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ERAC 1206/21

NOTE

From:	General Secretariat of the Council
To:	Delegations
Subject:	ERAC 'Triangle Task Force' Report on the Review of the European Charter and Code of Conduct for the Recruitment of Researchers

Delegations will find in annex to this Note the ERAC 'Triangle Task Force' (Joint ERAC Standing Working Groups (SWGs) on Open Science and Innovation (OSI), Human Resources and Mobility (HRM) and Gender in Research and Innovation (GRI) Task Force) Report on the Review of the European Charter and Code of Conduct for the Recruitment of Researchers, as adopted by written procedure.

ERAC 1206/21 MVG/cb

ERAC 'TRIANGLE TASK FORCE' REPORT ON THE REVIEW OF THE EUROPEAN CHARTER AND CODE OF CONDUCT FOR THE RECRUITMENT OF RESEARCHERS

Report from the Goal 2 of the ERAC 'Triangle Task Force'

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IMPORTANT CONSIDERATIONS BEFORE GETTING STARTED

The work presented in this document has been performed by the "Triangle Task Force", a working group established in 2020 with representatives from three standing working groups of the <u>European Research Area Committee</u> (ERAC). The ERAC's main mission is to advise the Council (in particular the Competitiveness Council), the European Commission and EU member states in European Research Area (ERA) priority areas.

The Triangle Task Force is publishing the result of its work (v 2.1) after analysing, discussing and incorporating much of the input received from over 15 stakeholders (individual institutions or associations).

Important: The outputs of the Triangle Task Force remain at the realm of ERAC and they feed into the European Commission's own analysis, conclusions and next steps on ERA priority 3.

THE TRIANGLE TASK FORCE-GOAL 2 OBJECTIVES

ESTABLISHING THE TRIANGLE TASK FORCE

In 2020, the Chairs of the Standing Working Groups on i) Human Resources and Mobility, ii) Open Science and Innovation, and iii) Gender in Research and Innovation of the European Research Area Committee (ERAC) launched the "Triangle Task Force". The Task Force, chaired by the Chair of the Standing Working Group on Human Resources and Mobility had the purpose to work on two interrelated goals:

Goal 1: To issue a policy report to foster the transformation of research evaluation principles and processes so that they become more supportive of Open Science, while making sure that those principles and processes also foster Gender Equality. The outcome of this goal can be found here: https://data.consilium.europa.eu/doc/document/ST-1201-2021-INIT/en/pdf

Goal 2: To review the "European Charter for Researchers and a Code of Conduct for the Recruitment of Researchers" (from now on, "C&C") at the light of the new European Research Area objectives and priorities.

This document summarizes the main findings and recommendations of the working group of the Triangle Task Force responsible for Goal 2 and incorporates the Stakeholder's inputs. The outputs of the Triangle Task Force remain at the realm of ERAC and they feed into the European Commission's own analysis, conclusions and next steps on ERA priority 3.

RATIONALE OF GOAL 2 WORK

The C&C is a European Commission Recommendation issued in March 2005. Since then, the C&C has become an important instrument for the implementation of the European Research Area priority 3 "Open labour market for researchers". Since 2005, over 1200 European institutions have endorsed the C&C and more than 580 have been awarded with the Human Resources in Research Excellence Award, which recognizes their progress towards aligning their human resource policies with the principles set out in the "C&C". 10

The Standing Working Groups of the European Research Area Committee considered that, coinciding with the launch of the European Commission Communication "A new ERA for research and innovation", the Council Conclusions on "the new ERA", and on "Deepening the European Research Area: Providing researchers with attractive and sustainable careers and working conditions and making brain circulation a reality", the Recommendation on a Pact for R&I in Europe adopted on November 26 by the Council, and the 15 years anniversary of the C&C, it was a good time to review the C&C. The objective was to assess whether the current C&C is still a valid tool to inspire European policymakers, funders, institutions, employers and researchers to continue building the European Research Area and its current priorities and if, in order to do so, a revamping was necessary.

SCOPE OF GOAL 2 WORK

The working group agreed on performing the C&C assessment following these principles:

- The review of the C&C is based on an evolution of its principles and not a revolution. There is agreement that the C&C structure and main principles have been coherent and useful and it is widely known by European performing and funding institutions. The Triangle Task Force will work on the assumption that the general structure and spirit of the C&C should remain.
- The revised C&C aims at not to increasing the number of principles. The current C&C is a comprehensive set of 40 principles covering many aspects and dimensions of human resources in research management. A revised C&C should aim at remaining comprehensive yet not increasing the total number of principles that would make the C&C too challenging for institutions to adhere to. Instead, the existing principles were either redefined, renamed, merged or replaced where deemed necessary in order to adhere to the new European Research Area objectives and priorities.
- The implementation mechanism "Human Resources Strategy for Researchers (HRS4R)" is outside the scope of Goal 2. The working group will focus on reviewing the C&C and its principles and will not asses the implementation mechanism at this stage.

TOWARDS A REVAMPED C&C. THE TRIANGLE TASK FORCE GOAL 2 PROPOSAL

As a result of the discussions and work of Goal 2, a number of agreements and recommendations were reached. In the first section, a summary of the rationale and the main recommendations and changes to the current C&C is shown. In the second section, a proposal on how these recommendations could be implemented in a revamped C&C is presented.

SUMMARY OF THE MAIN RECOMMENDATIONS PROPOSED FOR A REVAMPED C&C

Validity of the current C&C principles

The C&C principles remain today very relevant and appropriate to contribute to the construction of a single market for research and innovation and to fostering relationships between researchers, employers, and funders that is conductive to excellence in research and to the career development of researchers in Europe.

However, some current priorities of the new ERA could be more integrated as to make sure that the C&C evolves at the same pace as ERA. The dimensions that the Goal 2 working group would recommend to better integrate in the C&C would be:

- Gender Equality in research and innovation (GRI). The gender aspects of the human resources policies need to be reinforced and mainstreamed throughout the whole C&C. This reinforcement does not hamper the development of specific policy tools to foster Gender Equality in research and innovation such as Gender Equality Plans. On the contrary, it brings coherence to all the EC policy Gender Equality Measures and is a means to support excellence in research.
- Open Science and innovation (OSI). Open Science and innovation is at the core of the European Commission science policy objectives and it needs to be fostered and embedded throughout the whole C&C. Because of the impact of OSI in the whole research circle (training, recruitment, assessment, infrastructures, etc.), OSI should also be mainstreamed in the C&C.
- The teaching dimension of research. Research and higher education are intimately related, benefit from each other and meet, among other dimensions, at their human resources management in higher education institutions. The teaching dimension of some researchers' job profiles has an impact in training, recruitment and assessment, among others, so it should be mainstreamed in the C&C.

- Recognition of the profession. The recognition of the researcher profession remains to be an unfulfilled objective of the European Research Area. The C&C is a fundamental tool to contribute to this recognition through the identification and agreement of the rights and obligations of researchers in the European Union. This principle should be identified as core to the C&C and as a principle to be mainstreamed through it.
- Research evaluation. Research assessment can be a driver of change towards
 the new envisaged European Research Area. The assessment dimension of the
 C&C should be reinforced so that Open Science, quality over quantity of
 research outputs and Gender Equality in research are duly fostered.

Moreover, some principles (ethical principles, good practice, professional attitude, accountability), may well be "regrouped" under a "research integrity" principle for the sake of simplicity. This would simplify the C&C and include a fundamental dimension of research policy (research integrity). Another reason for this "regrouping" of principles is that the action plans of HRS4R awarded institutions often show how these principles are addressed through the same actions in the institutions, showing how they are understood as very close concepts.

In the same lines, the "value of mobility" principle could be merged to the judging merit one as a fundamental dimension of "judging merit". Finally, the "supervision" principles (three in the current C&C) could be merged into one as to give supervision a more weighted place.

Weight of the principles and the transversal nature of some principles

The weight, importance and implications of the current 40 principles may be a bit unbalanced and not sufficiently comprehensive nor coherent. Just as an example, some of the principles are transversal and affect many other principles of the C&C (i.e. Gender Equality, non-discrimination, good practice and others) and some others, whereas also important, may not have the same significance.

We recommended to identify those principles that are fundamental in achieving the European Research Area and that need to be mainstreamed throughout the rest of the principles due to their transversal nature. These principles should be grouped and "upgraded". This would help to better communicate the core objectives of the C&C, which currently may be slightly diluted throughout the 40 principles (see Figure 1).

A good starting point for this "re-grouping" could be the 4 pillars currently used in the implementation tool of the C&C: the Human Resources Strategy for researchers. Those pillars (currently being "Ethical and professional aspects", "Recruitment and selection", "Working conditions and social security" and "Training and development") were created in order to facilitate institutions working with the C&C and have proven to be useful and practical. They, duly adapted, could be used to regroup crucial principles of the C&C currently scattered throughout different pillars.

Once those transversal principles are grouped and identified, it is recommended to indicate that they need to be mainstreamed (meaning the rest of the principles would need to be implemented in such a way that they also contribute to the implementation of the "Research and Ethical principles") throughout the whole C&C.

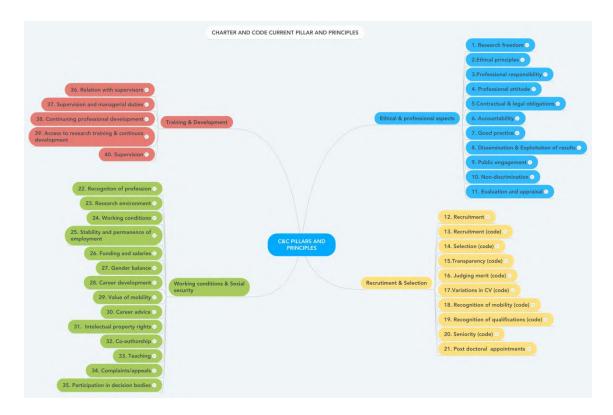


Figure 1. Charter and Code current pillars and principles

The Charter dimension and the Code dimension of the C&C

The 40 principles of the current C&C are formally grouped in the European Commission's recommendation in the "European Charter for researchers" and the "Code of Conduct for the recruitment of researchers". The European Charter for Researchers is a set of general principles (31) and requirements which specifies the roles, responsibilities and entitlements of researchers as well as of employers and/or funders of researchers. The Code of Conduct for the Recruitment of Researchers (9) consists of a set of general principles and requirements that should be followed by employers and/or funders when appointing or recruiting researchers.

For practical reasons, the 40 C&C principles are also grouped in 4 different pillars in the documentation for the institutions, in order to present their gap analysis and action plans within Human Resources Strategy for Researchers award process. These pillars are i) Ethical and Professional Aspects, ii) Recruitment and Selection, iii) Working conditions and Social Security and, iv) Training and Development. This grouping was performed for institutions to better tackle the 40 principles.

The work of Goal 2 working group has been based on the later way of grouping the principles as it is usually the way institutions analyse the C&C in order to align their policies. Also, it is probably more intuitive than the "charter and the code" way.

We recommend to further study the practical and legal (if any) implications of the principles sitting in the Charter or the Code so to decide whether the difference remains relevant and necessary.

Reference to other charters, declarations or recommendations

In the last years, a number of relevant declarations, statements and charters are being published by different research and innovation key European stakeholders (i.e. The Bonn Declaration on "Freedom of Scientific Research", the 2020 Rome Communiqué Annex I - Statement on Academic Freedom, the San Francisco Declaration on Research Assessment (DORA)). Goal 2 members acknowledge these declarations which have inspired some of the recommendations for the revamped C&C. They also reinforce some of the recommendations issued by Goal 2 members. However, it is recommended that the C&C remains agnostic and does not specifically reference any of those documents so that it can stay in force and will not be outdated for a good period of time.

Inclusion of policymakers as new stakeholders

The current version of the C&C addresses funders, employers and researchers. It is recommended that the revamped C&C includes policymakers as a key stakeholder, as often, the legal barriers that hamper institutions aligning their human resources policies towards the C&C need to be addressed by policy makers (at regional, national and/or European level).

Employers' definition

We recommend that a distinction between I) academic and II) non-academic employers is highlighted in the revamped C&C. One of the priorities of the new ERA is to better connect academia and industry and to make both worlds a seamless recruitment and working space for researchers. Specifically addressing non-academic employers of researchers as key stakeholders, whereas at the same time acknowledging their specific and distinct nature compared to academic employers, may contribute to their commitment.

Researchers definition

We recommend to review the current researcher's definition offered in the C&C. First, in order to align it with other European initiatives such as European Skills/Competences, Qualifications and Occupations (ESCO), and second to better support a European Research Framework for Researchers. Also, the researcher definition should reflect the diversification of career paths and acknowledge the numerous different research outputs and processes that relate to the conduct of research and/or to the relevant activities that support research (such as data curation or research management). In order to place value on the diverse career paths, processes and outputs possible, the definition should widen the current tasks, competences, skills and research outputs and responsibilities identified ,and make it clear that those are meant to be developed and exploited as a whole by the research community and not as individual researchers. The goal is to place the responsibility of valorisation of diversification at the academic environment as a whole, including the academic leadership. This would also avoid an excessive and non-realistic demand on individual researchers.

Shared responsibilities of all stakeholders

In the current C&C, concrete stakeholders (researchers, funders or employers) are specifically addressed in the principles as responsible for the implementation of the principle. This may give the wrong impression that it is only those particularly addressed in the definitions the ones with a responsibility in fostering this principle when, in reality, no principle can be addressed by only one stakeholder. It is recommended to work on a preamble to the principles that call for the participation of all stakeholders in every principle according to their own responsibilities and capacities.

MAIN ELEMENTS OF A REVAMPED CHARTER AND CODE

In this section, and according to the above recommendations, a proposal regarding C&C stakeholders' definitions, pillars and principles is offered.

Stakeholders Definitions

RESEARCHER DEFINITION

The Frascati¹ definition of researcher and the European Skills/Competences qualifications and occupations (ESCO)² definition of science and engineering such as legal, social and cultural professionals have been acknowledged and partially incorporated in the C&C definition to fit to the purpose of this Recommendation.

Researchers are professionals engaged in the conception, creation or development of new knowledge. They conduct or manage research and improve or develop concepts, theories, models, techniques instrumentation, softwares or operational methods, engage in activities that require the use of research-related skills (e.g., research communication, critical thinking) and, may teach at higher education level about the foregoing in a systematic manner.

This new knowledge may be related to "basic research", "applied research", "experimental development" and/or "transfer of knowledge" and it is expected to be created in a responsible manner.

Researchers work in very different environments and workplaces. The tasks that they perform depend on their particular jobs and personal strengths, are related to research and innovation and often to higher education teaching. These tasks may include: applying for research funding; conducting and evaluating research and innovation; managing projects and teams; supervising staff; engaging with stakeholders and the public at large in participatory research processes; managing, sharing and transferring the generated knowledge (including through scholarly communication, science communication to society, knowledge management for policy, and knowledge transfer to industry) and higher education teaching among others.

This Recommendation acknowledges the four research profiles described in the European Framework for Research careers:

R1 First Stage Researcher (up to the point of PhD)

R2 Recognised Researcher (PhD holders or equivalent who are not yet fully independent)

R3 Established Researcher (researchers who have developed a level of independence)

R4 Leading Researcher (researchers leading their research area or field)

¹ OECD (2015), Frascati Manual 2015: Guidelines for Collecting and Reporting Data on Research and Experimental Development, The Measurement of Scientific, Technological and Innovation Activities, OECD Publishing, Paris, https://doi.org/10.1787/9789264239012-en.

² https://ec.europa.eu/esco/portal/home Consulted on October 21st

FUNDERS DEFINITION

"Funders" refers to all those bodies which provide and/or distribute funding to public and private research institutions and/or individual researchers or research groups. In this role they might stipulate as a key condition for providing funding that the funded institutions or researchers should have in place and apply effective strategies, practices and mechanisms according to the general principles and requirements presented in this Recommendation.

POLICY MAKERS DEFINITION

"Policymakers" are those institutions or individuals who, through the formulation of policies at the local, national, regional or global level can foster the necessary legal, financial and cultural conditions to enforce or facilitate the uptake of the general principles of the Charter and Code by all the stakeholders involved.

ACADEMIC EMPLOYERS

"Academic employers" refers to public or private higher education institutions awarding academic degrees, public or private non-profit research organisations and International European Research Organisations which employ researchers on a contractual basis or which host them under other types of contracts or arrangements, including those without a direct financial relationship.

NON-ACADEMIC EMPLOYERS

"Non-academic employers" refers to all those non-academic organizations (including the non-academic public sector, the private and/or the industrial sector) which employ researchers on a contractual basis or which host them under other types of contracts or arrangements. Employers from the non-academic sector are encouraged to comply with all those principles of the C&C, especially when performing publicly funded research. In particular, they are encouraged to comply with the "Research and ethical principles" as they are fundamental to foster excellent research. Employers from the non-academic sector may, in occasions, encounter difficulties comply with some of the principles as they may collide with their competitiveness power. The C&C encourages employers from the non-academic sector to carefully evaluate these situations and to make sure they do not contravene the C&C principles.

The pillars and 31 principles of Goal 2 proposal for a revamped C&C

New, renamed, merged and existing principles are tagged as such. ALL THE DEFINITIONS HAVE BEEN EDITED FROM THEIR CURRENT VERSIONS.

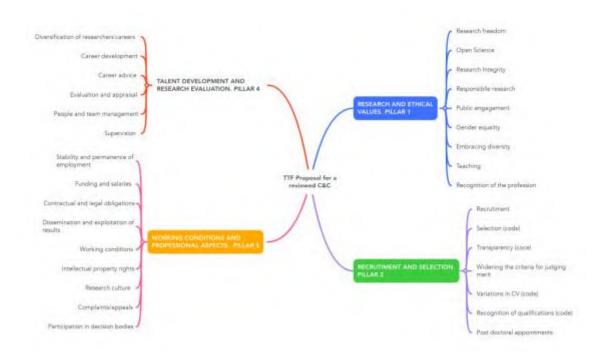


Figure 2. Triangle task force proposed pillars and principles

PILLAR 1. RESEARCH AND ETHICAL PRINCIPLES

This pillar gathers the fundamental principles of the European C&C and its commitment towards supporting excellence in research, understood as fostering the best possible research teams and projects and free from gender and other biases. The principles under this pillar are expected to contribute to the foundations of the vision of a revitalized 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 C&C principles.



Figure 3. Research and ethical principles

RESEARCH FREEDOM

Existing principle in the current C&C

Research should focus on the good of humanity and nature and on expanding the frontiers of scientific knowledge, while guaranteeing researchers the freedom of thought and expression, and the freedom to identify methods by which problems are solved, according to recognised ethical principles and practices. As a result of particular research circumstances (including supervision/guidance/management) or operational constraints, (including budgetary, strategical or infrastructural reasons) could result in certain limitations to this freedom. Such limitations, however, should not, contravene recognised ethical principles and practices, to which all stakeholders have to adhere.

Research freedom in higher education institutions is intimately linked to academic freedom, which includes the freedom to teach ideas and facts. This freedom is confined to the academic discourse and needs to be reconciled with due respect to ethical principles.

OPEN SCIENCE

New principle for a revamped C&C

Open Science practices should be encouraged and become the norm, especially when performing publicly funded research, as it improves the transparency, quality, efficiency and responsiveness of research and the trust of society in science. Open Science will enable open access to research publications and research data and foster innovation in sharing research knowledge as early as possible in the research process, through adequate infrastructures and tools. Open access to research data adheres to the principle "as open as possible as closed as necessary", and takes into account legitimate interests or constraints such as intellectual property rights of third parties, personal data protection or security. The management of research data in line with the FAIR principles ("Findable", "Accessible", "Interoperable", "Reusable") should be ensured. The participation of industry, public authorities, civil society representatives and citizens in the research and innovation processes should be encouraged where appropriate.

RESEARCH INTEGRITY

New principle for a revamped C&C

Research should aim at defining and complying with the highest standards of ethics and integrity in the performance and governance of research and innovation and comply with the following dimensions:

- Reliability in ensuring the quality of research, reflected in the design, the methodology, the analysis and the use of resources.
- Honesty in developing, undertaking, reviewing, reporting and communicating research in a transparent, fair, full and unbiased way.
- Respect for colleagues, research participants, society, ecosystems, cultural heritage and the environment.
- Accountability for the research from idea to publication, for its management and organisation, for training, supervision and mentoring, and for its wider impacts.

RESPONSIBLE RESEARCH AND INNOVATION

New principle for a revamped C&C

Research and innovation processes need to strive towards the participation of societal actors when this is of relevance, in order to responsibly consider the values, needs and expectations of society throughout both the process and the research and innovation results. In the same way, environmental considerations should be mainstreamed, seeking to avoid negative environmental impacts.

PUBLIC ENGAGEMENT

Existing principle in the current C&C

Research should be shared with society at large in ways that it can raise the interest of non-specialists, and benefit research by better understanding the public's concerns. Public engagement needs to be understood as a two way process.

GENDER EQUALITY

Renamed principle (former gender balance)

Gender Equality includes fostering gender balance in research teams, managerial, decision-making bodies, recruitment and promotion committees, and advisory groups. Also, it 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 shall be understood from an intersectional perspective, where different systems of power between gender and other social categories and identities intersect and reinforce each other. Sustainable institutional changes, channelled through Gender Equality plans or similar, that allow for proper reporting of infringements, and include monitoring and evaluation systems, are adequate mechanisms to promote Gender Equality.

EMBRACING DIVERSITY

Renamed principle (former non-discrimination)

Actively fostering equal opportunities for all and dynamic, diverse, and inclusive research systems both in terms of participation in research and in the integration of human diversity in research, teaching and innovation content improve the scientific quality, excellence, and societal relevance of the produced knowledge by identifying and eliminating barriers to participation, supporting and empowering underrepresented people, and creating an inclusive work environment where diverse voices are valued, respected and heard.

No discrimination against any researchers in any way on the basis of gender, age, ethnic background, national or social origin, religion or belief, affective and sexual relations, language, disability, political opinion, social or economic condition, etc. (and its intersections) should occur in research environments.

TEACHING

Existing principle in the current C&C

Research and higher education teaching should be mutually supportive and be valued in parity. Teaching should benefit from and make use of scientific knowledge and promote research interest among students. Teaching responsibilities (lecturing, tutoring, etc.) should be acknowledged as a common responsibility of stakeholders in research and should be adequately remunerated and taken into account in the evaluation/appraisal systems. This common responsibility should allow early stage researchers to carry out their research satisfactorily and senior researchers to share their knowledge and competences with students. Academic career schemes should reflect engagement in research and teaching and suitable training and resources should be provided for teaching and coaching activities as part of the professional development of researchers.

RECOGNITION OF PROFESSION

Existing principle in the current C&C

Researchers engaged in a research career should be recognised as professionals and be treated accordingly, also in their role as higher education teachers. 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 (e.g. employee, postgraduate student, doctoral candidate, postdoctoral fellow, civil servants, etc.)

PILLAR 2. RECRUTIMENT AND SELECTION

Open, transparent, merit-based recruitment and selection of researchers' policies are fundamental for achieving an open labour market for researchers and the "Research and ethical principles" of the C&C. This pillar gathers the main recruitment and selection principles the Charter and Code wants to promote. The "Research and ethical principles" are expected to be mainstreamed in this pillar.

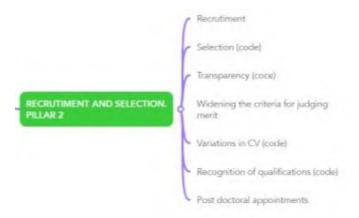


Figure 4. Recruitment and selection principles.

RECRUITMENT

Merged principle in the current C&C (from the "recruitment" principle in the "Code" and the "recruitment" principle in the "Charter")

Clear entry and admission standards for researchers are fundamental to guarantee fair, trust-worthy recruitment systems. These standards need to foster Gender Equality and access for disadvantaged groups.

Recruitment procedures should be open, transparent, merit-based, efficient, internationally comparable and aim at reaching out to the widest pool of candidates and selecting the optimal applicant for the position. They should seek for excellence, Gender Equality, diversity, and be tailored to the type of position advertised. Advertisements should give a broad description of knowledge and competencies required, and should not be so specialised as to discourage suitable applicants. A description of the working conditions and entitlements, including career development prospects and Gender Equality and diversity policies should be included. Moreover, the time allowed between the advertisement of the vacancy or the call for applications and the deadline for reply should be realistic.

SELECTION (CODE)

Existing principle in the current C&C

Selection committees should bring together diverse expertise and competences, have an adequate gender balance and, where appropriate and feasible, include members from different sectors (public and private), disciplines, countries, and cultural backgrounds, and with relevant experience to assess the candidates. Whenever possible, a wide range of selection practices should be used, such as external expert assessment and face-to-face interviews. Members of selection panels should be adequately trained, especially for minimizing gender or any other possible unconscious biases.

TRANSPARENCY (CODE)

Existing principle in the current C&C

Candidates should be informed, prior to the selection, about the recruitment process and the selection criteria, the number of available positions and the career development prospects. They should also receive adequate timely feedback during the application and selection process also when they were not selected.

WIDENING THE CRITERIA FOR JUDGING MERIT (CODE)

Merged principle

Notes: Includes now recognition of mobility experience and adds recognition to Open Science practices and impact of research

The selection process should take into consideration the whole range of experiences³ of the candidates.

This means that merit should be judged more qualitatively than quantitatively focusing on outstanding results within a diversified career path and with a clear recognition of good research management and any positive scientific, technological, economic and/or societal impact of diverse research outputs and not on the number of peer reviewed publications in high impact factor journals. Consequently, a wide range of evaluation criteria could be used in accordance to the position and career stage, such as the quality and experience of the candidates in scholarly communication, teaching, supervision, teamwork, knowledge transfer, science advice, management of research and innovation, public awareness, contribution to patents, developments or inventions, etc.

Any purposeful international, interregional, inter-sectoral or interdisciplinary mobility, being physical or virtual (the latter meaning performing research a limited time at another organisation by using its resources and/or infrastructures and/or or by being supervised by a researcher affiliated to that institution without being physically present), should be considered as a valuable contribution to the professional development of a researcher.

Open Science practices (early and open sharing of research, open access publishing, FAIR management of research data and other outputs, participatory research practices such as Citizen Science, etc.) should also be considered as a valuable contribution to fostering excellence, effectiveness, transparency and integrity and not only productivity of the research system.

VARIATIONS IN THE CHRONOLOGICAL ORDER OF CVS (CODE)

Existing principle

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 multidimensional career track. Unjust penalization of career breaks should be equally avoided in the case of maternity leave. Candidates should therefore be allowed to submit CVs reflecting a representative array of achievements and qualifications appropriate to the post for which the application is being made.

³ See also Evaluation/Appraisal systems principle

RECOGINITON OF QUALIFICATIONS (CODE)

Merged principles with seniority

The levels of qualifications required should be in line with the needs of the position and not be set as a barrier to entry. Recognition and evaluation of qualifications should focus on judging the achievements of the person rather than his/her circumstances or the reputation of the institution where the qualifications were gained.

Appropriate assessment and evaluation of the academic and professional qualifications, (including non-formal qualifications of all researchers -in particular within the context of international and professional mobility and qualifications gained at early stages of a long career) needs to be guaranteed. Procedures, existing national laws, conventions and specific rules on the recognition of these qualifications need to be correctly applied when assessing qualifications.

POST-DOCTORAL APPOINTMENTS

Existing principle

Clear rules and explicit guidelines for the recruitment and appointment of postdoctoral researchers, including recommended duration and the objectives of such appointments, should be established by the institutions appointing postdoctoral researchers. Such guidelines should take into account the 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

PILLAR 3. WORKING CONDITIONS AND PROFESSIONAL ASPECTS

Improving researchers working conditions is at the core of the C&C. The principles under this pillar contribute to the stability of employment, to the definition of researchers' labour rights and obligations and to the recognition of the research profession. The "Research and ethical principles" are expected to be mainstreamed in this pillar.



Figure 5. Working conditions and professional aspects.

STABILITY AND PERMANENCE OF EMPLOYMENT

Existing principle in the current C&C

Increased stability of employment contracts should be fostered by all stakeholders. The implementation of the principles and terms laid down EU Directive of Fixed-Term Work⁴ would contribute to this aim.

FUNDING AND SALARIES

Existing principle in the current C&C

Researchers at all career stages, regardless of their contractual situation, should enjoy fair and attractive conditions of funding and/or salaries with adequate and equitable social security provisions (including sickness and parental benefits, pension rights and unemployment benefits) in accordance with existing national legislation and with national or sectoral collective bargaining agreement. Gender pay equity should be at the core of this principle.

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⁴ Which aims to prevent fixed-term employees from being treated less favourably than similar permanent employees, to prevent abuse arising from the use of successive fixed-term contracts, to improve access to training for fixed-term employees and to ensure that fixed-term employees are informed about available permanent jobs. Council Directive 1999/70/EC concerning the "Framework Agreement on fixed-term work" concluded by ETUC, UNICE and CEEP, adopted on 28 June 1999.

CONTRACTUAL AND LEGAL OBLIGATIONS

Existing principle in the current C&C

National, sectoral or institutional regulations governing training and/or working conditions need to be acknowledged and complied with. All stakeholders need to introduce the necessary safeguards to assure that legal requirements covering working conditions are duly applied. This includes Intellectual Property Rights regulations, and the requirements and conditions of any sponsor or funders, independently of the nature of their contract

WORKING CONDITIONS

Existing principle in the current C&C

Working conditions for researchers, including for researchers with disabilities, should provision where appropriate of the flexibility deemed essential for successful research performance in accordance with existing national legislation and with national or sectoral collective-bargaining agreements. They should aim to provide working conditions which allow researchers to attend to their caring needs family members and combine care and work. Particular attention should be paid, inter alia, to flexible working hours, part-time working, tele-working and sabbatical leave, as well as to the necessary financial and administrative provisions governing such arrangements.

DISSEMINATION, EXPLOITATION OF RESULTS

Existing principle in the current C&C

Fostering wide dissemination and exploitation of research results is at the core of the objectives of the C&C. All stakeholders should take the necessary measures to ensure that research outputs are widely disseminated, made openly available, communicated to expert and non-expert audiences following, when possible, Open Science practices. Stakeholders should be open to exploitation by others and to possible commercialisation of their research results.

INTELLECTUAL PROPERTY RIGHTS

Existing principle in the current C&C

Intellectual property policies and practices should specify what rights belong to researchers and/or, where applicable, to their employers or other parties, and should ensure that researchers reap the benefits of the exploitation (if any) of their results. These policies need to support adequate IP management by researchers, which is also at the core of open science.

The exploitation of research results policies should ensure that researchers at all career stages reap the benefits (if any) of their R&D results. Policies need to be put in place to allow for a comprehensive view and understanding of IP, to enable an adequate IP management.

RESEARCH ENVIRONMENT

Existing principle in the current C&C

All stakeholders should foster the most stimulating research environment by building appropriate equipment, facilities, services and opportunities and by investing in qualified human resources both in the research workforce and support staff. Next to that, they should provide an atmosphere that allows every individual to fully make use of their talents and develop their careers. These facilities and incentives should especially facilitate the necessary infrastructures and means and training to practice Responsible Research and Innovation, Research Integrity, Open Science, and virtual mobility. Also, they should ensure that the national or sectoral regulations concerning health and safety in research are observed. Finally, a positive research culture that supports all individuals involved and aiming at excellence, Gender Equality, diversity, and, non-discrimination and collaboration should be nurtured".

COMPLAINTS/APPEALS

Existing principle in the current C&C

Procedures need to be established in compliance with national rules and regulations. 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, non-discriminatory and equitable treatment within the institution and improving the overall quality of the working environment In particular, these procedures need to facilitate complaints/appeals of researchers regarding conflicts between supervisor(s) and early-stage researchers, and protection against multiple forms of non-healthy behaviour, including gender based violence and sexual harassment.

PARTICIPATION IN DECISION MAKING BODIES

Existing principle in the current C&C

The participation of researchers in the relevant information, consultation and decision-making bodies of the institutions for which they work guarantees the promotion and protection of their individual and collective interests as professionals and the active contribution to the functioning of their institutions. This participation should ensure Gender Equality and a fair representation of diversity in the research community. All stakeholders must recognize and foster this participation.

PILLAR 4. TALENT DEVELOPMENT AND RESEARCHERS' EVALUATION

The researcher community is diverse in talents, skills, competences and capacities. The more these talents are fostered and developed, the better scientific quality, excellence, and societal relevance of the produced knowledge. Researchers' evaluation is a key tool to foster a researchers' community that makes the most out of everyone's talent. The principles under this pillar aim at contributing to this vision. The "Research and ethical principles" are expected to be mainstreamed in this pillar.



Figure 6. Talent development and research evaluation

DIVERSIFICATION OF RESEARCHERS CAREERS

New principle for the revamped C&C

The research community is diverse in talents and expertise and produce a wide range of research outputs (from scholar publications to scientific advice for policy makers, science communication to the public, higher education teaching, knowledge transfer to industry, and many others). All stakeholders need to put in place the necessary measures (from training to recruitment, reintegration and career development) to foster different career paths within the research profession that guarantees room for every talent rendering to richer research results.

CAREER DEVELOPMENT

Existing principle

Career development strategies for researchers are a fundamental tool for researchers at all stages of their career, regardless of their contractual situation. These strategies should encourage the professional development and improvement of employability of researchers through continuing development of skills and competences as to make them suitable for employment opportunities across different sectors.

CAREER ADVICE

Existing principle

Career advice and job placement assistance, s a key service for researchers at all stages to so they can explore and be informed about their career options, assess their assets and gaps when aspiring to certain jobs and, ultimately, maximize their employability. Moreover, services connecting research institutions with other industrial and public sector institutions through the mobility of highly skilled professionals will contribute to maximizing the impact of research in society.

EVLUATION/ APPRAISAL SYSTEMS

Existing principle in the current C&C

Evaluation/appraisal systems for assessing the professional performance of researchers on a regular basis need to be put in place in order to foster their potential and value.

These systems should focus on evaluating outstanding results within a diversified career path. They should promote qualitative judgement with peer-review, supported by responsible use of quantitative indicators. They should reward the quality and (potential) impact of research, and research that meets the highest standards of ethics and integrity. They should consider and value transparent research processes and methods, as well as the diversity of research activities and outputs, and not be based on the number of peer reviewed publications in high impact factor journals. These systems need to be performed in a transparent manner by an independent, duly trained committee (and, in the case of senior researchers, preferably international) as to ensure that evaluations and appraisals are free from any gender and other types of unconscious biases. Career breaks or variations in the chronological orders of CVs should be duly assessed so they are not unjustly penalised.

Such evaluation and appraisal procedures should take due account of their overall research creativity and research outputs, e.g. publications, patents, science advice and communication activities, management of research, fund raising, teaching/lecturing, supervision, mentoring, national or international collaboration, administrative duties, public awareness activities and mobility (including virtual mobility), and should consider favourably Open Science practices. The evaluation and appraisal procedures should be taken into consideration in the context of career progression.

PEOPLE AND TEAM MANAGEMENT

New principle

Proper people and team management are crucial in research working environments as research is by definition a joint endeavour. The necessary training, tools and evaluation mechanisms should be put in place as to ensure that senior and leading researchers are capable of managing their staff and teams in a fair and non-discriminatory manner, free of gender and other types of biases, and are capable of establishing fruitful and cooperative working relationships to their peers. Equally, early stage researchers should be trained and the practice team science be fostered. This should contribute toa healthy, fair, work-life balance, as well as friendly, creative environments where every individual is respected, duly motivated, recognized and their general well-being fostered. Also, all sorts of collaborations (multidisciplinary, multi-stakeholder, cross-border etc.) should be fostered and acknowledged. People and team management merits should be taken into account both in recruitment and appraisal processes.

SUPERVISION

Merged principle (from supervision and managerial duties and relation with supervisors)

The role of supervision is essential in the training and development of early stage researchers, and the necessary measures need to be put in place to provide it to the highest professional standards. A constructive and positive relationship, should be built up where mutual trust is fostered. Also, it should set the necessary conditions for the development of early stage researchers' skills and competences and a successful development of their careers, their general well-being, and an adequate work-life balance.

Supervision standards should be structured and acknowledged and include the record-keeping of all work progress and research findings, the gathering of feedback from the supervisor by means of reports and seminars, and the compliance with agreed schedules, milestones, deliverables and/or research outputs.

Measures to train and evaluate supervisor's adhesion to these standards should be put in place.

NEXT STEPS

The Triangle Task Force Goal 2 members consider the objective of reviewing the Charter and Code in the light of the new ERA met. However, there are a number of aspects that may require further work and reflection:

- Open up a dialogue with non-academic employers. Although the Charter and Code addresses non-academic employers, the adhesion from this sector is barely nonexistent. A better communication with the sector to better understand their needs and human resources policies when recruiting researchers may render to more integration and commitment with the C&C
- Consider the inclusion of non-academic staff as beneficiaries of the Charter and Code. Non-academic staff is essential for the well-functioning of research and, as research career paths widen and expand, the barriers between academic and non-academic become blurrier. It might be necessary to study whether a duly adapted C&C may also become a framework for non-academic staff.
- Coordination with the European Commission's own evaluation of ERA priority 3. The
 European Commission is undertaking a study on the way forward for the ERA priority 3
 policy measures. It is expected that Goal 2 work will be taken into consideration in this
 study and will contribute to the way forward.
- One Charter &Code, several Toolkits. The idea of developing one Charter and Code (with the main values and principles of European human resources in research policies) and different "toolkits" (in the same fashion of the Open, Transparent, Merit based-recruitment toolkit) has been discussed within the group as a means to continuously evolve the C&C while keeping the "core principles" intact. This idea could be further explored and it is aligned with the current proposal in which the core principles of the C&C have been grouped under Pillar 1 (Research and ethical principles).
- The Open, Transparent, Merit-based recruitment toolkit.
 - The Open, Transparent, Merit-based recruitment toolkit was issued as part of the Human Resources Strategy for Researchers. This guide sets out, in chronological order, the various steps of the recruitment process, from the job advertising/application phase to the appointment phase. It aims to build on the principles of the Code of Conduct for the Recruitment of Researchers, providing more detailed information, practical solutions and including examples of good practice. Goal 2 members are aware that this toolkit could have been reviewed in the context of the new ERA objectives as well, but it was kept out of the scope of this work because of it being part of the strategy and not the C&C.

ANNEX 1

MEMBERS OF GOAL 2 WORKING GROUP

NAME OF EXPERT	POSITION	COUNTRY
Cabello, Cecilia	Chair of the Standing Working Group on Human Resources and Mobility (SWGHRM) and Chair of the Triangle Task Force (TTF)	Spain
Lacunza, Izaskun	Chair of the TTF Goal 2	Spain
Eekhout, Xavier	Rapporteur of the TTF Goal 2	Spain
Linková, Marcela	Chair of the Standing Working Group on Gender in Research	Czech
	and Innovation	Republic
Vanholsbeeck, Marc	Chair of the Standing Working Group on Open Science and Innovation	Belgium
Álvarez, Mónica	Member of the Standing Working Group on Human Resources and Mobility (SWGHRM)	Spain
Bamert, Brita	Member of the Standing Working Group on Human Resources and Mobility (SWGHRM)	Switzerland
Biglia, Chiara	Member of the Standing Working Group on Human Resources and Mobility (SWGHRM)	Italy
Buraczewska, Izabela E.	Member of the ERAC Standing Working Group on Human Resources and Mobility (SWGHRM)	Norway
Costache, Mihaela	Former officer at the European Commission (RTD A3)	European
		Commission
Degand, Martin	Vice-Chair of the Standing Working Group on Gender in Research and Innovation	Belgium
Duda, Gerhard	Member of the Standing Working Group on Human Resources and Mobility (SWGHRM)	Germany
Gourova, Elissaveta	Member of the Standing Working Group on Human Resources and Mobility (SWGHRM)	Bulgaria
Jerolimov Cetina, Lana	Member of the TTF Goal 2, assigned delegate by the Croatian Ministry of Science and Education	Croatia
Koebrunner, Marlene	Member of the Standing Working Group on Human Resources and Mobility (SWGHRM)	Austria
Lanting, Dorien	Member of the TTF Goal 2 and policy advisor at the Dutch	The
	Ministry of Education, Culture and Science	Netherlands
Rosa-Clot, Michele	Officer at the European Commission (RTD A3)	European Commission
Sancho, Laura	Officer at the European Commission (RTD A3)	European Commission
Sorcan, Stogan	Member of the Standing Working Group on Human Resources and Mobility (SWGHRM)	Slovenia
Spigarelli, Francesca	Member of the Standing Working Group on Human Resources and Mobility (SWGHRM)	Italy
Tiba, Anca	Former officer at the European Commission (RTD A3)	European Commission
Vögeli, Stephanie	Former member of the Standing Working Group on Human Resources and Mobility (SWGHRM)	Switzerland

METHODOLOGY OF GOAL 2

The Goal 2 working group counts with experts from the three standing working groups on ERA. So far, Goal 2 has celebrated 5 webinars in which different aspects of the C&C have been discussed and where different agreements have been made. Next, a brief summary of the content of the webinars is offered. The work performed in the webinars has been iterative: this means that the discussions and agreements on the different topics (priorities, pillars, stakeholders definitions, etc.) have taken place throughout the whole process.

Webinar 1. 16th July 2020. Setting the scene.

- The scope of the work was agreed.
- The appropriateness of the stakeholders (and their definitions) addressed by the C&C and of the current pillars was discussed.
- What dimensions should be emphasized in the C&C and how this emphasis could be done (by adding new principles or mainstreaming them throughout the current principles) was discussed.

Webinar 2. 10th October 2020. C&C stakeholders and pillars.

- Discussion about the current stakeholders addressed by the C&C and the appropriateness of the definitions.
- The current pillars in which the C&C principles are grouped were analysed and discussed.

Webinar 3. 9th and 16th November 2020. C&C pillars and principles.

- Agreements regarding the renaming, merger, reallocation, renaming and "downsizing" of some of the C&C principles and the proposal of new principles.
- Discussion about the possibility of the first C&C pillar to become the "core principles" of the C&C and the need to mainstream these values throughout the whole C&C.
- Agreement to organize a stakeholder consultation.

Webinar 4. 4th February 2021. C&C principles and definitions.

- Fine tuning the agreements regarding the principles of the revamped C&C.
- Discussion about the definitions of the principles and how to make it clear that all principles should be addressed by all the involved stakeholders in their own capacities.

Webinar 5. 23rd June 2021. Putting together the report and next steps.

- Editing of v 1.0 of the report "Review of the European Charter and Code of Conduct for the recruitment of researchers. Main conclusions of the Goal 2 Triangle Task Force"
- Agreement on publication in the EURAXESS library in July 2020 and delegates from the SWGHRM and Goal 2 members to disseminate and ask for written input until September 15th.

Webinar 6. 22nd October 2021. Review of stakeholder input to the report

- Reviewing the input from stakeholders in order to analyse the nature of their input
 and discuss the appropriateness of its inclusion in version 2.0. In general terms, most
 of the input was very appropriate and welcome and goal 2 members agreed on its
 inclusion.
- Agreeing on version 2.0 of the report

STAKEHOLDERS CONSULTATIONS DURING THE PROCESS

Informal stakeholder consultations

The Chair or the Triangle Task Force and the Chair of Goal 2 have met with a number of stakeholders upon their request. In the meetings, the scope and context of Goal 2 work has been explained and a future open stakeholder consultation been announced.

The progress of Goal 2 has also been presented in the first quarter of 2021 meetings of the SWGHRM and the SWGRI and a presentation has been shared with the SWGOSI. It has also been presented in the 15th December 2020 ERAC workshop.

Finally, the progress of Goal 2 has also been presented in the workshop "Fostering research careers in Europe: tools to support implementation of the new ERA", which is part of a study commissioned by the European Commission entitled: "Taking stock, evaluating the achievements and identifying a way forward for the ERA Priority 3 policy measures". The study is gathering evidence on the existing policy measures, including the Charter for Researchers and the Code of Conduct for the Recruitment of Researchers, and the Human Resources Strategy for Researchers.

Open stakeholder consultation. July 2021-October 2021

The first version of this report was published in July in the EURAXESS policy library section and widely disseminated through the relevant ERAC Standing Working Groups. Delegates were asked to reach out to their national stakeholders in order to get as much feedback as possible. As a result of the call, more than 15 contributions (either from individual institutions or associations) were received. Goal 2 members reviewed and discussed the input and much was incorporated.