle 2 > Career Development and Advice |

| | Pillar 2 | |
|---|---|---|
| | **Recognition, Interoperability, and Comparability of Researchers' Careers** | |
| | **Recommendations 7-10** | |
| **#** | **Topic** | **Charter Principles Relevant for Recommendations** |
| 7 | Recognition/ Interoperability | - Pillar 1 > Principle 6 > The Researcher <br> - Pillar 3 > Principle 1 > Working Conditions, Funding, and Salaries <br> - Pillar 3 > Principle 2 > Stability of Employment <br> - Pillar 4 > Principle 1 > Valuing Diverse Research Careers |
| 8 | Alternative Careers | - Pillar 1 > Principle 6 > The Researcher <br> - Pillar 2 > Principle 2 > Recruitment <br> - Pillar 2 > Principle 3 > Selection <br> - Pillar 4 > Principle 1 > Valuing Diverse Research Careers |

**SECURE**
Sustainable Careers for
Researcher Empowerment

**secureproject.eu**

| # | Topic | Charter Principles Relevant for Recommendations |
|---|---|---|
| | | - Pillar 4 > Principle 2 > Career Development |
| 9 | ESCO Classification | - Pillar 1 > Principle 6 > The Researcher<br>- Pillar 2 > Principle 2 > Recruitment<br>- Pillar 4 > Principle 3 > Continuous Professional Development |
| 10 | Human Resources | - Pillar 1 > Principle 6 > The Researcher<br>- Pillar 2 > Principle 4 > Career Progression<br>- Pillar 3 > Principle 2 > Stability of Employment |

| Pillar 3<br>Recruitment and Working Conditions<br>Recommendations 11-15 | | |
|---|---|---|
| **#** | **Topic** | **Charter Principles Relevant for Recommendations** |
| 11 | Recruitment/ Selection | - Pillar 2 > Principle 2 > Recruitment<br>- Pillar 2 > Principle 3 > Selection<br>- Pillar 4 > Principle 1 > Valuing Diverse Research Careers |
| 12 | Working Conditions | - Pillar 1 > Principle 2 > Freedom of Scientific Research<br>- Pillar 1 > Principle 4 > Gender Equality<br>- Pillar 1 > Principle 5 > Embracing Diversity<br>- Pillar 2 > Principle 4 > Career Progression<br>- Pillar 3 > Principle 1 > Working Conditions, Funding, and Salaries<br>- Pillar 3 > Principle 2 > Stability of Employment<br>- Pillar 3 > Principle 3 > Contractual and Legal Obligations |
| 13 | Rights/ Obligations | - Pillar 3 > Principle 1 > Working Conditions, Funding, and Salaries<br>- Pillar 3 > Principle 3 > Contractual and Legal Obligations |
| 14 | Pensions/ RESAVER | - Pillar 1 > Principle 7 > Free Circulation of Researchers<br>- Pillar 3 > Principle 1 > Working Conditions, Funding, and Salaries<br>- Pillar 3 > Principle 3 > Contractual and Legal Obligations |
| 15 | R1-R2 Support | This recommendation adequately addressed in other recommendations |

| Pillar 4<br>Researchers Skilled for Intersectoral and Interdisciplinary Careers and for Entrepreneurship and Innovation<br>Recommendations 16-25 | | |
|---|---|---|
| **#** | **Topic** | **Charter Principles Relevant for Recommendations** |
| 16 | Doctoral Training | - Pillar 1 > Principle 1 > Ethics and Research Integrity<br>- Pillar 1 > Principle 3 > Open Science<br>- Pillar 4 > Principle 3 > Continuous Professional Development<br>- Pillar 4 > Principle 4 > Supervision and Mentoring |
| 17 | ResearchComp | - Pillar 4 > Principle 2 > Career Development and Advice |

SECURE
Sustainable Careers for
Researcher Empowerment

secureproject.eu

| # | Topic | Charter Principles Relevant for Recommendations |
|---|---|---|
| | | - Pillar 4 > Principle 3 > Continuous Professional Development |
| | | - Pillar 4 > Principle 4 > Supervision and Mentoring |
| 18 | Transversal Skills | This recommendation is adequately addressed in other recommendations |
| 19 | Intersectoral Skills | This recommendation is adequately addressed in other recommendations |
| 20 | Entrepreneurship | - Pillar 1 > Principle 4 > Gender Equality <br> - Pillar 1 > Principle 5 > Embracing Diversity <br> - Pillar 4 > Principle 1 > Valuing Diverse Research Careers <br> - Pillar 4 > Principle 2 > Career Development and Advice <br> - Pillar 4 > Principle 3 > Continuous Professional Development <br> - Pillar 4 > Principle 4 > Supervision and Mentoring |
| 21 | Lifelong Learning | This recommendation is adequately addressed in other recommendations |
| 22 | Intersectoral Initiatives | This recommendation is adequately addressed in other recommendations |
| 23 | Intersectoral Schemes | This recommendation is adequately addressed in other recommendations |
| 24 | Intersectoral Barriers | This recommendation is adequately addressed in other recommendations |
| 25 | Interdisciplinary Mobility | - Pillar 1 > Principle 7 > Free Circulation of Researchers <br> - Pillar 4 > Principle 1 > Valuing Diverse Research Careers <br> - Pillar 4 > Principle 2 > Career Development and Advice |

| Pillar 5 <br> Career Assessment, Development, and Progression <br> Recommendations 26-30 | | |
|---|---|---|
| **#** | **Topic** | **Charter Principles Relevant for Recommendations** |
| 26 | Recognition Mobility | - Pillar 1 > Principle 7 > Free Circulation of Researchers <br> - Pillar 2 > Principle 2 > Researchers' Assessment <br> - Pillar 2 > Principle 4 > Career Progression <br> - Pillar 4 > Principle 1 > Valuing Diverse Research Careers |
| 27 | Research Assessment | - Pillar 1 > Principle 1 > Ethics and Research Integrity <br> - Pillar 1 > Principle 3 > Open Science <br> - Pillar 1 > Principle 4 > Gender Equality <br> - Pillar 1 > Principle 5 > Embracing Diversity <br> - Pillar 2 > Principle 1 > Researchers' Assessment <br> - Pillar 2 > Principle 4 > Career Progression <br> - Pillar 4 > Principle 1 > Valuing Diverse Research Careers |
| 28 | Assessment Initiatives | - Pillar 2 > Principle 1 > Researchers' Assessment <br> - Pillar 2 > Principle 4 > Career Progression <br> - Pillar 4 > Principle 1 > Valuing Diverse Research Careers |

| 29 | Career Support | - Pillar 1 > Principle 8 > Sustainability of Research<br>- Pillar 2 > Principle 4 > Career Progression<br>- Pillar 4 > Principle 1 > Valuing Diverse Research Careers<br>- Pillar 4 > Principle 2 > Career Development and Advice<br>- Pillar 4 > Principle 3 > Continuous Professional Development<br>- Pillar 4 > Principle 4 > Supervision and Mentoring |
|---|---|---|
| 30 | Tenure Track | - Pillar 1 > Principle 8 > Sustainability of Research<br>- Pillar 2 > Principle 4 > Career Progression<br>- Pillar 3 > Principle 1 > Working Conditions, Funding, and Salaries<br>- Pillar 3 > Principle 2 > Stability of Employment<br>- Pillar 3 > Principle 3 > Contractual and Legal Obligations<br>- Pillar 4 > Principle 1 > Valuing Diverse Research Careers |

| **Pillar 6**<br>**Balanced Circulation of Talents and Making the Union an Attractive Destination**<br>**Recommendations 31-32** | | |
|---|---|---|
| **#** | **Topic** | **Charter Principles Relevant for Recommendations** |
| 31 | Competitive Union | This recommendation is not directly relevant for RPOs and RFOs |
| 32 | Balanced Circulation | This recommendation is not directly relevant for RPOs and RFOs |

| **Pillar 7**<br>**Support Actions for Research Careers**<br>**Recommendations 33-39** | | |
|---|---|---|
| **#** | **Topic** | **Charter Principles Relevant for Recommendations** |
| 33 | Talent Platforms | - Pillar 1 > Principle 7 > Free Circulation of Researchers<br>- Pillar 4 > Principle 1 > Valuing Diverse Research Careers<br>- Pillar 4 > Principle 2 > Career Development and Advice<br>- Pillar 4 > Principle 3 > Continuous Professional Development |
| 34 | Talent Initiatives | This recommendation is not directly relevant for RPOs and RFOs |
| 35 | Charter Importance | This recommendation is not directly relevant for RPOs and RFOs |
| 36 | Charter Encouragement | This recommendation is about the Charter |
| 37 | HRS4R/ Charter | This recommendation is about the HRS4R award and thus directly related to the Charter |
| 38 | Support Tools | This recommendation is not directly relevant for RPOs and RFOs |

| 39 | Pilot Actions | This recommendation is about piloting the recommendations in the EFfRC |
|----|---------------|------------------------------------------------------------------------|

| Pillar 8<br>Monitoring of Research Careers<br>Recommendations 40-44 | | |
|---|---|---|
| **#** | **Topic** | **Charter Principles Relevant for Recommendations** |
| 40 | ReICO | This recommendation is not directly relevant for RPOs and RFOs |
| 41 | ReICO Data | This recommendation is not directly relevant for RPOs and RFOs |
| 42 | ReICO Results | This recommendation is not directly relevant for RPOs and RFOs |
| 43 | ReICO/ EHESO | This recommendation is not directly relevant for RPOs and RFOs |
| 44 | ReICO/ Regulations | This recommendation is not directly relevant for RPOs and RFOs |

## Annex 5: Relevance of ResearchComp and ESCO for Recommendations

| Pillar 1 | | |
|---|---|---|
| **Researchers, Research Managers, and Research Technicians in the European Research Area** | | |
| **Recommendations 1-6** | | |
| **#** | **Topic** | **Relevance of ResearchComp and ESCO for Recommendations** |
| 1 | Researchers | - The adoption and promotion of ResearchComp at an organisation could be accompanied by a clear definition of 'researcher' so that it is clear for whom ResearchComp is applicable<br>- Organisations could align the classification/tagging of researcher job/grant advertisements with relevant ESCO classifications for occupations, skills/competences, and qualifications |
| 2 | Intersectoral Mobility | - The adoption of ResearchComp at an organisation could include the recognition and development of relevant skills/competences for intersectoral collaboration and mobility<br>- Organisations could align the classification/tagging of researcher job/grant advertisements with relevant ESCO classifications for intersectoral collaboration and mobility |
| 3 | Research Managers | - The adoption of ResearchComp at an organisation could include the recognition and development of relevant skills/competences for research managers and management<br>- Organisations could align the classification/tagging of research manager job/grant advertisements with relevant ESCO classifications for research managers and management |
| 4 | Research Technicians | - The adoption of ResearchComp at an organisation could include the recognition and development of relevant skills/competences for research technicians and technical support<br>- Organisations could align the classification/tagging of research technician job/grant advertisements with ESCO classifications for research technicians and technical support |
| 5 | R1-R4 | - The adoption of ResearchComp at an organisation could include mapping relevant skills/competences and learning outcomes/proficiency levels to the R1-R4 profiles<br>- Organisations could align the classification/tagging of researcher job/grant advertisements to the R1-R4 profiles along with relevant ESCO classifications for the profiles |
| 6 | R1-R2/<br>R3-R4 | - The adoption of ResearchComp at an organisation could include grouping relevant skills/competences and learning outcomes/proficiency levels into R1-R2 and R3-R4 profiles<br>- Organisations could align the classification/tagging of researcher job/grant advertisements to R1-R2 and R3-R4 profiles along with relevant ESCO classifications for the profiles |

SECURE
Sustainable Careers for
Researcher Empowerment

secureproject.eu

| Pillar 2<br>Recognition, Interoperability, and Comparability of Researchers' Careers<br>Recommendations 7-10 | | |
|---|---|---|
| # | Topic | Relevance of ResearchComp and ESCO for Recommendations |
| 7 | Recognition/ Interoperability | - The adoption of ResearchComp at an organisation could include aligning with relevant skills/competences and learning outcomes/proficiency levels in their research jobs/grants<br>- Organisations could align the classification/tagging of research job/grant advertisements with relevant ESCO classifications for occupations, skills/competences, and qualifications |
| 8 | Alternative Careers | - The adoption of ResearchComp at an organisation could include the recognition and development of relevant skills/competences for non-linear and hybrid research careers<br>- Organisations could align the classification/tagging of research job/grant advertisements with relevant ESCO classifications for non-linear and hybrid research careers |
| 9 | ESCO Classification | - The skills/competences in ResearchComp are directly aligned with the ESCO classification<br>- This recommendation is about the ESCO classification and is thus directly related to ESCO |
| 10 | Human Resources | - The adoption of ResearchComp at an organisation could help human resources offices to define and support skills/competences relevant for research careers across R1-R4 profiles<br>- Organisations could support human resources offices to implement the ESCO classification and R1-R4 profiles in the classification/tagging of their research job/grant advertisements |

| Pillar 3<br>Recruitment and Working Conditions<br>Recommendations 11-15 | | |
|---|---|---|
| # | Topic | Relevance of ResearchComp and ESCO for Recommendations |
| 11 | Recruitment/ Selection | - This recommendation is not directly or meaningfully relevant for ResearchComp<br>- This recommendation is not directly or meaningfully relevant for the ESCO classification |
| 12 | Working Conditions | - This recommendation is not directly or meaningfully relevant for ResearchComp<br>- This recommendation is not directly or meaningfully relevant for the ESCO classification |
| 13 | Rights/ Obligations | - This recommendation is not directly or meaningfully relevant for ResearchComp<br>- This recommendation is not directly or meaningfully relevant for the ESCO |

secureproject.eu

| | | classification |
|---|---|---|
| 14 | Pensions/ RESAVER | - This recommendation is not directly or meaningfully relevant for ResearchComp<br>- This recommendation is not directly or meaningfully relevant for the ESCO classification |
| 15 | R1-R2 Support | This recommendation is adequately addressed in other recommendations |

| Pillar 4<br>Researchers Skilled for Intersectoral and Interdisciplinary Careers and for Entrepreneurship and Innovation<br>Recommendations 16-25 | | |
|---|---|---|
| **#** | **Topic** | **Relevance of ResearchComp and ESCO for Recommendations** |
| 16 | Doctoral Training | - ResearchComp consists of skills/competences and learning outcomes/proficiency levels which are directly linked to research integrity and Open Science<br>- The ESCO classification is directly linked to the skills/competences listed in ResearchComp and thus includes relevant classifications for research integrity and Open Science |
| 17 | ResearchComp | - This recommendation is on ResearchComp and is thus directly related to ResearchComp<br>- The skills/competences in ResearchComp are directly aligned with the ESCO classification |
| 18 | Transversal Skills | This recommendation is adequately addressed in other recommendations |
| 19 | Intersectoral Skills | This recommendation is adequately addressed in other recommendations |
| 20 | Entrepreneurship | - ResearchComp consists of skills/competences and learning outcomes/proficiency levels which are directly linked to developing an entrepreneurial mindset<br>- The ESCO classification is directly linked to the skills/competences listed in ResearchComp and thus includes relevant classifications for developing an entrepreneurial mindset |
| 21 | Lifelong Learning | This recommendation is adequately addressed in other recommendations |
| 22 | Intersectoral Initiatives | This recommendation is adequately addressed in other recommendations |
| 23 | Intersectoral Schemes | This recommendation is adequately addressed in other recommendations |
| 24 | Intersectoral Barriers | This recommendation is adequately addressed in other recommendations |

| 25 | Interdisciplinary Mobility | - ResearchComp consists skills/competences and learning outcomes/proficiency levels which are directly linked to interdisciplinary collaboration and mobility<br>- The ESCO classification is directly linked to the skills/competences listed in ResearchComp and thus includes relevant classifications for interdisciplinary collaboration and mobility |

| Pillar 5<br>Career Assessment, Development, and Progression<br>Recommendations 26-30 | | |
|---|---|---|
| **#** | **Topic** | **Relevance of ResearchComp and ESCO for Recommendations** |
| 26 | Recognition Mobility | - This recommendation is not directly or meaningfully relevant for ResearchComp<br>- This recommendation is not directly or meaningfully relevant for the ESCO classification |
| 27 | Research Assessment | - The adoption of ResearchComp at an organisation could support the informing of research assessors about the added value of relevant reformed research assessment criteria<br>- This recommendation is not directly or meaningfully relevant for the ESCO classification |
| 28 | Assessment Initiatives | - This recommendation is not directly or meaningfully relevant for ResearchComp<br>- This recommendation is not directly or meaningfully relevant for the ESCO classification |
| 29 | Career Support | - The adoption of ResearchComp at an organisation could be utilised for the career support and professional development of relevant skills/competences for researchers<br>- This recommendation is not directly or meaningfully relevant for the ESCO classification |
| 30 | Tenure Track | - This recommendation is not directly or meaningfully relevant for ResearchComp<br>- This recommendation is not directly or meaningfully relevant for the ESCO classification |

| Pillar 6<br>Balanced Circulation of Talents and Making the Union an Attractive Destination<br>Recommendations 31-32 | | |
|---|---|---|
| **#** | **Topic** | **Relevance of ResearchComp and ESCO for Recommendations** |
| 31 | Competitive Union | This recommendation is not directly relevant for RPOs and RFOs |

| 32 | Balanced Circulation | This recommendation is not directly relevant for RPOs and RFOs |
|---|---|---|

| **Pillar 7**<br>**Support Actions for Research Careers**<br>**Recommendations 33-39** | | |
|---|---|---|
| **#** | **Topic** | **Relevance of ResearchComp and ESCO for Recommendations** |
| 33 | Talent Platforms | - ResearchComp could be promoted on the EURAXESS portal and ERA Talent Platform<br>- ESCO could be promoted on the EURAXESS portal and ERA Talent Platform |
| 34 | Talent Initiatives | This recommendation is not directly relevant for RPOs and RFOs |
| 35 | Charter Importance | This recommendation is not directly relevant for RPOs and RFOs |
| 36 | Charter Encouragement | - The implementation of the Charter could include ResearchComp<br>- The implementation of the Charter could include ESCO |
| 37 | HRS4R/ Charter | - The implementation of the Charter for the HRS4R award could include ResearchComp<br>- The implementation of the Charter for the HRS4R award could include ESCO |
| 38 | Support Tools | This recommendation is not directly relevant for RPOs and RFOs |
| 39 | Pilot Actions | This recommendation is about piloting the recommendations in the EFfRC |

| **Pillar 8**<br>**Monitoring of Research Careers**<br>**Recommendations 40-44** | | |
|---|---|---|
| **#** | **Topic** | **Relevance of ResearchComp and ESCO for Recommendations** |
| 40 | ReICO | This recommendation is not directly relevant for RPOs and RFOs |
| 41 | ReICO Data | This recommendation is not directly relevant for RPOs and RFOs |
| 42 | ReICO Results | This recommendation is not directly relevant for RPOs and RFOs |
| 43 | ReICO/ EHESO | This recommendation is not directly relevant for RPOs and RFOs |
| 44 | ReICO/ Regulations | This recommendation is not directly relevant for RPOs and RFOs |

SECURE
Sustainable Careers for
Researcher Empowerment

**secureproject.eu**

# Annex 6: Relevance of Recommendations for Research Career Precarity

<table>
<tr><td colspan="3"><strong>Pillar 1</strong><br><strong>Researchers, Research Managers, and Research Technicians in the European Research Area</strong><br><strong>Recommendations 1-6</strong></td></tr>
<tr><td><strong>#</strong></td><td><strong>Topic</strong></td><td><strong>Relevance of Recommendations for Research Career Precarity</strong></td></tr>
<tr><td>1</td><td>Researchers</td><td>The definition of 'researcher' proposed in this recommendation and its adoption or refinement at an organisation could help the organisation define the scope of precarity. Any organisation aiming to reduce precarity in research careers needs to define who is at risk and who is the target of efforts to reduce precarity. Including a clear definition of 'researcher' along with the associated rights and obligations of the role of the researcher in grant/job advertisements could help researchers manage their expectations in their careers</td></tr>
<tr><td>2</td><td>Intersectoral Mobility</td><td>This recommendation helps organisations to recognise that researchers collaborate across sectors and may temporarily or permanently transition to another career in or outside the academic sector. Organisations could better encourage and support their researchers to collaborate across sectors and be intersectorally mobile so that they have intersectoral experience should they want or need to transition to another career. This could increase their awareness, willingness, and opportunities of finding a new career and reduce the pressure and thus precarity of finding employment as a researcher in the academic sector</td></tr>
<tr><td>3</td><td>Research Managers</td><td>The inclusion of research manager as an alternative career path in the research profession gives recognition to the term and function of 'research manager' at organisations. This could help develop research manager as an independent profession and highlight diverse career paths in research. As many researchers may not be able or want to continue a career as a researcher, becoming a research manager gives them more options to exploit their skills/competences and transition to another research career in or outside academia. This also helps organisations and researchers to be aware of and prepare for such a transition</td></tr>
<tr><td>4</td><td>Research Technicians</td><td>The inclusion of research technician as an alternative career path in the research profession gives recognition to the term and function of 'research technician' at organisations. This could help develop research technician as an independent profession and highlight diverse career paths in research. As many researchers may not be able or want to continue a career as a researcher, becoming a research technician gives them more options to exploit their skills/competences and transition to another research career in or outside academia. This also helps organisations and researchers be aware of and prepare for such a transition</td></tr>
<tr><td>5</td><td>R1-R4</td><td>The adoption of the R1-R4 profiles could make it easier for researchers to identify a wider variety of researcher job/grant opportunities matched to</td></tr>
</table>

**SECURE**
Sustainable Careers for
Researcher Empowerment

secureproject.eu

|   |   | their skills/competences and qualifications across organisations, sectors, and countries. The R1-R4 profiles also help organisations define the scope of precarity as early-career researchers are typically in more precarious situations and face different issues than senior researchers. Doctoral candidates are, for example, in some cases students and do not receive professional working conditions or adequate social benefits as they would if they were professionals. Organisations could thus focus on specific R1-R4 profiles and tailor precarity support measures to those profiles |
|---|---|---|
| 6 | R1-R2/ R3-R4 | Early-career researchers are usually the most vulnerable to precarity in their careers as they are typically employed on temporary contracts for the duration of a research project and are not guaranteed any stability after their contract. While senior researchers are often seen as less vulnerable as they typically have permanent positions at organisations, they can be employed on temporary contracts and often may not be able to progress to more senior positions in their careers due to restricted numbers of senior positions. Organisations could aim to address such precarity issues for the R1-R2 and R3-R4 profiles |

| **Pillar 2** **Recognition, Interoperability, and Comparability of Researchers' Careers** **Recommendations 7-10** | | |
|---|---|---|
| **#** | **Topic** | **Relevance of Recommendations for Research Career Precarity** |
| 7 | Recognition/ Interoperability | While careers for researchers in academia are precarious due to the limited number of researcher jobs/grants, abundance of temporary/short-term contracts, and oftentimes inadequate working conditions and social benefits, there are many opportunities for other careers in research in and beyond academia with less precarity and better conditions. Organisations could raise awareness about these other opportunities in and beyond academia and better support researchers in this transition on the research labour market. Organisations could likewise better support researchers in transitioning to other research careers by internally improving the interoperability and comparability of research careers |
| 8 | Alternative Careers | Recognising and supporting non-linear and hybrid career paths encourages researchers to think of alternative career paths and offers researchers more opportunities in their careers. This not only takes some pressure off the traditional research career paths but provides more security to those both on traditional and non-traditional career paths. Organisations could raise more awareness about how non-linear and hybrid career paths can help to reduce precarity and help researchers to find their own fulfilling research career paths |
| 9 | ESCO Classification | Future updates to the ESCO classification could contribute to the identification of existing or new skills/competences, occupations, and |

| | | qualifications for the research profession that have been overlooked, have become less/more relevant due to changing occupations, or are required due to development, expansion, or specialisation of the research profession. Updates to the ESCO classification could signal to organisations and researchers that they need to acquire new skills/competences and qualifications for changing or emerging occupations and there are new occupations which are relevant for jobseeking researchers. Updates to the ESCO classification should go hand in hand with updates to ResearchComp |
|---|---|---|
| 10 | Human Resources | The mapping of existing research career structures to the R1-R4 profiles improves the interoperability and comparability of research occupations across organisations, sectors, and countries. This could help researchers more easily search and find relevant job/grant positions and help human resources offices increase the visibility of their job/grant advertisements and attract and recruit new research staff. This could also help human resources offices to identify and create internal career pathways linked to R1-R4 profiles |

| Pillar 3 Recruitment and Working Conditions Recommendations 11-15 | | |
|---|---|---|
| **#** | **Topic** | **Relevance of Recommendations for Research Career Precarity** |
| 11 | Recruitment/ Selection | This recommendation ensures that applicants who have had alternative career paths or career breaks are not unfairly penalised in recruitment and selection when applying for job/grant vacancies. Alternative career paths and career breaks could foster intersectoral mobility and allow researchers to gain additional skills/competences which may open up more opportunities and be beneficial for future research positions. This would be especially beneficial to any researchers who may experience career breaks due to parental leave |
| 12 | Working Conditions | This recommendation is critical in reducing the precarity of research careers as it tackles the core issues of working conditions and duration of contracts for researchers. These issues are linked to core activities and budget allocations of the organisations, whereby any changes to improve these issues will directly affect core activities and budget allocations. Addressing these issues will thus require reallocation or expansion of the available budget |
| 13 | Rights/ Obligations | This recommendation reduces precarity of research careers by ensuring that all researchers (regardless of their background, nationality, and career stage) are aware of their social protection rights and obligations and that they have access to those rights and obligations |
| 14 | Pensions/ RESAVER | Accumulating and transferring pension funds are an important social protection and supplementary support for mobile researchers after their |

| # | Topic | |
|---|-------|---|
| | | research careers in retirement. Pensions are often overlooked by researchers during their careers and they are typically not fully aware of the legalities associated with accumulating and transferring pensions across employers and countries. The RESAVER Pension Fund offers support to mobile researchers with their pensions and reduces the precarity of mobile researchers in their retirement. Researchers may also be more likely to accept opportunities in other countries as a result of RESAVER which they might otherwise refuse should their pension contributions be affected |
| 15 | R1-R2 Support | This recommendation is adequately addressed in other recommendations |

| Pillar 4 Researchers Skilled for Intersectoral and Interdisciplinary Careers and for Entrepreneurship and Innovation Recommendations 16-25 | | |
|---|---|---|
| **#** | **Topic** | **Relevance of Recommendations for Research Career Precarity** |
| 16 | Doctoral Training | Aligning doctoral training and the development of transversal skills/competences with key European initiatives for research careers could help researchers to find more opportunities and adjust more easily to a career beyond academia in other organisations, sectors, and countries. That said, while the importance of research integrity is quite well recognised, the importance of Open Science, especially outside academia, is currently less well recognised |
| 17 | ResearchComp | ResearchComp helps researchers to identify and develop skills/competences which could improve their awareness of their own abilities and help them to more easily find other career opportunities in or outside academia. ResearchComp also helps organisations to understand the skills/competences of researchers and what they could offer organisations |
| 18 | Transversal Skills | This recommendation is adequately addressed in other recommendations |
| 19 | Intersectoral Skills | This recommendation is adequately addressed in other recommendations |
| 20 | Entrepreneurship | Offering relevant training to develop an entrepreneurial mindset and supporting the creation of new start-ups and spin-offs helps researchers not only to create their own opportunities but possibly also new opportunities and career paths for other researchers. Taking an inclusive and gender equal approach to raising awareness on entrepreneurship ensures that more precarious groups are especially encouraged to become entrepreneurs |
| 21 | Lifelong Learning | This recommendation is adequately addressed in other recommendations |
| 22 | Intersectoral Initiatives | This recommendation is adequately addressed in other recommendations |

| 23 | Intersectoral Schemes | This recommendation is adequately addressed in other recommendations |
|---|---|---|
| 24 | Intersectoral Barriers | This recommendation is adequately addressed in other recommendations |
| 25 | Interdisciplinary Mobility | Researchers who are trained in interdisciplinary collaboration and mobility have developed additional skills/competences to their disciplinary and transversal skills/competences and are capable of flexibly working across disciplines and on complex societal challenges. This provides them with more opportunities with finding employment in and outside academia |

| Pillar 5<br>Career Assessment, Development, and Progression<br>Recommendations 26-30 | | |
|---|---|---|
| **#** | **Topic** | **Relevance of Recommendations for Research Career Precarity** |
| 26 | Recognition Mobility | Researchers are more likely to engage in international, intersectoral, interdisciplinary, and virtual collaboration and mobility if these activities are taken into account in assessment. This would ensure that they acquire extra collaboration and mobility skills/competences on top of their usual disciplinary and transversal skills/competences as well as broaden their professional experiences and contacts. This would in turn also provide them with more opportunities to find employment across disciplines, organisations, sectors, and countries |
| 27 | Research Assessment | The reform of research assessment will likely include recognising the diversity of roles, activities, and outputs of researchers as well as activities contributing to research integrity, inclusivity and gender equality, Open Science, and societal impact. This broadening of research assessment criteria allows more researchers to be positively recognised and rewarded in research assessment. At the same time, this broadening of research assessment criteria could result in increased competition between candidates for research jobs/grants and other potentially negative and unwanted effects. Organisations should monitor reforms in research assessment criteria for any negative and unwanted effects |
| 28 | Assessment Initiatives | Aligning the reform of research assessment across organisations, sectors, and countries (such as by signing the agreement and joining CoARA) could support wider interoperability of research careers and research assessment as well as providing researchers with equal opportunities and thus more opportunities across organisations, sectors, and countries |
| 29 | Career Support | Providing adequate career support and professional development to researchers could help them develop skills/competences to improve their opportunities with finding employment. Offering professional mentoring with experts, especially from outside the organisation, could not only provide researchers with valuable hands-on and practical experience but |

| | | also key contacts with other organisations which could become employers in the future |
|---|---|---|
| 30 | Tenure Track | This recommendation is critical for reducing the precarity of research careers as it is a direct means to reduce fixed-term positions and ensures that researchers have a clear and agreed career path to permanent positions. The percentage of researchers at an organisation which should have permanent positions and be on a TTLM is open for debate. Long-term funding plays a critical role in the success of implementing TTLMs as a substantial budget is required to guarantee permanent employment of TTLM researchers. Organisations could engage with national research-funding bodies on the need for long-term funding for TTLMs |

| Pillar 6<br>Balanced Circulation of Talents and Making the Union an Attractive Destination<br>Recommendations 31-32 | | |
|---|---|---|
| **#** | **Topic** | **Relevance of Recommendations for Research Career Precarity** |
| 31 | Competitive Union | This recommendation is not directly relevant for RPOs and RFOs |
| 32 | Balanced Circulation | This recommendation is not directly relevant for RPOs and RFOs |

| Pillar 7<br>Support Actions for Research Careers<br>Recommendations 33-39 | | |
|---|---|---|
| **#** | **Topic** | **Relevance of Recommendations for Research Career Precarity** |
| 33 | Talent Platforms | The existing EURAXESS portal and future ERA Talent Platform are excellent tools to help researchers develop their skills/competences and find collaboration and employment opportunities across organisations, sectors, and countries. More promotion of these two initiatives is necessary to ensure that researchers are aware of and utilise the platforms |
| 34 | Talent Initiatives | This recommendation is not directly relevant for RPOs and RFOs |
| 35 | Charter Importance | This recommendation is not directly relevant for RPOs and RFOs |
| 36 | Charter Encouragement | The Charter consists of a set of principles to improve the careers of researchers and reduce the precarity of research careers. The focus of the Charter on diversity and gender equality could especially help to reduce the precarity of female and disadvantaged researchers |
| 37 | HRS4R/ Charter | The HRS4R award recognises the implementation of the Charter at organisations and aims to improve the careers of researchers and reduce the |

**SECURE**
Sustainable Careers for
Researcher Empowerment

**secureproject.eu**

| | | |
|---|---|---|
| | | precarity of research careers. The HRS4R award helps researchers recognise organisations that treat their researchers well |
| 38 | Support Tools | This recommendation is not directly relevant for RPOs and RFOs |
| 39 | Pilot Actions | This recommendation is about piloting the recommendations in the EFfRC |

| Pillar 8 Monitoring of Research Careers Recommendations 40-44 | | |
|---|---|---|
| **#** | **Topic** | **Relevance of Recommendations for Research Career Precarity** |
| 40 | ReICO | This recommendation is not directly relevant for RPOs and RFOs |
| 41 | ReICO Data | This recommendation is not directly relevant for RPOs and RFOs |
| 42 | ReICO Results | This recommendation is not directly relevant for RPOs and RFOs |
| 43 | ReICO/ EHESO | This recommendation is not directly relevant for RPOs and RFOs |
| 44 | ReICO/ Regulations | This recommendation is not directly relevant for RPOs and RFOs |

SECURE
Sustainable Careers for
Researcher Empowerment

secureproject.eu

## Annex 7: Actions to Implement Recommendations at Organisations

<table>
<tr><td colspan="3"><strong>Pillar 1</strong><br><strong>Researchers, Research Managers, and Research Technicians in the European Research Area</strong><br><strong>Recommendations 1-6</strong></td></tr>
<tr><td><strong>#</strong></td><td><strong>Topic</strong></td><td><strong>Actions to Implement Recommendations at Organisations</strong></td></tr>
<tr><td>1</td><td>Researchers</td><td>- Adopt the EFfRC definition of 'researcher' in organisational regulations and policies<br>- Communicate more clearly on the definition and rights and obligations of 'researcher'</td></tr>
<tr><td>2</td><td>Intersectoral Mobility</td><td>- Raise awareness on the wide diversity of research careers in and outside academia<br>- Encourage, train, and support researchers for intersectoral collaboration and mobility<br>- Promote value of researchers and their skills/competences to non-academic sector<br>- Organise research career events and employer matchmaking events for researchers<br>- Identify structural and administrative barriers to intersectoral collaboration and mobility<br>- Collect and share best practices on support for intersectoral collaboration and mobility</td></tr>
<tr><td>3</td><td>Research Managers</td><td>- Define a clear profile for research manager positions with their roles and responsibilities<br>- Raise awareness on diverse career paths and research manager as a research career<br>- Train researchers in research management and support transition to research manager<br>- Support ongoing training, development, and professionalisation of research managers</td></tr>
<tr><td>4</td><td>Research Technicians</td><td>- Define a clear profile for research technician positions with their roles and responsibilities<br>- Raise awareness on diverse career paths and research technician as a research career<br>- Train researchers in technical support and support transition to research technician<br>- Support ongoing training, development, and professionalisation of research technicians</td></tr>
<tr><td>5</td><td>R1-R4</td><td>- Adopt the R1-R4 profiles or map existing organisational profiles onto the R1-R4 profiles<br>- Refer to the R1-R4 profiles in job/grant advertisements and relevant communications<br>- Identify scope of precarity and propose measures to reduce precarity for</td></tr>
</table>

**secureproject.eu**

| | | R1-R4 profiles<br>- Treat doctoral candidates as professionals with related working conditions and benefits<br>- Raise awareness of and support adoption of R1-R4 profiles in the non-academic sector |
|---|---|---|
| 6 | R1-R2/<br>R3-R4 | - Adopt the grouping of R1-R2 and R3-R4 profiles in organisational regulations and policies<br>- Tailor support measures for career development to R1-R2 and R3-R4 profile groups<br>- Tailor support measures to address precarity to R1-R2 and R3-R4 profile groups |

| Pillar 2<br>Recognition, Interoperability, and Comparability of Researchers' Careers<br>Recommendations 7-10 | | |
|---|---|---|
| **#** | **Topic** | **Actions to Implement Recommendations at Organisations** |
| 7 | Recognition/<br>Interoperability | - Track the long-term career paths of researchers at and beyond home organisations<br>- Collect and share best practices on recognition and support of diverse research careers<br>- Engage with key stakeholders on recognition and support of diverse research careers<br>- Engage with key stakeholders on interoperability and comparability of research careers |
| 8 | Alternative Careers | - Raise awareness on non-linear and hybrid research career paths among researchers<br>- Integrate non-linear and hybrid research career paths into regulations and policies<br>- Offer career development support for non-linear and hybrid research career paths<br>- Collect and share best practices on non-linear and hybrid research career paths |
| 9 | ESCO Classification | - Integrate (updates of) the ESCO classification into research job/grant advertisements<br>- Integrate (updates of) ESCO classification into local/national accreditation frameworks<br>- Identify changing and emerging skills/competences, qualifications, and occupations<br>- Provide recommendations for future revisions of classifications in the ESCO classification |
| 10 | Human Resources | - Conduct a review of research career structures and career paths within organisation |

**SECURE**
Sustainable Careers for
Researcher Empowerment

**secureproject.eu**

| | | - Involve human resources officers and research staff in organisational R1-R4 mapping<br>- Develop clear documentation, guidelines, and communications on the R1-R4 mapping<br>- Engage with other human resources offices to share best practice s on the R1-R4 profiles |
| --- | --- | --- |

| Pillar 3<br>**Recruitment and Working Conditions**<br>**Recommendations 11-15** | | |
| --- | --- | --- |
| **#** | **Topic** | **Actions to Implement Recommendations at Organisations** |
| 11 | Recruitment/ Selection | - Make general recruitment and selection procedures for vacant positions publicly available<br>- Provide individual feedback to candidates on result of a specific recruitment and selection<br>- Inform recruiters and selectors on the value of alternative career paths and career breaks |
| 12 | Working Conditions | - Review and internally discuss providing commensurate remuneration for researchers<br>- Review and improve support for flexible working conditions and work-life balance<br>- Review and improve support for inclusivity, equal opportunities, and gender equality<br>- Review and improve support for academic freedom and protection against interference<br>- Review and improve support to researchers with the fulfilment of administrative duties<br>- Review and internally discuss providing more permanent contracts to researchers<br>- Define a maximum threshold for number of fixed-term contracts and monitoring plan<br>- Review and internally discuss researcher access to relevant social protection benefits |
| 13 | Rights/ Obligations | - Raise awareness regularly on social protection rights and obligations to all researchers<br>- Provide individual personalised counselling on social protection rights and obligations<br>- Collaborate with external specialists in field of social protection rights and obligations |
| 14 | Pensions/ RESAVER | - Raise awareness about long-term pension planning and RESAVER among researchers<br>- Take part in RESAVER Pension Fund and join the consortium of member |

secureproject.eu

| | | organisations |
|---|---|---|
| 15 | R1-R2 Support | This recommendation is adequately addressed in other recommendations |

<br>

| **Pillar 4**<br>**Researchers Skilled for Intersectoral and Interdisciplinary Careers and for Entrepreneurship and Innovation**<br>**Recommendations 16-25** | | |
|---|---|---|
| **#** | **Topic** | **Actions to Implement Recommendations at Organisations** |
| 16 | Doctoral Training | - Align doctoral training programmes with Principles for Innovative Doctoral Training<br>- Align doctoral training programmes with European Code of Conduct for Research Integrity<br>- Integrate policies and practices for Open Science into doctoral training programmes |
| 17 | ResearchComp | - Raise awareness on ResearchComp and transversal skills/competences for researchers<br>- Integrate ResearchComp into training and career development support for researchers<br>- Integrate ResearchComp into researcher profiles and relevant regulations and policies<br>- Collect and share best practices on ResearchComp and transversal skills/competences<br>- Provide recommendations for future revisions of skills/competences in ResearchComp |
| 18 | Transversal Skills | This recommendation is adequately addressed in other recommendations |
| 19 | Intersectoral Skills | This recommendation is adequately addressed in other recommendations |
| 20 | Entrepreneurship | - Raise awareness on entrepreneurship taking an inclusive and gender equal approach<br>- Encourage, train, and support researchers for entrepreneurship, start-ups, and spin-offs<br>- Create support offices, hubs, and centres for entrepreneurship and technology transfer |
| 21 | Lifelong Learning | This recommendation is adequately addressed in other recommendations |
| 22 | Intersectoral Initiatives | This recommendation is adequately addressed in other recommendations |
| 23 | Intersectoral Schemes | This recommendation is adequately addressed in other recommendations |

| 24 | Intersectoral Barriers | This recommendation is adequately addressed in other recommendations |
|----|------------------------|----------------------------------------------------------------------|
| 25 | Interdisciplinary Mobility | - Encourage, train, and support researchers for interdisciplinary collaboration and mobility<br>- Collect and share best practices on supporting interdisciplinary collaboration and mobility |

<table>
<tr><td colspan="3" align="center"><strong>Pillar 5<br>Career Assessment, Development, and Progression<br>Recommendations 26-30</strong></td></tr>
<tr><td><strong>#</strong></td><td><strong>Topic</strong></td><td><strong>Actions to Implement Recommendations at Organisations</strong></td></tr>
<tr><td>26</td><td>Recognition Mobility</td><td>- Recognise international collaboration and mobility activities in research assessment<br>- Recognise intersectoral collaboration and mobility activities in research assessment<br>- Recognise interdisciplinary collaboration and mobility activities in research assessment<br>- Recognise virtual collaboration and mobility activities in research assessment</td></tr>
<tr><td>27</td><td>Research Assessment</td><td>- Integrate a qualitative and responsible quantitative approach into research assessment<br>- Recognise diversity of roles, activities, and outputs of researchers in research assessment<br>- Recognise research manager and research management activities in research assessment<br>- Recognise research technician and technical support activities in research assessment<br>- Recognise research integrity and inclusivity and gender equality in research assessment<br>- Recognise Open Science practices and societal impact of research in research assessment<br>- Inform research assessors on the added value of reformed research assessment criteria<br>- Monitor any reforms in research assessment criteria for negative and unwanted effects</td></tr>
<tr><td>28</td><td>Assessment Initiatives</td><td>- Sign the Agreement on Reforming Research Assessment and join CoARA as a member<br>- Identify structural and administrative barriers to reform research assessment systems<br>- Collect and share best practices on reforming existing research assessment systems</td></tr>
</table>

**SECURE**
Sustainable Careers for
Researcher Empowerment

**secureproject.eu**

| 29 | Career Support | - Review and improve the career support and professional development for researchers<br>- Provide professional mentoring to researchers by experts in and outside the organisation |
|---|---|---|
| 30 | Tenure Track | - Review regulations and status of TTLMs in national context and locally at organisations<br>- Define TTLMs in discussion and close collaboration with researchers at organisations<br>- Develop an action plan for future implementation of defined TTLMs at organisations<br>- Engage with key stakeholders on TTLMs to collect and share best practices on TTLMs<br>- Engage with national research-funding bodies on need for long-term funding for TTLMs |

| **Pillar 6**<br>**Balanced Circulation of Talents and Making the Union an Attractive Destination**<br>**Recommendations 31-32** | | |
|---|---|---|
| **#** | **Topic** | **Actions to Implement Recommendations at Organisations** |
| 31 | Competitive Union | This recommendation is not directly relevant for RPOs and RFOs |
| 32 | Balanced Circulation | This recommendation is not directly relevant for RPOs and RFOs |

| **Pillar 7**<br>**Support Actions for Research Careers**<br>**Recommendations 33-39** | | |
|---|---|---|
| **#** | **Topic** | **Actions to Implement Recommendations at Organisations** |
| 33 | Talent Platforms | - Raise awareness on the EURAXESS portal and ERA Talent Platform among researchers<br>- Disseminate job/grant opportunities in the EURAXESS portal and ERA Talent Platform |
| 34 | Talent Initiatives | This recommendation is not directly relevant for RPOs and RFOs |
| 35 | Charter Importance | This recommendation is not directly relevant for RPOs and RFOs |
| 36 | Charter Encouragement | - Raise awareness on the revised Charter among researchers<br>- Endorse and implement the revised Charter at organisations |
| 37 | HRS4R/ Charter | - Raise awareness on the HRS4R award and its relevance for researchers<br>- Apply formally to the European Commission to receive the HRS4R award |

| 38 | Support Tools | This recommendation is not directly relevant for RPOs and RFOs |
|----|---------------|----------------------------------------------------------------|
| 39 | Pilot Actions | This recommendation is about piloting the recommendations in the EFfRC |

| Pillar 8<br>Monitoring of Research Careers<br>Recommendations 40-44 | | |
|---|---|---|
| **#** | **Topic** | **Actions to Implement Recommendations at Organisations** |
| 40 | ReICO | This recommendation is not directly relevant for RPOs and RFOs |
| 41 | ReICO Data | This recommendation is not directly relevant for RPOs and RFOs |
| 42 | ReICO Results | This recommendation is not directly relevant for RPOs and RFOs |
| 43 | ReICO/ EHESO | This recommendation is not directly relevant for RPOs and RFOs |
| 44 | ReICO/ Regulations | This recommendation is not directly relevant for RPOs and RFOs |

**SECURE**
Sustainable Careers for
Researcher Empowerment

secureproject.eu

## Annex 8: Challenges to Implement Recommendations at Organisations

| Pillar 1 Researchers, Research Managers, and Research Technicians in the European Research Area Recommendations 1-6 | | |
|---|---|---|
| # | Topic | Challenges to Implement Recommendations at Organisations |
| 1 | Researchers | - Definition of 'researcher' may already be defined in local or national regulations<br>- Semantic meaning of 'researcher' can differ across languages and translations<br>- Changing definition of 'researcher' in regulations and policies is a complex process<br>- Researchers may be resistant to changes regarding the definition of 'researcher' |
| 2 | Intersectoral Mobility | - Researchers are interested in academic careers and not in non-academic careers<br>- Researchers are more interested in academic careers than in non-academic careers<br>- Non-academic sector is not aware of skills/competences of academic researchers |
| 3 | Research Managers | - Creation and embedding of a new profile for research managers is a complex process<br>- Researchers are not aware of opportunities and benefits of career as research manager<br>- Researchers are not adequately trained and supported for career as research manager<br>- Position of research manager may not be recognised with attractive working conditions |
| 4 | Research Technicians | - Creation and embedding of a new profile for research technicians is a complex process<br>- Researchers are not aware of opportunities and benefits of career as research technician<br>- Researchers are not adequately trained and supported for career as research technician<br>- Position of research technician may not be recognised with attractive working conditions |
| 5 | R1-R4 | - Integration of R1-R4 profiles in existing regulations and policies is a complex process<br>- R1-R4 profiles may not be easily mapped onto existing local and national profiles<br>- Non-academic sector is not aware of or does not see benefits of the R1-R4 profiles<br>- Lack of widespread adoption of R1-R4 profiles hinders interoperability and |

| | | usefulness |
|---|---|---|
| 6 | R1-R2/ R3-R4 | - Two-fold grouping of early-career and senior researchers may be too simple for reality<br>- National regulations and policies may define and treat doctoral candidates as students |

| Pillar 2<br>Recognition, Interoperability, and Comparability of Researchers' Careers<br>Recommendations 7-10 | | |
|---|---|---|
| **#** | **Topic** | **Challenges to Implement Recommendations at Organisations** |
| 7 | Recognition/ Interoperability | - Tracking long-term careers of researchers requires long-term planning and commitment<br>- Best practices on recognition and support of diverse research careers may not be findable<br>- Engaging with key stakeholders on diverse research careers could cost time and resources |
| 8 | Alternative Careers | - Researchers are not aware of possible non-linear and hybrid research career paths<br>- Integration of non-traditional career paths in existing systems is a complex process<br>- Researchers may be resistant to changes regarding non-traditional career paths<br>- Best practices on non-linear and hybrid research career paths may not be findable |
| 9 | ESCO Classification | - Integration of new classifications or updates to any classifications is a complex process<br>- Technical infrastructure may be needed to implement any (updates to) classifications |
| 10 | Human Resources | - Human resources officers may need to be trained and supported to manage the mapping<br>- Engaging internally and with other human resources offices could cost time and resources |

| Pillar 3<br>Recruitment and Working Conditions<br>Recommendations 11-15 | | |
|---|---|---|
| **#** | **Topic** | **Challenges to Implement Recommendations at Organisations** |
| 11 | Recruitment/ Selection | - Current hiring culture is strongly biased against alternative career paths and career breaks<br>- Ensuring compliance with new hiring policies may be challenging and |

| | | require monitoring<br>- Changes in local hiring policies may conflict with national hiring regulations and policies |
|---|---|---|
| 12 | Working Conditions | - Changing working conditions and contracts may need to comply with national regulations<br>- Changing working conditions and contracts may require budget reallocation or expansion<br>- Changing working conditions and contracts may need cultural change and face resistance |
| 13 | Rights/ Obligations | - Ensuring updated and specialist social protection advice could cost time and resources<br>- Social protection differences across countries could lead to issues for mobile researchers<br>- Ensuring transferability of social protection entitlements could require regulatory changes |
| 14 | Pensions/ RESAVER | - Researchers are not aware of or interested in long-term pension planning and RESAVER<br>- National regulations and policies could restrict the uptake and usefulness of RESAVER<br>- Low number of participating organisations could limit uptake and usefulness of RESAVER |
| 15 | R1-R2 Support | This recommendation is adequately addressed in other recommendations |

| Pillar 4<br>Researchers Skilled for Intersectoral and Interdisciplinary Careers and for Entrepreneurship and Innovation<br>Recommendations 16-25 | | |
|---|---|---|
| **#** | **Topic** | **Challenges to Implement Recommendations at Organisations** |
| 16 | Doctoral Training | - Aligning doctoral training programmes with key initiatives could cost time and resources<br>- There may be a lack of expertise in research integrity and Open Science at organisations |
| 17 | ResearchComp | - There may be existing skills/competence frameworks which are being used or mandated<br>- Integration of new skills/competences or revised skills/competences is a complex process |
| 18 | Transversal Skills | This recommendation is adequately addressed in other recommendations |
| 19 | Intersectoral Skills | This recommendation is adequately addressed in other recommendations |
| 20 | Entrepreneurship | - Researchers are not aware of opportunities for entrepreneurship, start- |

**secureproject.eu**

| | | |
|---|---|---|
| | | ups, and spin-offs<br>- There may be a lack of expertise in supporting entrepreneurship and technology transfer<br>- Local and national regulations and policies could restrict researchers in entrepreneurship<br>- Creating entrepreneurship and technology transfer support could cost time and resources |
| 21 | Lifelong Learning | This recommendation is adequately addressed in other recommendations |
| 22 | Intersectoral Initiatives | This recommendation is adequately addressed in other recommendations |
| 23 | Intersectoral Schemes | This recommendation is adequately addressed in other recommendations |
| 24 | Intersectoral Barriers | This recommendation is adequately addressed in other recommendations |
| 25 | Interdisciplinary Mobility | - Researchers are not aware of opportunities of interdisciplinary collaboration and mobility<br>- There may be a lack of expertise in supporting interdisciplinary collaboration and mobility |

| Pillar 5<br>Career Assessment, Development, and Progression<br>Recommendations 26-30 | | |
|---|---|---|
| # | Topic | Challenges to Implement Recommendations at Organisations |
| 26 | Recognition Mobility | - Researchers are not interested in the different types of collaboration and mobility<br>- Researchers are not aware of opportunities for research collaboration and mobility |
| 27 | Research Assessment | - Changing research assessment criteria in regulations and policies is a complex process<br>- Researchers may be resistant to changes regarding existing research assessment criteria<br>- Reforming research assessment criteria could result in negative and unwanted effects |
| 28 | Assessment Initiatives | - Organisations may not want to commit to signing the agreement and joining CoARA<br>- There may not yet be many best practices available on reforming research assessment |
| 29 | Career Support | - Improving career support and professional development could cost time and resources<br>- Organisations may not have experience or contacts with mentors outside the organisation |

| 30 | Tenure Track | - National regulations and policies may restrict TTLMs and not be open for improvement<br>- Long-term funding may not be available to guarantee the implementation of any TTLMs |
|---|---|---|

| **Pillar 6**<br>**Balanced Circulation of Talents and Making the Union an Attractive Destination**<br>**Recommendations 31-32** | | |
|---|---|---|
| **#** | **Topic** | **Challenges to Implement Recommendations at Organisations** |
| 31 | Competitive Union | This recommendation is not directly relevant for RPOs and RFOs |
| 32 | Balanced Circulation | This recommendation is not directly relevant for RPOs and RFOs |

| **Pillar 7**<br>**Support Actions for Research Careers**<br>**Recommendations 33-39** | | |
|---|---|---|
| **#** | **Topic** | **Challenges to Implement Recommendations at Organisations** |
| 33 | Talent Platforms | - Researchers are not aware of the existing EURAXESS portal and new ERA Talent Platform<br>- Organisations may need support in utilising the EURAXESS portal and ERA Talent Platform |
| 34 | Talent Initiatives | This recommendation is not directly relevant for RPOs and RFOs |
| 35 | Charter Importance | This recommendation is not directly relevant for RPOs and RFOs |
| 36 | Charter Encouragement | - Researchers are not aware of the revised Charter and its implementation<br>- Integration of the revised Charter into existing systems is a complex process |
| 37 | HRS4R/ Charter | - Researchers are not aware of the HRS4R award and its relevance for researchers<br>- Application for the HRS4R award is a long and strategic and structural procedure |
| 38 | Support Tools | This recommendation is not directly relevant for RPOs and RFOs |
| 39 | Pilot Actions | This recommendation is about piloting the recommendations in the EFfRC |

| | | |
|---|---|---|
| **Pillar 8**<br>**Monitoring of Research Careers**<br>**Recommendations 40-44** | | |
| **#** | **Topic** | **Challenges to Implement Recommendations at Organisations** |
| 40 | ReICO | This recommendation is not directly relevant for RPOs and RFOs |
| 41 | ReICO<br>Data | This recommendation is not directly relevant for RPOs and RFOs |
| 42 | ReICO<br>Results | This recommendation is not directly relevant for RPOs and RFOs |
| 43 | ReICO/<br>EHESO | This recommendation is not directly relevant for RPOs and RFOs |
| 44 | ReICO/<br>Regulations | This recommendation is not directly relevant for RPOs and RFOs |

# Sustainable Careers for Researcher Empowerment

## WP2
### *Development of Research Career Framework*

**Deliverable 2.1**
*First Draft of SECURE Research Career Framework*

# SECURE PROJECT

IF YOU WOULD LIKE TO KNOW MORE ABOUT OUR
PROJECT ACTIVITIES

E-MAIL US **info@secureproject.eu**

secureproject.eu

**SECURE**
Sustainable Careers for
Researcher Empowerment