UPV HRS4R application

CASE NUMBER: 2019ES368935 - UNIVERSITAT POLITÈCNICA DE VALÈNCIA

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PROCESS

Introduction

The HRS4R process must engage all management departments directly or indirectly responsible for researchers' HR-issues. These will typically include the Vice-Rector for Research, the Head of Personnel, and other administrative staff members. In addition, the HRS4R strategy must consult its stakeholders and involve a representative community of researchers ranging from R1 to R4, as well as appoint a Committee overseeing the process and a Working Group responsible for implementing the process.

People involved

Please provide the name, the position and the management line/ department of the persons who are directly or indirectly engaged in the HRS4R process in your organisation.

Name	Position	Management line / Department
Francisco José Mora	Rector	University
Rosa Puchades	Vice-rector	Social Responsibility and Cooperation
José E. Capilla	Vice-Rector	Research, Innovation and Technology Transfer
Eduardo Vendrell	Vice-Rector	Studies, Quality and Accreditation
José Manual Barat	Vice-Rector	Academic Planning and Faculty
María Consuelo Jiménez	Vice-Rector	Planning and Foresight
José Luis Cueto	Vice-Rector	Students, Culture and Sports
José Millet	Vice-Rector	Employment and Entrepreneurship
Virginia Vega	Vice-Rector	Digital Resources and Documentation
Marilda Azulay	Vice-Rector	Campuses and Sustainability
Juan M. Martínez	Vice-Rector	Rector's Office
Josep A. Claver	Secretary General	Legal Office
Salvador F. Navarro	Bursar	University Management
Agustín Blasco	Full Professor / Director	Department of Animal Science
Ana Albalat	PhD Candidate	Department of Linguistics

Name	Position	Management line / Department
Ivana Gasulla	Researcher	Institute for Telecommunications and Multimedia Applications
Fernando Conesa	Director	Technology Transfer Office
Eduardo Tomás	Director	Research Management Office
Mª José Iza	Director	Human Resources Office
Carlos Ripoll	Director	Institutional Projects and Student Experience
Sergio Marí / Alberto Conejero	Director	Legal Office
Carlos Fernández	Researcher	Trade Unions

Consultation groups

Your organisation must consult its stakeholders and involve a representative community of researchers ranging from R1 to R4, as well as appoint a Committee overseeing the process and a Working Group responsible for the implementation of the HRS4R process. Provide information on how the above groups were involved in the GAP-analysis.

Governing Council

The Governing Council is the highest governing body of the university. Among its main functions is "to establish the strategy of the university and the necessary implementation processes to put strategy in practice. Its main areas of competences include regulations in teaching, research, human resources, economic resources and budget preparation. Its members are: the Rector, the Secretary General, the Bursar, three representatives from the Social Council (see below) and 50 members from the whole university community according to this criterion: 15 members appointed by the Rector, including the Vice-Rectors, 20 representatives from the University Senate chosen by peers, 6 Deans, 6 Department Directors, 3 Research Institute Directors.

The decision to implement the HRS4R strategy was taken early before the HRS4R process started, on 2014, with the approval of the university strategic plan by the Governing Council. Since that the university committed itself to pursue the principles stated on European Code and Charter for Researchers (2005/251/EC). On the 28th of October 2016, the Governing Council approved a proposal by the Vice-Rector for Research, Innovation and Technology Transfer to set up the HRS4R Steering Committee, that would be in charge of overseeing the design of the HRS4R planning phase. On the 13th of April 2018, the Governing Council approved an update on the composition of the HRS4R Committee due to changes in the university management.

On the 19th of December 2019 the Vice-Rector for Research, Innovation and Technology Transfer presented the Gap Analysis and Action Plan, that was subsequently approved by the Governing Council. Afterwards it was sent for approval to the Social Council (See below).

Social Council

The Social Council is defined as a "participatory body of the society in the university", acting as a link between the university and different social agents like companies, the Regional Government, the Valencian municipality, trade unions or professional bodies. In addition it includes 6 representatives from the university community, including   the Rector, the Secretary General, the Bursar and 3 members elected by the Governing Council. Among its main functions is supervising economic activities and monitoring institutional performance. Additionally, it also aims to foster public-private partnerships as funding instruments for the University in the fields of teaching, research and technology transfer.

On the 19th of December 2019 the Vice Rector for Research, Innovation and Technology Transfer presented the final version of the Gap Analysis and Action Plan and it was approved by the Social Council.

University Senate

The University Senate is the highest representative body of the university community. It is composed by the Rector, who chairs the sessions, the Secretary General, who acts as a secretary during Senate meetings, the Bursar and 300 members from the university community. Among those 300 members, there are 4 Vice-Rectors, the Deans of the 17 Schools and Faculties and the Student Union Representative. The rest of the Senate includes a range of academics, students and administrative staff derived from the results of an electoral process participated by the whole university community.

Among its main functions is "to debate on the Annual Report from the Rector regarding the situation of the University". As part of the Annual Report, the Vice-Rector for Research, Innovation and Technology Transfer, was called to present the HRS4R process during the session held on the 26th of October 2017.

University Management Council

The University Management Council is a body aimed to coordinate the executive branch of the institution. It is chaired by the Rector, who supervises a team conformed by 10 Vice-rectors, the Bursar and the Secretary General.

Under the premises established by the Strategic Plan, on the 11th of September 2016, the Vice-Rector for Research, Innovation and Technology Transfer presented a concrete proposal to initiate the HRS4R process and a draft of the composition of the Steering Committee.

For the whole duration of the HRS4R process definition, the Vice-Rector for Research, Innovation and Technology Transfer presented to the University Management Council quarterly reviews to monitor and give feedback on the progress of the HRS4R process.

On the 11th of November 2019, the Vice-Rector for Research, Innovation and Technology Transfer presented the last version of the Gap Analysis and the Action Plan to the University Management Council and informed about his intention to submit it to the Governing Council for approval.

Steering Committee

The purpose of the Steering Committee is to supervise the HRS4R process. It is chaired by the Vice-Rector for Research, Innovation and Technology Transfer, who acts as a link between the Steering Committee and the other decision-making bodies involved in the process (i.e. the University Management Council, the University Senate, the Social Council and the Governing Council). In addition, the Vice-Rector for Research, Innovation and Technology Transfer was in charge of appointing Steering Committee members. The criterion followed to set up the Steering Committee is described on the next section. The list of members was sent for approval to the Governing Council, which ratified its composition on the 28th of October 2016. Later on, due to changes on the university governing structure, it was approved an update on the list of members on the 13th of March 2018.

The Steering Committee met 6 times during the whole duration of the definition of the HRS4R process (28th of September 2016, 2nd of November 2016, 25th of January 2018, 28th of June 2018 and 27th of November 2019).

During the first meeting the Director for Institutional Projects was officially endorsed to conduct the whole process and to report to the Steering Committee on the different achievements of the design of the HRS4R process. On subsequent meetings the Director for Institutional Projects conveyed, among other things, a proposal for the HRS4R process, the results from the different working group sessions, a proposal for the online survey, a proposal of the gap analysis, a proposal of the action plan, a proposal for the dissemination event and a tentative website. All proposals were acknowledged by the Steering Committee.

In order to conduct the Gap Analysis, it was agreed to combine a qualitative analysis, using the focus group methodology, with a quantitative analysis by means of an online survey addressed to the whole university community. The qualitative analysis would collect the raw material that would help on the identification of areas to focus, whilst the quantitative analysis would serve as a mean to quantify how important was each of the detected areas.

Due to the complexity of the university, it was suggested to develop the qualitative analysis by deploying 4 thematic working groups based on the Charter and Code Principles areas: Working group on Ethical and Professional issues (WG1), Working Group on Recruitment (WG2), Working Group on Working Conditions and Social Security (WG3) and Working Group on Training and Career development (WG4). Each working group included representatives from R1-R4 and also members from the different areas involved in research (i.e. technology transfer management, human resources management, research management, trade unions and the legal department). For each working group a report was produced by the Director of Institutional Projects. Each report served as the grassroots to build up the gap analysis, the action plan and the online survey.

In addition to those 4 working groups, an ad-hoc fifth working group (WG5) was created to carry on with the analysis of the current legal framework. This group was composed by the Director of the Legal Office and the Director of Human resources. The Director of Institutional Projècts acted as facilitator.

The Steering Committee had a crucial role on validating a preliminary proposal of the Gap Analysis and the Action Plan. This preliminary proposal was the base to set up an online survey that would act as a quantitative method to validate the areas and actions detected during the qualitative phase by means of focus groups and internal meetings. It was used a specific methodology to validate the preliminary version of both the Gap Analysis and the Action Plan that would help on reaching an agreement among Steering Committee members: participants in the Steering Committee were presented with a list of 100 statements extracted from working group contributions and organised in the same terms as the Charter and Code principles. For each statement each member was asked to express the level of acknowledgement he/she. It was used a scale ranging from 1 (Totally in disagreement) to 5 (Totally in agreement). Eventually, scores from all member were presented on a table format highlighting those statements with higher divergence on the scores acknowledged. Each member was asked to justify his/her score. Finally a list of gaps and actions was produced. This list was used to set up a survey that was prompted to the whole research community of the university (2.495 researchers). The number of respondents to the survey was 1.374, almost 60% of the entire population. This represents a very good metric of the level of involvement of the whole university in this process.

Working Group 1: Ethical and Professional Aspects

The purpose of the Ethical and Professional working group is to perform a qualitative analysis on each of the 11 aspects defined by the Charter and Code in this field. The group was chaired by Mr. Eduardo Tomás, Director of the Research Management Office. The session was facilitated by Dr. Carlos Ripoll, Director of Institutional Projects who, in addition, was in charge of compiling all the issues raised by participants during the session, and in producing the final report of the group.

Participants to this working group were selected by the Steering Committee. The selection criterion (see later) sought to have at least one representative of each researcher career stage (R1 to R4). As a result, the following people was called to participate: Manuel Monleón (R4), Manuel Alcazar (R4), Pilar Bravo (R3), Mª Victoria González (R3), Ana Albalat (R2), Gerardo Martínez (R1) and Marcos Carreres (R1). In addition to this, it was included a representative from the Research Management Office, Dr. Concepción Ginestar, a representative from the Technology Transfer Office, Dr. Mª Carmen Rodrigo and a representative from Trade Unions, Dr. Carlos Fernández.

A 3 hours session was held on the 30th of March 2017 to work on ethical and professional issues. Participants received in advance the list of the 11 aspects of this area, the description for each one stated by the Charter and Code, the methodology and what was expected from the session.

The session started with an introduction to the topic, that was made by the chairperson and the Director of Institutional Projects. Afterwards, an average of 2 aspects were assigned to

each participant. Then, participants had 10 minutes of individual work, to think in terms of strengths and weakness about how the university was performing on each of the aspects that they had been assigned. Eventually, during a final discussion, each participant had the opportunity to present their reflections on each aspect and have feedback from other participants. The Director of Institutional Projects moderated the final discussion to guarantee that all participants could provide their feedback. During the discussion, a mind map was constructed to help on focusing the discussion.

All feedback obtained during the session, including strengths, weaknesses and comments, was compiled by the Director of Institutional Projects on a report entitled "Qualitative analysis of ethical and professional field". The report was sent to the chairperson for validation on the 23rd of January 2018. The final version was structured in 4 sections: participants, methodology, executive summary and a full analysis of each of the 11 aspects covered during the session. The report has 8.802 words and 19 pages.

The document was sent to the Steering Committee on the 25th of January 2018 as part of the Gap Analysis report. The final version of this report is available at the HRS4R website of the university.

Working Group 2: Recruitment

The purpose of the Recruitment working group is to perform a qualitative analysis on each of the 10 aspects defined by the Charter and Code in this field. The group was chaired by Mrs. Mª José Iza, Director of the Human Resources Office. The session was facilitated by Dr. Carlos Ripoll, Director of Institutional Projects who, in addition, was in charge of compiling all the issues raised by participants during the session and in producing the final report.

Participants to this working group were selected by the Steering Committee. The selection criterion (see later) sought to have at least one representative of each researcher career stage (R1 to R4). As a result, the following people was called to participate: Fernando Brusola (R4), Rosa Peiró (R3), Daniel Catalá (R2), Cristian Gil (R1), Joaquín de la Morena (R1) and Valentina Cristini (R1). In addition to this, it was included   a representative from the Research Management Office, Juan Fuster, a representative from the Human Resources Office, Antonio Gimeno and a representative from Trade Unions, Dr. Carlos Fernández.

A 3 hours session was held on the 18th of July 2017 to work on Recruitment issues. Participants received in advance the list of the 10 aspects of this area, the description for each one stated by the Charter and Code, the methodology and what was expected from the session.

The session started with an introduction to the topic, that was made by the chairperson and the Director of Institutional Projects. Afterwards, an average of 2 aspects were assigned to each participant. Then, participants had 10 minutes of individual work, to think in terms of strengths and weakness about how the university was performing on each of the aspects that they had been assigned. Eventually, during a final discussion, each participant had the opportunity to present their reflections on each aspect and have feedback from other participants. The Director of Institutional Projects moderated the final discussion to guarantee that all participants could provide their feedback. During the discussion, a mind map was constructed to help on focusing the discussion.

All feedback obtained during the session, including strengths, weaknesses and comments, was compiled by the Director of Institutional Projects on a report entitled "Qualitative analysis of recruitment field". The report was sent to the chairperson for validation on the 4th of October 2017. The final version was structured in 4 sections: participants, methodology, executive summary and a full analysis of each of the 10 aspects covered during the session. The report has 12.193 words and 27 pages.

The document was sent to the Steering Committee on the 4th of October 2017 as part of the gap analysis report. The final version of this report is available at the HRS4R website of the university.

Working Group 3: Working conditions and social security

The purpose of the Working Conditions and Social Security working group is to perform a qualitative analysis on each of the 14 aspects defined by the Charter and Code in this field. The group was chaired by Mrs. Mª José Iza, Director of the Human Resources Office. The session was facilitated by Dr. Carlos Ripoll, Director of Institutional Projects who, in addition, was in charge of compiling all the issues raised by participants during the session and in producing the final report of the group.

Participants to this working group were selected by the Steering Committee. The selection criterion (see later) sought to have at least one representative of each researcher career stage (R1 to R4). As a result, the following people was called to participate: Salomé Cuesta (R4), Vicente Moreno (R3), Mª Esther Goméz (R2), Stella Heras (R2), Adrián Hernández (R1) and Roberto Montes (R1). In addition to this, it was included   two representatives from the Research Management Office, Dr. Emilio Rayón and Dr. Saturnino del Castillo and a representative from Trade Unions, Dr. Carlos Fernández.

A 3 hours session was held the 22nd of March 2017 to undergo with the topic of Working Conditions and Social Security. Participants received in advance the list of the 14 aspects of this area, the description for each one stated by the Charter and Code, the methodology and what was expected from the session.

The session started with an introduction to the topic, that was made by the chairperson and the Director of Institutional Projects. Afterwards, an average of 2 aspects were assigned to each participant. Then, participants had 10 minutes of individual work, to think in terms of strengths and weakness about how the university was performing on each of the aspects that they had been assigned. Eventually, during a final discussion, each participant had the opportunity to present their reflections on each aspect and have feedback from other participants. The Director of Institutional Projects moderated the final discussion to guarantee that all participants could provide their feedback. During the discussion, a mind map was constructed to help on focusing the discussion.

All feedback obtained during the session, including strengths, weaknesses and comments, was compiled by the facilitator on a report entitled "Qualitative analysis of working conditions and social security field". The report was sent to the chairperson for validation on the 20th of December 2017. The final version was structured in 4 sections: participants, methodology, executive summary and a full analysis of each of the 14 aspects covered during the session. The report has 6.995 words and 16 pages.

The document was sent to the Steering Committee on the 20th of December 2017. The final version of this report is available at the HRS4R website of the university.

Working Group 4: Training and Career Development

The purpose of the Training and Career Development working group is to perform a qualitative analysis on each of the 5 aspects defined by the Charter and Code in that field. The group was chaired by Prof. José Manual Barat, Vice-Rector for Academic Planning and Faculty. The session was facilitated by Dr. Carlos Ripoll, Director of Institutional Projects who, in addition, was in charge of compiling all the issues raised by participants during the session and in producing the final report.

Participants to this working group were selected by the Steering Committee. The selection criterion (see later) sought to have at least one representative of each researcher career stage (R1 to R4). As a result, the following people was called to participate: Javier Ribal (R4), Mercedes Verdeguer (R3), David Gómez (R2), Mª Amparo Borrell (R2), Gerardo Martínez (R1) and Laura Montalbán (R1). In addition to this, it was included a representative from the Career Development Office, Eva González, a representative from the Doctoral Training, Juan Carcel and a representative from Trade Unions, Dr. Carlos Fernández.

A 3 hours session was held the 7th of April 2017 to work on this topic. Participants received in advance the list of the 5 aspects of this area, the description for each one stated by the Charter and Coded, the methodology and what was expected from the session.

The session started with an introduction to the topic, that was made by the chairperson and the Director of Institutional Projects. Afterwards, an average of 2 aspects were assigned to each participant. Then, participants had 10 minutes of individual work, to think in terms of strengths and weakness about how the university was performing on each of the aspects that they had been assigned. Eventually, during a final discussion, each participant had the opportunity to present their reflections on each aspect and have feedback from other participants. The Director of Institutional Projects moderated the final discussion to guarantee that all participants could provide their feedback. During the discussion, a mind map was constructed to help on focusing the discussion.

All feedback obtained during the session, including strengths, weaknesses and comments, were compiled by the facilitator on a report entitled "Qualitative analysis of training and career development field". The report was sent to the chairperson for validation on the 12th of December 2017. The final version was structured in 4 sections: participants, methodology, executive summary and a full analysis of each of the 5 aspects covered during the session. The report has 3.878 words and 10 pages.

The document was sent to the Steering Committee as part of the gap analysis report on the 12th of December 2017. The final version of this report is available at the HRS4R website of the university.

Working Group 5: Legal Framework

The goal of this working group was to identify legal constrains that could affect the development of the HRS4R process. Its members, the Director of the Legal Office and the Director of Human Resources, were in charge of analysing existing European, national and regional legislation together with all internal regulations related with scientific research. The Director of Institutional Projects was in charge of facilitating the whole process and producing a report based on their feedback and some other additional information that could be obtained from research funding bodies.

The result of this working group was a   compilation of 75 regulations, both external and internal to the university. They were presented on a double entrance table format, with regulations in rows and aspects of the Charter and Code in columns. It was then possible to determine the weight of each regulation on each aspect.

In addition to that, it was presented a report containing 3.520 words and 15 pages and covering the key findings of this analysis.

UPV Research Community

The aim of this group is to validate quantitively the work done during previous phases to construct the gap analysis and the action plan. The population for this survey was the whole

research community (2.495 researchers). They were asked to complete an online questionnaire.

The questionnaire was designed with the information obtained from the different working groups after the final validation of the Steering Committee (see above).

Results show how highly committed is the research community with the HRS4R process: the number of respondents to the survey was 1.374, almost 60%% of the entire population, a figure significantly higher than any other HRS4R online survey publicly available in Spain.

Eventually, once the online survey was analysed, we obtained a list of improvement areas prioritised and a list of improvement actions that would be the ground to build the action plan.

Results were presented during a dissemination event on the 22nd of October 2018 called "Designing the Human Resources Strategy at UPV". The goal of this event was to present to the research community the results and to exchange face to face feedback with attendees. For that purpose the whole sessions was designed following round tables and interviews format. Speakers were the Vice-Rector for Research and Technology Transfer, the Director for Institutional Projects, the Responsible of International Science of the Spanish Foundation for Science and Technology (FECYT), the Vice-Rector for Academic Affairs and Faculty, the Director of the Research Management Office, representatives from R1-R4 and a representative from Trade Unions. The session was recorded and is available at the HRS4R website

Trade Unions

The aim of this group is to validate quantitively the work done during previous phases to construct the gap analysis and the action plan. The population for this survey was the whole research community (2.495 researchers). They were asked to complete an online questionnaire.

The questionnaire was designed with the information obtained from the different working groups after the final validation of the Steering Committee (see above).

Results show how highly committed is the research community with the HRS4R process: the number of respondents to the survey was 1.374, almost 60% of the entire population, a figure significantly higher than any other HRS4R online survey publicly available in Spain.

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Committee overseeing the process

The Vice-Rector for Research, Innovation and Technology Transfer (VRITT) was in charge of appointing members for the Steering Committee. The criterion to select its members was to include representatives from each research stage (R1 to R4) and key people involved, on a broad sense, on facilitating research.

Fourteen people were called to become part of the committee. The VIRTT acted as chairperson. Vice-Rector for Academic Planning and Faculty, the Director of Research and Innovation Programs, the Director of Human Resources, the Director of the Office of the Secretary General, the Coordinator of R&D, the Director of the Research Management Office, the Director of the Technology Transfer Office. Additionally, trade unions were called to propose a candidate to be part of the Steering Committee were included. The group the Director of Institutional Projects was added to conduct the process. Finally, a total of 4 researchers (R1 to R4) were appointed. Their role would be to act as representatives from their research mates, appointing also members for the working groups.

The list of members was submitted to the Governing Council, which ratified its composition on the 28th of October 2016. On the 13th of March 2018 an update on the list was approved.

Working Group responsible for the implementation

For the implementation of HRS4R process it has been considered the following parameters: number of researchers (more than 2.400), number of administrative staff (more than 1.600) and number of students (more than 25.000). Research activity is made in departments and in research institutes. In addition, it has also been taken into consideration how the Charter and Code is organised: there are 4 areas and 40 different principles (aspects).

In order to implement the HRS4R process it is foreseen to have the same 4 thematic working groups that were set up for the definition of the HRS4R process: Working group on Ethical and Professional issues (WG1), Working Group on Recruitment (WG2), Working Group on Working Conditions and Social Security (WG3) and Working Group on Training and Career development (WG4). Each working group includes representatives from R1-R4, technology transfer management, human resources management, research management, trade unions and the legal department.

GAP ANALYSIS

Introduction

The Charter and Code provides the basis for the Gap analysis. In order to aid cohesion, the 40 articles have been renumbered under headings called "aspects" grouped in 4 categories. In this document we provide the outcome of our organisation's GAP analysis below. If we do not fully meet the criteria, we provide a list whether national or organisational legislation may be limiting the Charter's implementation, initiatives that have already been taken to improve the situation or new proposals that could remedy the current situation.

Each aspect has been analysed following the methodology described in the document "Process". As a result, there is a level of accomplishment for each aspect, according to the following scale:
- +: fully implemented
- +/-: almost but not fully implemented
- -/+: partially implemented
- - -: insufficiently implemented

Additionally, in each aspect we describe the current situation (gap) and those initiatives undertaken or suggestions for improvement. The document "Action Plan" will select certain actions that are supposed to reduce tha gap we encountered.

The document complies with the following structure:
- Name of the aspect
- Descriptive text of each aspect: it will help the reader to understand better the gap
- Implementation: this will show to what extent the   UPV meets that aspect, using the following scale:
- Actual gap (300 words maximum): In case of --, -/+, or +/-, we indicate the actual "gap" between the principle and the current practice in the organisation. When relevant, we list any national/regional legislation or organisational regulation currently impeding implementation
- Initiatives undertaken and/or suggestions for improvement (200 words maximum): We present a first draft of potential suggestions for improvement, but it should not be misunderstand as the action plan (see template 3)

Ethical and Professional Aspects

Research freedom (1): +/-
Researchers should focus their research for the good of mankind and for expanding the frontiers of scientific knowledge, while enjoying the freedom of thought and expression, and the freedom to identify methods by which problems are solved, according to recognised ethical principles and practices. Researchers should recognise the limitations to this freedom that could arise as a result of particular research circumstances (including supervision / guidance /management) or operational constraints, e.g. for budgetary or infrastructural

reasons or, especially in the industrial sector, for reasons of intellectual property protection. Such limitations should not, however, contravene recognised ethical principles and practices, to which researchers have to adhere.

Gap:

No one would dispute the fact that researchers have "the freedom to identify methods by which problems are solved, according to recognised ethical principles and practices", but it seems researchers have a diverse understanding of what "research freedom" means. It is worth to mention that research topics are dictated by external funding bodies, with no consideration to each researcher perspective. Themes are defined in different calls for proposals and researchers have no other option than alining their activities to those topics. This can harm emerging areas that are not on the main stream of funding bodies. This situation is exacerbated in those researchers on earlier stages (R1-R2), who are very dependent on external funding to support their activity and, moreover, their own contracts. Hence, it could be said that research autonomy could be constrained by the actual contractual framework of each individual. In addition to that, supervision is sometimes misunderstood by PhD candidates as a constraint to their research freedom. Additionallhy, we consider that there is no clear understanding of the implications and limitations of "research freedom".

Relevant legislation	Internal regulation
Spanish Constitution 1978 Law of Biomedical Research (14/2007) Law of Science, Technology and Innovation (14/2011) Organic Law 4/2007, of 12th April, modifying Organic law 6/2001, 21st December, on Universities.	General framework for R&D and innovation activities Code of good practices in research and scientific integrity Bylaws

Initiatives undertaken and/or suggestions for improvement:
- Explore connections between funding bodies, the UPV Doctorate School and the university governing board.
- Doctorate School training activities should consider to include the funding schemes as part of its program
- Analyse existing working conditions for researchers funded by external bodies to determine the possibility to allocate a certain part of dedicating part of their working time to other topics, not necessarily connected to the funded activity
- Better explain the role of the supervisor in relation to the PhD candidate

Ethical principles (2): +/-

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.

Gap:

It is widely admitted that researchers are aware of the ethical principles both in terms of existing ethical codes and good practices. This aspect is strongly   regulated by different national and regional legislation that the university and every researcher must comply with. In addition, the university established 2 bodies directly connected with ethical issues: the Ethical Commission and the Commission for Biomedical Research.

Relevant legislation	Internal regulation
Directive 2001/18/CE of the European Parliament and of the Council of 12th March of 2001 on the deliberate release into the environment of genetically modified organisms and repealing Council Directive 90/220/EEC Directive 2009/41/CE of the European Parliament and of the Council of 6th May 2009 on the contained use of genetically modified micro-organisms Directive 2010/63/UE of the European Parliament and of the Council of 22nd September of 2010 on the protection of animals used for scientific purposes Law of Biomedical Research (14/2007) Law of Science, Technology and Innovation (14/2011) Royal Decree 1716/2011, of November 18 Order/Decree 9/2012 of data protection and security of information by the Valencian Ministry of Health Royal Decree 2132/2004, of 29 October in steam cells Royal Decree 223/2004 of 6 February in clinical essays Spanish law on personal data protection (15/1999) Royal Decree of animal protection in experimentation (1201/2005) Royal Decree 53/2013, of 1st February, establishing applied basic rules for animals protection used in experimentations and other scientific purposes including teaching.	Conflicts of interest code of conduct Ombudsman regulation Code for good practices in research Ethics Commission Bylaws

Initiatives undertaken and/or suggestions for improvement:
- Disseminate the Ethics Committee activities and its role among the research community

Professional responsibility (3): +/-

Researchers should make every effort to ensure that their research is relevant to society and does not duplicate research previously carried out elsewhere. They must avoid plagiarism of any kind and abide by the principle of intellectual property and joint data ownership in the case of research carried out in collaboration with a supervisor(s) and/or other researchers. The need to validate new observations by showing that experiments are reproducible should not be interpreted as plagiarism, provided that the data to be confirmed are explicitly quoted. Researchers should ensure, if any aspect of their work is delegated, that the person to whom it is delegated has the competence to carry it out .

Gap:

Research relevance is guaranteed by the fact that publicly funded calls are supposed to support only relevant research. As discussed in aspect 1, researchers must align their activities to those themes defined in the call, so it could be said that having research activity supported by public external financing qualifies a research activity as relevant. During the different sessions, it was admitted that researchers were aware of their responsibility to conduct research oriented to societal needs. Nonetheless, there was some discussion on wether research activity is driven by societal challenges or, sometimes, driven by the need of each individual to progress on the career ladder.

The level of understanding of intelectual property issues, seems to be co-related with the the researcher experience: some R1   researchers are not aware of how intelectual property affect them and have little understanding about research results ownership.

In terms of professional responsibility as such, it was argued that those researchers that are still being trained should have different duties than those better experienced. They must be clearly recognised as personnel in training. In the case of people doing PhD it is not very clear that both supervisor and the PhD candidate know who is responsible of what

Relevant legislation	Internal regulation
Law 14/2011, 1st June, of Science , Technology and Innovation Law of Research Patent and utility models (11/1986) 20 March Law of Science, Technology and Innovation (14/2011)	Conflicts of interest code of conduct

Initiatives undertaken and/or suggestions for improvement:

- To raise the awareness of the relevance of the intelectual property issues by organising open seminars
- To disseminate data protection issues by organising open seminars addressed to the whole research community
- To introduce the topic of research ownership in R1 training activities

Professional attitude (4): -/+

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. They should inform their employers, funders or supervisor when their research project is delayed, redefined or completed, or give notice if it is to be terminated earlier or suspended for whatever reason.

Gap:

Whilst the university has established strict monitoring tools to control everything around economic management at large, those controls does not provide the level of granularity required to monitor research project management. Therefore, researchers are responsible for the project life cycle, but the university only participates at the beginning, to formalise the contracts, and at the end, to justify the grant against the funding body. However, throughout the life cycle of the project, there are no clear control mechanisms to determine if commitments made in the grant agreement are being fully satisfied. Researchers, in general, even those with engineering backgrounds, suffer from the lack of basic theory about project management, and more specifically from research project management. It is important to remark that by "management" we do not mean "administrative management", we refer to management techniques that involve planning, organisation, resource allocation and control.

Relevant legislation	Internal regulation
Law of Science, Technology and Innovation (14/2011)	General framework for R&D and innovation activities at UPV
Royal Decree 63/2006 of January 27 approving the Statue for research personnel in training	Policy on scientific integrity and good practices in research
Spanish State Plan on Scientific and Technic Research and Innovation 2013-2016	Regulation on research structures
	Researchers' Rights and Responsibilities
	Code for good practices in research

Initiatives undertaken and/or suggestions for improvement:
- Evaluate the possibility to apply UNE standards for project management
- It is considered that it would be appropriate to prepare manuals and guidelines to promote good practices on project management

- The researcher should be aware of what it means to carry out a project within a very regulatory framework that could be considered restrictive. The denial of this regulatory framework usually entails numerous frustrations on the part of researchers who cannot do what they "consider most appropriate at all times" and end up blaming the problems on the university

Contractual and legal obligations (5): +/-

Researchers at all levels must be familiar with the national, sectoral or institutional regulations governing training and/or 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. Researchers should adhere to such regulations by delivering the required results (e.g. thesis, publications, patents, reports, new products development, etc) as set out in the terms and conditions of the contract or equivalent document

Gap:

It was discussed that researchers on early stages (R1 and R2) do not have the same knowledge of contractual and legal obligations as other researchers on later stages. This is due to the fact that legal obligations are established by a wide variety of external funding bodies, with different regulations. In additions, calls are usually increasing heterogeneity. Conditions should have to be in accordance with national or local regulations, but the mesh of the 3, makes difficult to have a clear understanding of the situation.

Additionally, pre-doctoral researchers have teaching requirements as part of their contract, but it is not always possible to match their expertise with the actual teaching needs on each Department, making its implementation a tough matter. This situation undermines career development,preventing them from accumulating the teaching experience required for future promotions.

Relevant legislation	Internal regulation
Organic Law of Universities (6/2001)	General framework for R&D and innovation activities at UPV
Spanish Law 14/2011, 1st June, of Science , Technology and Innovation.	Directive for pre-docs
Organic law 4/2007, 12th April, modifying Organic law 6/2001, 21st December, on Universities.	Conflicts of interest code of conduct
	Regulation on research structures
Law of Research Patent and utility models (11/1986)	Directive for teaching collaborations and research personnel
Law of Biomedical Research (14/2007)	General framework for academic activities (NOA)
Royal Decree 1/1995 of 24 March, approving the revised text of the Law of the Workers' Statute	Doctorate School regulation
	Regulation for doctorate studies
Royal Decree 63/2006, of 27th January, approving Statute for research staff in training	
Royal Decree Legislative 2/2015, of 23 rd October, approving the restated text of Law on the Statute of rights of workers	
EU law for EC funded projects	

Initiatives undertaken and/or suggestions for improvement:
- Greater transparency and greater connection between the funding agency and the Doctoral School would be welcomed.
- Open seminars about contractual and legal obligations and working conditions for R1 and R2 researchers
- Design a monitoring system for project management
- Matchmaking platform of teaching needs and R1 researchers teaching capabilities

Accountability (6): +/-

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 as a whole. In particular, 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 with any authorised audits of their research, whether undertaken by their employers/funders or by ethics committees. 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.

Gap:

The discussion around this aspect focused in good research project management as a mean to be countable. In aspect number 4, we mentioned how the university has introduced strict controls and regulations in the field of economics. Changes on regulatory frameworks and requirements from the different financial bodies, have made those changes a must in order to be elegible for research projects. Whilst that should be considered positive, researchers had a different perception about this fact, and expressed disgust regarding how the rise of control mechanisms has derived in a huge increase in bureaucracy and paperwork, affecting their capability to run a project successfully. Researchers consider that the university has failed to create a framework that balance the requirements from existing regulatory frameworks with the agility required to run successfully research projects at an international scale. We could say that there is a divorce between the researcher community, which considers that "the university is bureaucratic and not agile" and the management staff that those complain come from a subtle ignorance by researchers on their responsibilities within existing legal frameworks and regulations.

Regarding accountability the spot was on project operational controls and project results assessments, but not so much on audits. Researchers complain about the lack of an standardised procedure, with specific instructions, on how the research results are supposed to be assessed, and what can be a matter of an audit. The issue of fragmentation among calls arise again: monitoring mechanism vary widely among each funding body.

Relevant legislation	Internal regulation
Law of Research Patent and utility models (11/1986) 20 March	General framework for R&D and innovation activities at UPV
Law 38/2003, of 17th November, on General Subsidies	Research Activity Index regulation
Law 19/2013, of 9th December on Transparency, Access to public information and good governance	
Law of Biomedical Research (14/2007)	
Law of Science, Technology and Innovation (14/2011)	
Royal Decree 887/2006 of 21 July, approving the regulations of the Law 38/2003 of November 17, General Grant Management	

Initiatives undertaken and/or suggestions for improvement:

- Establish a standard process to assess existing research projects in terms o their contractual obligations
- Analyse existing research project management processes in order to improve managerial efficiency and monitoring capabilities of the institution
- To provide web tools for researchers to monitor project progress

Good practice in research (7): -/+

Researchers should at all times adopt safe working practices, in line with national legislation, including taking the necessary precautions for health and safety and for recovery from information technology disasters, e.g. by preparing proper back-up strategies. They should also be familiar with the current national legal requirements regarding data protection and confidentiality protection requirements, and undertake the necessary steps to fulfil them at all times.

Gap:

Researchers acknowledge that there is a general framework for labor risk prevention and the existence of a general occupational hazard prevention services at the university. It is true to say that the university fulfils all requirements set by the existing legal framework, but researchers manifest that research activities are very heterogeneous, causing specific issues difficult to deal with from a general approach. Overall, they concluded, that existing working conditions are suitable for developing their research activity in a safe manner.

Regarding protection against information loss and data protection, participants mentioned different practices they use. Nonetheless it was crystal clear that research practices has no institutional policy to prevent information loss. Things like backup copies are left at the individual will, with no preventive policy established from the institution. There were even some participants that raised their concerns on some people using private computers or external services to perform backup copies. This becomes highly relevant when working with sensitive data or research that have specific confidentiality clauses. No mention has been made either of data encryption or the use of university computing resources to safeguard the results of a project.

Relevant legislation	Internal regulation
Spanish Constitution 1978	General framework for R&D and innovation activities at UPV
Law 31/1995, of November 8, Prevention of occupational hazards	Policy on scientific integrity and good practices in research
Law of Biomedical Research (14/2007)	Regulation on research structures
Law of Science, Technology and Innovation (14/2011)	Researchers' Rights and Responsibilities
Law of Science (14/2011) Spanish Committee of Research Ethics. Ninth Additional Provision. Protection of personal data	Code for good practices in research
	Conflicts of interest code of conduct
Spanish law on personal data protection (15/1999)	Regulations of the Prevention of Occupational Hazards Committee
EU Global data Protection Regulation	Code for good practices in research

Initiatives undertaken and/or suggestions for improvement:
- There has been several talks by security experts to rise the awareness on the importance of data protection in research
- A code of good practice on safeguarding information and data related to research should be developed and disseminated.
- A catalogue of IT services for research projects should be prepared and be part of the assessment process defined in aspect 6
- Include the topic of information loss and data protection on a guide for research project management
- Define a code of good practices on data protection and information loss

Dissemination, exploitation of results (8): -/+

All researchers should ensure, in compliance with their contractual arrangements, that the results of their research are disseminated and exploited, e.g. communicated, transferred into other research settings or, if appropriate, commercialised. Senior researchers, in particular, are expected to take a lead in ensuring that research is fruitful and that results are either exploited commercially or made accessible to the public (or both) whenever the opportunity arises

Gap:
Exploitation and dissemination of research results are fundamental blocks of activities funded by external bodies. In non externally funded research, is at the researcher will to disseminate or exploit the results. We could say that researchers are aware of the relevance of disseminating and exploiting research results, but the recognition of this activity cannot be

considered enough to push numbers higher. The absence of proper recognition does not encourage researchers to invest more time in exploitation and dissemination. The university has personnel exclusively dedicated to support exploitation and dissemination, but it does not amount to the huge level of research done at the university. In addition to that, researchers are sometimes reluctant to collaborate in dissemination activities, mainly because they are already overwhelmed by their teaching, research and managerial responsibilities. They complain about the takeover of bureaucracy over research, so exploitation and dissemination is not always considered a priority.

Despite the fact that UPV is always nationally ranked in top positions in technology transfer, participants also recognised a generalised lack of knowledge of the different tools to protect research results, like patents or licenses. We could not question that there is a culture of research and result protection, but it is constrained by the recognition issue, both at institutional and national level, that is totally unbalanced towards research.

Relevant legislation	Internal regulation
Law of Biomedical Research (14/2007) Law of Science, Technology and Innovation (14/2011) Royal Decree (55/2002) of 18 January - exploitation inventions in public research bodies Guidelines on the Implementation of Open Access to Scientific Publications and Research Data in Projects supported by the European Research Council under Horizon 2020	Research Activity Index regulation

Initiatives undertaken and/or suggestions for improvement:
- The university already has dedicated personnel to research awareness and technology transfer
- There is a blog and a newsletter aimed to reach society at large and rise awareness of the impact of research in society
- The recent introduction of the 6-years national recognition of technology transfer activities by the national government is considered possitive
- Adjust the UPV research assessment system to increase the weight of dissemination and exploitation
- Open seminars on the importance of dissemination and exploitation
- Establish an internal call to identify those researchers good at dissemination and allocate resources to increase their activity

Public engagement (9): -/+

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 the public will help researchers to better understand public interest in priorities for science and technology and also the public's concerns

Gap:

See aspect 8

Relevant legislation	Internal regulation
Law of Biomedical Research (14/2007) Law of the Sustainable Economy (2/2011) March 4th Law of Science, Technology and Innovation (14/2011)	General framework for R&D and innovation activities at UPV: Policy on scientific integrity and good practices in research Regulation on research structures Researchers' Rights and Responsibilities Code for good practices in research Conflicts of interest code of conduct

Initiatives undertaken and/or suggestions for improvement:

See aspect 8

Non discrimination (10): +/-

Employers and/or funders of researchers will not discriminate against researchers in any way on the basis of gender, age, ethnic, national or social origin, religion or belief, sexual orientation, language, disability, political opinion, social or economic condition.

Gap:

There are strict regulations, both internal and external, aimed to diminish any potential discrimination in terms of gender, age, ethnic, national or social origin, religion or belief, sexual orientation, disability, political opinion or social or economic conditions. Nonetheless, it is true to say that there is still room for improvement. Participants raised issues concerning

language and gender balance (i.e. if we analyse the different research positions, we find that most of "full professors" (R1) positions are men).

Languages is also acknowledge as a source of discrimination. Despite the fact of being in a bilingual community, where Spanish and Valencian should be used interchangeably, it is far to be true in daily life. In addition, recruitment calls are not published in different languages, like English, reducing the options to attract foreign researchers benefiting only to those fluent in Spanish.

UPV's policy regarding work-family balance, called "Plan Concilia", should be reviewed. Participants acknowledged that some researchers are unaware of the Plan Concilia, restraining them from some rights that they already have.

Relevant legislation	Internal regulation
Spanish Constitution 1978	Directive for pre-docs
Organic Law for the effective equality between women and men (3/2007) of 22 March	Gender balance regulation
Law 31/1995, of November 8, Prevention of occupational hazards	Regulation on temporal academic staff selection
Resolution of 20 May 2011, the Secretary of State for Public Service. Gender Balance in Public bodies	Regulation on permanent academic staff selection
Royal Decree 5/2015 Basic law civil servants Law of the Sustainable Economy (2/2011) March 4th	Regulation for effective work-family balance
Royal Decree Legislative 2/2015, of 23rd October, approving the restated text of Law on the Statute of rights of workers.	

Initiatives undertaken and/or suggestions for improvement:
• STEM: a special attention should be given to the policies of recruitment of female students in the STEM (Science, Technology, Engineering and Maths)
• Translate into English and Valencian every recruitment call
• Open seminars regarding working life balance

Evaluation / appraisal systems (11): +/-
Employers and/or funders should introduce for all researchers, including senior researchers, evaluation/appraisal systems for assessing their professional performance on a regular basis and in a transparent manner by an independent (and, in the case of senior researchers, preferably international) committee.

Gap:

Participants acknowledged the existence of an in-house systematic mechanism to monitor research activity. This system is based on an indicator called "Research Activity Index", and it has several implications in terms of salaries and teaching responsibilities. The discussion focused on potential amendments to the Research Activity Index (RAI) so that a better measure of research activity could be achieved.

In addition, the discussion focused on potential discriminations that could arise from the indicator itself, mainly for those researchers with no teaching responsibilities. The index ranks higher those researchers holding a national recognition on research (6-years terms), but this recognition is only available to those researchers with teaching capabilities. Hence, researchers with no teaching capabilities are usually ranked lower than the rest.

There is a committee in charge of the RAI, but all members are part of the institution. It was pointed out as a source of potential conflict of interests.

Relevant legislation	Internal regulation
Royal Decree (1052/2002)	Research Activity Index regulation
Royal Decree 5/2015 Basic law civil servants	General framework for academic activities (NOA)
Law of Biomedical Research (14/2007)	
Royal Decree 63/2006 of January 27 approving the Statue for research personnel in training	
Royal Decree 887/2006 of 21 July, approving the regulations of the Law 38/2003 of November 17, General Grant Management. Article 60 1. Evaluation criteria Spanish Law 14/2011, 1st June, of Science , Technology and Innovation	
Royal Decree 1086/1989, of 28th August, on university teaching staff remunerations, modified by Royal Decrees 1949/1995, of 1st December, 74/2000 of 21st January and 1325/2002	
Order of 2nd December 1994 establishing the proceeding to assess the research activity in development of Royal Decree 1086/1989, of 28th /August, on university teaching staff remunerations, updated by Order of 16th November 2000 and modified by Order CIN/3040/2008, of 20th October	

Initiatives undertaken and/or suggestions for improvement:
- To include the H index as part of the UPV Research Activity Index
- To reduce the gap between academic and non-academic researchers in terms of research appraisal
- To add external experts on the Research Activity Index Commission

Recruitment and Selection

Recruitment (12): -/+
Employers and/or funders should ensure that the entry and admission standards for researchers, particularly at the beginning at their careers, are clearly specified and should also facilitate access for disadvantaged groups or for researchers returning to a research career, including teachers (of any level) returning to a research career. Employers and/or funders of researchers should adhere to the principles set out in the Code of Conduct for the Recruitment of Researchers when appointing or recruiting researchers.

Gap:

Participants made clear that, in terms of recruitment, there are two streams: those researchers with a teaching profile and those with no teaching profile. Whilst the first follow a very standardised process (externally defined by the Ministry but locally driven by the University) the latter fall on a sort of ambiguous state guided by external funding bodies where uncertainty rules the situation.

When recruiting researcher, usually R1 or R2, for externally funded projects, the institution is certainly the employer, but plays a low profile role compared to R4 researchers who act usually as their employers "de facto", having a predominant role. Participants complain that job description is vaguely defined and working conditions are not clearly stated. More over, some argue that job description is too static and, in many cases, does not evolve accordingly to what the researcher does in practice: it should be noticed that the role of the researcher in the project may change during project life cycle, while his/her working conditions and job description may not.

During the discussion there was no mention to individuals moving from a teaching career to a research career neither a mention to the admission of disadvantage groups. Disadvantaged groups are clearly regulated by law, with a reserved a quota of job provision that the university must comply.

Relevant legislation	Internal regulation
Spanish Constitution, 27th December 1978	Regulation for visiting professors
Organic Law 6/2011, of 21st December, of Universities.	Directive for pre-docs
Spanish Law 14/2011, 1st June, of Science , Technology and Innovation	Gender balance regulation
	Regulation on temporal academic staff selection
Royal Decree (1312/2007) - National accreditation for university teachers	Regulation on permanent academic staff selection
Royal Decree (1313/2007) - Public procurement for university teachers	Regulation on R2 recruitment
	UPV Bylaws
Order CIN/2657/2008 to regulate the administrative procedure for research activity assessment. Pre-Researchers	
Royal Decree 5/2015 Basic law civil servants Law of Science, Technology and Innovation (14/2011)	
Royal Decree Legislative 2/2015, of 23 rd October, approving the restated text of Law on the Statute of rights of workers	
Royal Decree 63/2006 of January 27 approving the Statue for research personnel in training	
Royal Decree Legislative 1/2013, of 29th November approving the restated text of General Law on rights of disabled people and their social inclusion	
LO 3/2007, of 22nd March, on effective equality between Women and Men.	

Initiatives undertaken and/or suggestions for improvement:
- To define a new profile of generic researcher that could intervene in different research projects without needing to repetitively hired for each project.
- To publish standards for recruitment of researchers that will participate on externally funded projects

Recruitment - Code (13): +/-

Employers and/or funders should establish recruitment procedures which are open, efficient, transparent, supportive and internationally comparable, as well as tailored to the type of positions advertised. Advertisements should give a broad description of knowledge and

competencies required, and should not be so specialised as to discourage suitable applicants. Employers should include a description of the working conditions and entitlements, including career development prospects. Moreover, the time allowed between the advertisement of the vacancy or the call for applications and the deadline for reply should be realistic.

Gap:
See aspect 12

Relevant legislation	Internal regulation
See aspect 12	See aspect 12

Initiatives undertaken and/or suggestions for improvement:
• See aspect 12

Selection - Code (14): +/-

Selection committees should bring together diverse expertise and competences and should have an adequate gender balance and, where appropriate and feasible, include members from different sectors (public and private) and disciplines, including from other countries and with relevant experience to assess the candidate. 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 should be realistic.

Gap:

It could be said that people participating in selection committees are well fit to that position, they are knowledgeable of its area of expertise and have the necessary requirements to make an objective selection of the best candidate. Nonetheless, participants complained about an unbalanced situation in terms of gender inclusion. It is true to say that it is not always possible to set up a gender balance committee mainly because women R1 researchers are fewer, so it is not always possible to fulfil the gender balance requirement.

Participation of people from the private sector in selection committees is currently forbidden by law. Nonetheless, international members could be possible, but there is not always the necessary budget allocated to support this kind of international selection committees.

The most disgusting issue raised by participants is that the selection criteria for R1-R2 researchers is totally outdated, with a model that comes from 20 years ago but that has not suffered any kind of update since then. In addition to that, the criteria ask for certain

requisites that are not connected at all with the research activity. Moreover, the aspects it assess are quickly saturated so that is finally up to the researcher to select the best candidate by the use of the so-called "suitability coefficient". This coefficient is supposed to asses non-quantitative aspects but, at the end, is the one which determines who is selected and who is not.

Public advertising of research positions is done, but channels are not considered to be the best, specially if the aim is to attract international candidates.

Relevant legislation	Internal regulation
Organic Law 6/2011, of 21st December, of Universities.	Directive for pre-docs
Royal Decree Legislative 5/2015, of 30th October approving the restated text of Law on the Statute of rights of workers	Research Activity Index regulation
	Regulation on temporal academic staff selection
Royal Decree (1312/2007) - National accreditation for university teachers	Regulation on permanent academic staff selection
	Regulation on R2 recruitment
Royal Decree (1313/2007) - Public procurement for university teachers	UPV Bylaws
Law of Science, Technology and Innovation (14/2011)	

Initiatives undertaken and/or suggestions for improvement:
• Allocate an specific budget to setup international selection committees
• Increase the participation of women in selection committees
• Participants consider that it would be useful to have some pre-selection system for researchers with temporary contracts
• To advertise international job positions
• To setup a recruitment procedure based on generic research lines that are not so tightened to specific research projects

Transparency - Code (15): +/-
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 be informed after the selection process about the strengths and weaknesses of their applications.

Gap:
However conditions to hire temporal research staff could be consider transparent, there is a clear lack of information about certain requisites, specially the so-called "suitability coefficient" aforementioned in aspect number 14. That coefficient could be considered a

weakness of the system mainly because it opens the door for decisions that cannot be sufficiently backed up.

The selection process of researchers with teaching responsibilities is also on the spot, mainly because the National Agency in charge of accrediting academic curricula is also suffers from a lack of transparency. Academics submit their curricula but they never get any concrete feedback that could help on directing their career progress. Hence, potential improvement on the academic curriculum is undermined by this.

Relevant legislation	Internal regulation
Organic Law 6/2011, of 21st December, of Universities Law of Science, Technology and Innovation (14/2011) Royal Decree 887/2006 of 21 July, approving the regulations of the Law 38/2003 of November 17, General Grant Management. Article 60 1. Evaluation criteria Royal Decree Legislative 5/2015, of 30th October approving the restated text of Law on the Statute of rights of workers	UPV Bylaws Directive for pre-docs Research Activity Index regulation Regulation on temporal academic staff selection Regulation on permanent academic staff selection Regulation on R2 recruitment

Initiatives undertaken and/or suggestions for improvement:
• Introduce changes on the use of the "suitability coefficient"

Judging merit - Code (16): -/+

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 and level of independence should also be considered. This means that merit should be judged qualitatively as well as quantitatively, focusing on outstanding results within a diversified career path and not only on the number of publications. Consequently, the importance of bibliometric indices should be properly balanced within a wider range of evaluation criteria,

such as teaching, supervision, teamwork, knowledge transfer, management of research and innovation and public awareness activities. For candidates from an industrial background, particular attention should be paid to any contributions to patents, development or inventions.

Gap:

Participants hesitate about the possibility to achieve a common comparable assessment system for all potential candidates. The diversity in research areas on a university of this size, would make this task quite unthinkable. The existing judging merit system mainly relays on bibliometric indicators, provoking important disadvantages on certain domains of knowledge that are not so active on publications. Participants also rise concerns on the excessive rigidity of the assessment framework. They consider the existing judging merit system lacks the required flexibility to fit researchers' curricula from different domains of knowledge.

It has already been mentioned the in-house system to assess research performance. Participants also mentioned that we could be over-assessing research, due to the fact that the in-house system is performed in addition to the national assessment system and the regional assessment system.

All participants agree on the necessity to implement a qualitative assessment criteria in addition to the existing quantitative assessment criteria. Nonetheless, some participants expressed their concerns on potential lawsuits that the university could face in the event of applying a qualitative system that cannot be backed up by facts.

Relevant legislation	Internal regulation
Spanish Constitution 1978 Law of Science, Technology and Innovation (14/2011) Organic Law 6/2011, of 21st December, of Universities. Royal Decree 887/2006, of 21 July - Procedure for General Grants Law Royal Decree 887/2006 of 21 July, approving the regulations of the Law 38/2003 of November 17, General Grant Management. Article 60 1. Evaluation criteria Spanish Law 14/2011, 1st June, of Science , Technology and Innovation Royal Decree legislative 5/2015, of 30th October approving the restated text of Law on the Statute of rights of workers. Title IV, Chapter I. Articles 55 - 61. Royal Decree Legislative 1/2013, of 29th November approving the restated text of General Law on rights for disabled people and their social inclusion Organic Law 3/2007, 22nd March, for effective gender balance	Research Activity Index regulation UPV Bylaws

Initiatives undertaken and/or suggestions for improvement:
- Explore the possibility to implement a qualitative assessment system
- Analyse the use of the "suitability coefficient" and its impact on hiring temporal research staff
- Design a standard process for judging merits that could be used for different domains of knowledge
- Perform a test on how qualitative measures could be introduced on the existing assessment system

Variations in the chronological order of CVs - Code (17): -/ +

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. Candidates should therefore be allowed to submit evidence-based CVs, reflecting a representative array of achievements and qualifications appropriate to the post for which application is being made.

Gap:

Professional experience or mobility do not account in the researcher curriculum with no teaching requirements. Assessment systems are not considering those as merits to be taken into consideration. It could be said that neither the National Agency, nor the UPV, consider those as a merit.

Taking the option to interrupt the academic career to serve on a company would be an extremely risky activity, almost impossible to assume: researchers cannot abandon its academic path once started. Otherwise they will be totally out and would be considered unfit to progress on the career ladder.

Relevant legislation	Internal regulation
Law of Science, Technology and Innovation (14/2011) Organic Law 6/2011, of 21st December, of Universities	Regulation for visiting professors UPV Bylaws Regulation for doctorate studies

Initiatives undertaken and/or suggestions for improvement:
• Explore alternatives to assess professional experience in academic curricula

Recognition of mobility experience   - Code (18): -/+

Any 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.

Gap:

Inter-sectoral mobility is a challenge at the university, and it is usually not considered by the researcher because of the negative impact that can have in her/his career mainly because it is not possible to use it as a merit. Virtual mobility is not even considered

Relevant legislation	Internal regulation
Law of Biomedical Research (14/2007)	UPV Bylaws
Organic Law 6/2011, of 21st December, of Universities	Directive for pre-docs
	Research Activity Index regulation
Law of Science, Technology and Innovation (14/2011)	Regulation on temporal academic staff selection
Royal Decree 1/1995 of 24 March, approving the revised text of the Law of the Workers' Statute	Regulation on permanent academic staff selection
	Regulation on R2 recruitment

Initiatives undertaken and/or suggestions for improvement:
- Explore alternatives to assess professional experience in academic curricula
- Consider the option of assess virtual mobility as part of the assessment criteria

Recognition of qualifications   - Code (19): +/-

Employers and/or funders should provide for 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. They should inform themselves and gain a full understanding of rules, procedures and standards governing the recognition of such qualifications and, consequently, explore existing national law, conventions and specific rules on the recognition of these qualifications through all available channels.

Gap:

Participants agree on the existence of serious difficulties to incorporate international researchers to the UPV, mainly because it is no well defined a system to recognise merits from other countries than Spain. The lack of an efficient and effective mechanism to recognise   foreign accreditations becomes the first and most important barrier to hire international researchers.

In terms of recognition of non formal activities, like skills, it is not a common practice. It is a fact that only formal activities can be accredited, because only formal activities can be backed by an external body.

Regarding existing regulations, participants consider that it is needed an effort to introduce them more effectively to the research community.

Relevant legislation	Internal regulation
Order CIN/2657/2008 to regulate the administrative procedure for research activity assessment. Pre-Researchers	Research Activity Index regulation
Organic Law 6/2011, of 21st December, of Universities	General framework for academic activities (NOA)
Spanish Law 14/2011, 1st June, of Science , Technology and Innovation	UPV Bylaws
Law of Biomedical Research (14/2007) Royal Decree 63/2006 of January 27 approving the Statue for research personnel in training	Doctorate School regulation
Royal Decree 1837/2008, of November 8, by which are incorporated into Spanish law the Directive 2005/36/EC of the European Parliament and the Council, of 7 September 2005 and Directive 2006/100/EC, Council of November 20 of 2006	
Royal Decree 778/1998 of 30 April, regulating the third cycle of university studies, obtaining and forwarding a PhD and other postgraduate studies	
Royal Decree 56/2005, regulating official university postgraduate studies	
Royal Decree 1393/2007, 29th October, establishing the organization of the official University Studies.	
Royal Decree 99/2011, 28th January, regulating official Doctorate Studies.	

Initiatives undertaken and/or suggestions for improvement:
- Open seminar on the existing regulation regarding recognition and qualifications
- Establish an automatic recognising system for every researcher coming from the European Union

Seniority - Code (20): ++

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. As professional qualifications may be gained at an early stage of a long career, the pattern of lifelong professional development should also be recognised.

Gap:
No gap

Postdoctoral appointments - Code (21): +/-

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

Gap:
Participants were concerned about the vague definition of the long-term career at UPV. Facts point out that there are no great possibilities to build a professional career as a researcher in the same institution. Some researchers face the situation of working project after project on a cycle that seems to have no end. UPV has no clear appointment for only-research figures that could be working on permanent basis. It also creates discrepancies between the research focus and the contract itself.

In terms of recruitment criteria, participants agree that there are no clear rules. They complain about the researcher career as a highly inestable choice with high personal cost that can refrain you from other possibilities. It could be said that uncertainty is the norm for full time researchers. The system is focused on researchers with teaching profile but seems not to be determined to implement the figure of a permanent pure researcher. Nonetheless there are evident constraints to implement such a policy, mainly because the university is financed on regular basis according to teaching credits. Therefore, those researchers with no teaching profile must be financed from other sources, mainly coming from research projects financed by external bodies. Therefore they are subjected to short-term contracts with no perspective to become full time researcher permanente employee

It is also detected another factor that will affect conditions and working environment: pre or post doctoral activity is highly determined by the research structure were you develop your activity. Participants outline a research environment highly fragmented, working like a compound of many "micro-systems" instead of a uniform university system for research.

Relevant legislation	Internal regulation
Law of Biomedical Research (14/2007)	Research Activity Index regulation
Organic Law 6/2011, of 21st December, of Universities	UPV Bylaws
Spanish Law 14/2011, 1st June, of Science , Technology and Innovation	Research Activity Index regulation Regulation on temporal academic staff selection
Royal Decree 63/2006 of January 27 approving the Statue for research personnel in training	Regulation on permanent academic staff selection
Royal Decree legislative 5/2015, of 30th October approving the restated text of Law on the Statute of rights of workers	

Initiatives undertaken and/or suggestions for improvement:
- To analyse the existing working conditions in the different research structures
- To create common access rules for all researchers that are non-dependant of the research structure or the type of project
- To analyse alternatives for the existing short-term contracts for research that could match legal requirements of research projects, external funding bodies and researchers' expectations

Working Conditions and Social Security

Recognition of the profession (22): -/+

All researchers engaged in a research career should be recognised as professionals and be treated accordingly. 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).

Gap:

The existing research environment is very demanding, with a lot of pressure coming from external funding bodies and external evaluation agencies. In addition, the rewards that the system provides never compensates the effort don by researchers, specially does with no teaching profile. It could be said that existing conditions destroy any motivation that the researcher could have. The lack of motivation is mainly because there is no perspective (for researchers with no teaching profile) to progress in the career ladder. They are stuck in short-term contracts with no other alternative than starting an academic career as a way to improve their situation. It could be said that the fact of being "recognised as professionals" is very dependent on your teaching profile: if you have a teaching profile you have a different status than if you have not.

Some PhD candidates are hired by the university under a contract aimed to support them to become a PhD. They are supposed to be part of a learning process to become a researcher. Nonetheless, the existence of a contract creates the impression in the PhD candidate that they are performing a job for the university, whilst the fact is that this contract is aimed to support their learning process. They considere that the condition of being on a learning process diminish their role as professional researchers.

Relevant legislation	Internal regulation
Law of Science, Technology and Innovation (14/2011) Organic Law 6/2011, of 21st December, of Universities	Research Activity Index regulation General framework for academic activities (NOA) UPV Bylaws

Initiatives undertaken and/or suggestions for improvement:
• Design of the Researcher Career Professional Development Strategy

Research environment (23): +/-
Employers and/or funders of researchers should ensure that the most stimulating research or research training environment is created which offers appropriate equipment, facilities and opportunities, including for remote collaboration over research networks, and that the national or sectoral regulations concerning health and safety in research are observed. Funders should ensure that adequate resources are provided in support of the agreed work programme.

Gap:
It is a fact that UPV posses the required infrastructure to guarantee the working conditions to develop all kind of research activities. Yet the university has cutting-edge equipment, suitable to perform advanced research in a wide range of areas, there is no central management for this equipment. It could be said that research equipment management is fragmented, making almost impossible to achieve the full potential of it.

Some participants claim that motivation is undermined by the existing research framework, both internal and external. So that, talking about an "stimulating research environment" needs to be backed with more than good infrastructure.

The university distinguish two types of labs: teaching labs and research labs. Support personnel for labs is assigned according to teaching needs, so the main focus of that

personnel are teaching labs. That makes that some research labs do not have the necessary support personnel.

Relevant legislation	Internal regulation
Law of Biomedical Research (14/2007) Law of Science, Technology and Innovation (14/2011) Organic Law 6/2011, of 21st December, of Universities	Regulation of research structures Directive for teaching collaborations and research personnel

Initiatives undertaken and/or suggestions for improvement:
- Build a database of research equipments and potential services to extend access to those equipment to the whole research community
- Design a new service to manage centrally research equipment
- Launch an internal regulation aimed to facilitate the use of existing research equipment (currently allocated to individuals) to the whole research community

Working conditions (24): +/-

Employers and/or funders should ensure that the working conditions for researchers, including for disabled researchers, provide where appropriate 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 both women and men researchers to combine family and work, children and career. 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.

Gap:
One of the main obstacles to fulfil this aspect is the absence of a collective bargain agreement. This agreement should cover the main points of this aspect. Some progress is being done in recognising the fact that researchers usually travel and have to do part of their work remotely. The most striking point is the personal-work balance benefits, that some researchers opt out of the general framework that covers the whole university personnel

Relevant legislation	Internal regulation
Royal Decree (70/2000) January 21st	Regulation for doctorate studies
Organic Law 6/2011, of 21st December, of Universities	Directive for pre-docs
Organic Law for the effective equality between women and men (3/2007) of 22 March	Gender balance regulation
Royal Decree 5/2015 Basic law civil servants Law of Science, Technology and Innovation (14/2011)	Regulation on temporal academic staff selection
Royal Decree legislative 5/2015, of 30th October approving the restated text of Law on the Statute of rights of workers	Regulation on permanent academic staff selection
Royal Decree legislative 2/2015, 23rd October, approving the restated Text of the Law of rights workers.	Regulation on R2 recruitment
Royal Decree Legislative 1/2013, of 29th November approving the restated text of General Law on rights for disabled people and their social inclusion.	Regulation for effective work-family balance
Organic Law 3/2007 for effective gender balance	

Initiatives undertaken and/or suggestions for improvement:
- Proposal to better recognise remote-working in research
- Open seminars about the existing legal framework for a better balance between work and personal life

Stability and permanence of employment (25): -/+

Employers and/or funders should ensure that the performance of researchers is not undermined by instability of employment contracts, and should therefore commit themselves as far as possible to improving the stability of employment conditions for researchers, thus implementing and abiding by the principles and terms laid down in the EU Directive on Fixed-Term Work.

Gap:

It could be said that this has been one of the most intriguing aspects of the gap analysis. This aspect evidences a deep division between researchers with teaching profile against those with no teaching background, driving a wedge between them. Whilst stability and permanence seems to be the norm in researchers with teaching profile, researchers with non academic profile suffer from recurrent short-term contracts. Moreover, those short contracts are always linked with specific research projects. Unless there is a research

project financed by an external body, researchers cannot be hired, even if the university has the necessary economic resources to do so. This paradox seems to be derived directly from the existing legal framework according to which no short contract can be done unless there is a research project to work on.

Relevant legislation	Internal regulation
Directive 1999/70/CE regarding Framework agreement of CES, la UNICE y el CEEP about Fixed- Term Work Royal Decree (70/2000) January 21st Royal Decree 5/2015 Basic law civil servants Law of Science, Technology and Innovation (14/2011) Law 48/2015, 29th October, on General State Budget	Doctorate School regulation Regulation on temporal academic staff selection Regulation on permanent academic staff selection Regulation on R2 recruitment

Initiatives undertaken and/or suggestions for improvement:
- Explore alternatives to short-term contracts based on research projects
- Analyse the concept of "research lines" as a way to involve the same person on different research projects
- Explore the possibility to have full-time researchers as part of the payroll of the university

Funding and salaries (26): -/+

Employers and/or funders of researchers should ensure that researchers 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 agreements. This must include researchers at all career stages including early-stage researchers, commensurate with their legal status, performance and level of qualifications and/or responsibilities.

Gap:

Conditions are strictly defined by the existing legal framework. All the university staff is considered to be part of the public administration, meaning that wages and salaries are fixed by the National Ministry or the Regional Government. Hence, it could be said that there is no room to establish incentives or bonuses based on results, except for researchers with teaching profile that, a small part of the salary could be increased based on productivity indicators. It is widely admitted that wages scales are aged and that need some sort of actualisation. We could conclude that salaries are not related with individual performance, meaning that a flat rate is applied to all personnel. The rate applied depends on the type of contract or the level you achieve.

Relevant legislation	Internal regulation
Royal Decree (70/2000) January 21st	Research Activity Index regulation
Royal Decree legislative 2/2015, 23rd October, approving the restated Text of the Law of rights workers.	Research and Teaching personnel regulation on incentives and bonuses
Royal Decree Legislative 8/2015, 0th October, approving the restated text on the General Law of Social Security (several provisions)	Regulation on temporal academic staff selection
	Regulation on permanent academic staff selection
Royal Decree 5/2015 Basic law civil servants Law of Science, Technology and Innovation (14/2011)	Regulation on R2 recruitment
Royal Decree Law 1/1994, General Social Security Law	
Royal Decree 1/1995 of 24 March, approving the revised text of the Law of the Workers' Statute	
Royal Decree 63/2006 of January 27 approving the Statue for research personnel in training	
Resolution 3 November III Collective Agreement for the General National Administration. CAPVIII. Art 45. Art 46. Art 47. CAP xIII -	

Initiatives undertaken and/or suggestions for improvement:
- Actualise existing scales to determine salaries
- Explore the possibility to add economic incentives for researchers with non teaching profile
- Design of the Researcher Career Professional Development Strategy

Gender balance (27): -/+

Employers and/or funders should aim for a representative gender balance at all levels of staff, including at supervisory and managerial level. This should be achieved on the basis of an equal opportunity policy at recruitment and at the subsequent career stages without, however, taking precedence over quality and competence criteria. To ensure equal treatment, selection and evaluation committees should have an adequate gender balance.

Gap:

If we analyse the different research positions, we find that most of R1 positions considered "full professors", are men. Part of the reason comes from a domino effect coming from the

lower number of female technical students in comparison with other disciplines. The legal framework is trying to reshape this situation. The institution has established an internal unit to follow up gender balance, not only in research, but at the whole university. Despite the fact the number is continually rising, the pace of it does not allow us to make a certain prediction of when a real gender balance will be achieved.

Relevant legislation	Internal regulation
Spanish Constitution 1978 Organic Law for the effective equality between women and men (3/2007) of 22 March Royal Decree legislative 5/2015, of 30th October approving the restated text of Law on the Statute of rights of workers Royal Decree legislative 2/2015, 23rd October, approving the restated Text of the Law of rights workers	Gender balance regulation

Initiatives undertaken and/or suggestions for improvement:
• Analyse the existing trends in research recruitment in terms of gender balance
• STEM: a special attention should be given to the policies of recruitment of female students in the STEM (Science, Technology, Engineering and Maths)

Career development (28): +/-

Employers and/or funders of researchers should draw up, preferably within the framework of their human resources management, a specific career development strategy for researchers at all stages of their career, regardless of their contractual situation, including for researchers on fixed-term contracts. It should include the availability of mentors involved in providing support and guidance for the personal and professional development of researchers, thus motivating them and contributing to reducing any insecurity in their professional future. All researchers should be made familiar with such provisions and arrangements.

Gap:
As mentioned in other aspects, there is a clear division between those researchers with teaching responsibilities and those who has no teaching responsibilities. In general terms, we could say that career development is deeply biased by seniority: the longer years in the same institutions the better chances you have to get promoted, provided you are a researcher with teaching profile.

Given the cuts in research and education public spending in Spain, researchers who have retired has not been replaced by younger researchers. In addition to that, some knowledge domains are struggling in personnel. Though the situation is improving, there is still a lot to do to recover from that policy.

Broadly speaking, it is difficult to identify a concrete career development policy in researchers working under short-term contracts. Some participants described the situation as "daunting", mainly because once the project ends, the contract is dead and there are no prospects unless another project is awarded. In addition, they have no other option than working under those conditions or trying to become a researcher with teaching background.

Relevant legislation	Internal regulation
Royal Decree 5/2015 Basic law civil servants Law of Biomedical Research (14/2007) Law of Science, Technology and Innovation (14/2011)	

Initiatives undertaken and/or suggestions for improvement:
- Design of the Researcher Career Professional Development Strategy
- Define the figure of full time researcher
- Find new mechanisms to avoid researchers to be linked with specific research projects

Value of mobility (29): -/+

Employers and/or funders must recognise the value of geographical, inter-sectorial, inter- and trans-disciplinary and virtual mobility as well as mobility between the public and private sector as an important means of enhancing scientific knowledge and professional development at any stage of a researcher's career. Consequently, they should build such options into the specific career development strategy and fully value and acknowledge any mobility experience within their career progression/appraisal system. 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.

Gap:
Inter-sectorial mobility is a challenge at the university, and it is usually not considered by the researcher because of the negative impact that can have in her/his career. The main reason behind that is that professional merits are not considered relevant on a research career. A researcher could work on the private sector by establishing a spin-off, but only during a short period of time. Another option would be to ask for a gap year to work on the private sector. Nonetheless, once you get back, private experience is not recognised at all.

Despite the fact that university has some internal grants to foster mobility, you can only apply if you are a researcher with teaching profile.

We can hardly say that trans-disciplinarity mobility exists, mainly because administrative procedures are complex and contracts are tightened to specific domains of knowledge.

Relevant legislation	Internal regulation
Law of Biomedical Research (14/2007) Law of Science, Technology and Innovation (14/2011)	Directive for pre-docs Doctorate School regulation Regulation for doctorate studies

Initiatives undertaken and/or suggestions for improvement:
- Proposal to recognise remote work in research
- Design of the Researcher Career Professional Development Strategy
- Design a new scale to recognise inter-sectorial mobility
- Facilitate longer periods in private companies for researchers

Access to career advice (30): - -
Employers and/or funders should ensure that career advice and job placement assistance, either in the institutions concerned, or through collaboration with other structures, is offered to researchers at all stages of their careers, regardless of their contractual situation.

Gap:
Out of the framework of doctorate studies, it is hard to talk about career advice for researchers. Whilst some supervisors will guide some of their personnel, this is totally done at individual basis. The university has defined a mentor program for researchers, but its application has not been yet achieved.

Relevant legislation	Internal regulation
Law of Biomedical Research (14/2007) Law of Science, Technology and Innovation (14/2011) Order ECC/1402/2013, 22nd July, modified by Order ECC/1820/2014, 26th September, and by Order ECC/2483/2014, 23rd December, approving the regulatory basis to grant aids within the State Programme for Talent promotion and Employment Framework of State Plan on Science and Technique Research & Innovation 2013-2016.	Directive for pre-docs Doctorate School regulation Regulation for doctorate studies

Initiatives undertaken and/or suggestions for improvement:
- Establish a service for career advise aimed to support researchers.
- Design of the Researcher Career Professional Development Strategy

Intellectual Property Rights (31): +/-

Employers and/or funders should ensure that researchers at all career stages reap the benefits of the exploitation (if any) of their R&D results through legal protection and, in particular, through appropriate protection of Intellectual Property Rights, including copyrights. Policies and practices should specify what rights belong to researchers and/or, where applicable, to their employers or other parties, including external commercial or industrial organisations, as possibly provided for under specific collaboration agreements or other types of agreement.

Gap:

Benefits from exploitation of their R&D results are subject to existing legal framework but researcher does not get recognised his/her part of intelectual property on an invention. As mentioned on earlier aspects, exploitation of R&D results are not sufficiently recognised by existing assessment system, like the Research Activity Index.

Relevant legislation	Internal regulation
Law of Research Patent and utility models (11/1986) 20 March Royal Decree Law 1/1996, Intellectual Property Law (Book I. art.7 and art.10) - Law 10/2002, 29 abril adapting the Law of Patents to EU Directive related to legal protection of biotechnology inventions (art.1, 2, 3, 4) Law of Science, Technology and Innovation (14/2011) Royal Decree (55/2002) of 18 January - exploitation inventions in public research bodies Law 3/2000, 7th January, on Plant variety legislation Law 20/2003, 7th July, on the Legal protection of Industrial Designs Organic Law 6/2011, 21st September, on Universities.(Article 80)	Code for good practices in research Ethics Commission

Initiatives undertaken and/or suggestions for improvement:

• Design of the Researcher Career Professional Development Strategy
• Revise the existing Intelectual Property Right processes

Co-authorship (32): +/-

Co-authorship should be viewed positively by institutions when evaluating staff, as evidence of a constructive approach to the conduct of research. Employers and/or 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 and listed and/or quoted, in the context of their actual contributions, as co-authors of papers, patents, etc, or to publish their own research results independently from their supervisor(s).

Gap:

Co-authorship is evaluated positively by the university. The Research Activity Index recognises publications with more than one author. Nonetheless, participants regret that the existing method penalise those papers with more than one author.

Relevant legislation	Internal regulation
Law of Research Patent and utility models (11/1986) 20 March Royal Decree Law 1/1996, Intellectual Property Law (Book I. art.7 and art.10) Spanish Law 14/2011, 1st June, of Science , Technology and Innovation	UPV Bylaws

Initiatives undertaken and/or suggestions for improvement:
• Analyse the existing Research Activity Index in order to better recognise co-authorship
• Design of the Researcher Career Professional Development Strategy

Teaching (33): -/+

Teaching is an essential mean for the structuring and dissemination of knowledge and should therefore be considered a valuable option within the researchers' career paths. However, teaching responsibilities should not be excessive and should not prevent researchers, particularly at the beginning of their careers, from carrying out their research activities. Employers and/or funders should ensure that teaching duties are adequately remunerated and taken into account in the evaluation/appraisal systems, and that time devoted by senior members of staff to the training of early stage researchers should be

counted as part of their teaching commitment. Suitable training should be provided for teaching and coaching activities as part of the professional development of researchers.

Gap:

As mentioned several times, there is a big difference between those researchers with teaching responsibilities (academic background) against those with no teaching responsibilities. Hence, we could say that some researchers have no option to teach, mainly because they are hired for a specific research project and his/her work is intended to be only for the project. Nonetheless, teaching is the only way to access a stream that can guide researchers to better job prospects. Non academic researchers do not feel comfortable with the existing situation, where teaching is very dependent of the type of contract you have. Short-term contracts are considered full-time jobs with no spare space to dedicate to other activities like teaching.

Relevant legislation	Internal regulation
Organic Law of Universities (6/2001) Spanish law (RD 14/2012) - Public finances rationalisation Spanish Law 14/2011, 1st June, of Science , Technology and Innovation	Directive for teaching collaborations and research personnel

Initiatives undertaken and/or suggestions for improvement:
- Design a process aimed to recognise teaching activities done by pre-doctoral researchers
- Find new ways to allow researchers with short-term contracts to teach
- Design of the Researcher Career Professional Development Strategy

Complains / appeals (34): + +

Employers and/or funders of researchers should establish, in compliance with national rules and regulations, appropriate procedures, possibly in the form of an impartial (ombudsman-type) person to deal with complaints/appeals of researchers, including those concerning conflicts between supervisor(s) and early-stage 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 the working environment.

Gap:

No gap

Relevant legislation	Internal regulation
	Ombudsman regulation

Initiatives undertaken and/or suggestions for improvement:
- Design a process aimed to recognise teaching activities done by pre-doctoral researchers
- Build a database of research equipments
- Launch a proposal aimed to open the use of existing research equipment (currently allocated to individuals) to the whole research community
- Proposal to recognise tele-working in research
- Design of the Researcher Career Professional Development Strategy

Participation in decision-making bodies (35): + +

Employers and/or funders of researchers should recognise it as wholly legitimate, and indeed desirable, that researchers be represented in the relevant information, consultation and decision-making bodies of the institutions for which they work, so as to protect and promote their individual and collective interests as professionals and to actively contribute to the workings of the institution.

Gap:

No gap

Relevant legislation	Internal regulation
	UPV Bylaws

Training and Development

Relation with supervisors (36): +/-

Researchers in their training phase should establish a structured and regular relationship with their supervisor(s) and faculty/departmental representative(s) so as to take full advantage of their relationship with them. 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.

Gap:

Participants remarked the absence of a formal procedure to assess the role of the PhD supervisor. There are no concrete metrics to determine how good was a PhD supervisor. It is also impossible to compare 2 different PhD supervisor with any standardised process.

Heterogeneity seems to be the norm in this field, mainly because topics are very specific. Hence, it could be said that it is difficult to find a common ground for PhD supervision, but would be welcomed to have some sort of training, aimed at PhD supervisors, to set common standards on PhD supervision.

Multitasking was a source of controversia. Participants manifested their reaction against a policy that force researchers to focus on excellence whilst they are also required to deal with many other things, very time consuming, not recognised and not related with developing a researcher profile.

Relevant legislation	Internal regulation
Spanish law (RD 99/2011) - Doctorate studies regulation Spanish Law 14/2011, 1st June, of Science , Technology and Innovation.	Directive for pre-docs Doctorate School regulation Regulation for doctorate studies

Initiatives undertaken and/or suggestions for improvement:
- Produce a guide good practices guide for PhD supervision
- Create a training program for PhD supervision
- Set up personalised training curricula for researchers
- Assess PhD supervision

Supervision and managerial duties (37): +/-

Senior researchers 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. With regard to their role as supervisors or mentors of researchers, senior researchers should build up a constructive and positive relationship with the early-stage researchers, in order to set the conditions for efficient transfer of knowledge and for the further successful development of the researchers' careers.

Gap:
See aspect 36

Relevant legislation	Internal regulation
Spanish law (RD 99/2011) - Doctorate studies regulation	

Initiatives undertaken and/or suggestions for improvement:

- Set up a group of senior researchers to mentor younger researchers
- Create a training program for researchers regardless the type of contract they have and the content provider
- Set up an internal committee for researcher curriculum update
- Produce a guide good practices guide for PhD supervision
- Create a training program for PhD supervision
- Set up personalised curricula for researchers
- Design a welcome pack for new researchers
- Assess PhD supervision

Continuing Professional Development (38): +/-

Researchers at all career stages should seek 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.

Gap:

Most of the discussion has been dominated by topics related with training R1 and R2 researchers. Nonetheless, it has also been manifested several drawbacks connected with training R3 and R4 researchers. As mentioned in previous aspects, it was made clear that there is a necessity to train PhD supervisor to set up a common ground on PhD supervision. It is a fact that the unit responsible for training R3 and R4 does not observe this kind of training as relevant on their curricula.

It was discussed the high level of fragmentation in terms of content providers inside the university: researchers are deeply constrained by their contract in terms to what courses or learning materials they have access. More over, it could be said that there are three types of trainings: central provided training, de-centralised training and individual training. The first case is supported by 3 different units that are not coordinated at all. The second one depends on each research structure, and the last one is done on individual basis.

In conclusion, there is no training program tailored to the necessities of researchers according their progress in the career ladder (R1 to R4).

Relevant legislation	Internal regulation
Law 7/2007, of 12th April, of Public Employee Basic Statute Spanish Law 14/2011, 1st June, of Science , Technology and Innovation	Doctorate School regulation Regulation for doctorate studies

Initiatives undertaken and/or suggestions for improvement:

- Set up a group of senior researchers to mentor younger researchers

- Create a training program for researchers regardless the type of contract they have and the content provider
- Set up an internal committee for researcher curriculum update
- Create a training program for PhD supervision
- Set up personalised curricula for researchers
- Design a welcome pack for new researchers

Access to research training and continuous development (39): -/+

Employers and/or 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. Such measures should be regularly assessed for their accessibility, take up and effectiveness in improving competencies, skills and employability.

Gap:
See aspect 38

Supervision (40): +/-

Employers and/or funders should ensure that a person is clearly identified to whom early-stage researchers can refer for the performance of their professional duties, and should inform the researchers accordingly. Such arrangements should clearly define that the proposed supervisors are sufficiently expert in supervising research, have the time, knowledge, experience, expertise and commitment to be able to offer the research trainee appropriate support and provide for the necessary progress and review procedures, as well as the necessary feedback mechanisms.

Gap:
See aspect 36

Open Transparent Merit based Recruitment

OTM-R matrix

The table below represents the institutional situation against the OTM-R checklist. Column headed "A" stands for "Answer", and represents the level of implementation of each principle according to the following scale: ++ Yes, completely, +/-Yes, substantially, -/+ Yes, partially, -- No

Nr.	OTM-R System	O	T	M	A	Indicators
1	Have we published a version of our OTM-R policy online (in the national language and in English)?	•	•	•	-/+	Partially
2	Do we have an internal guide setting out clear OTM-R procedures and practices for all types of positions?	•	•	•	-/+	Partially
3	Is everyone involved in the process sufficiently trained in the area of OTM-R?	•	•	•	-/+	Partially
4	Do we make (sufficient) use of e-recruitment tools?	•	•		+/-	https://www.upv.es/entidades/SRH/
5	Do we have a quality control system for OTM-R in place?	•	•	•	++	https://aplicat.upv.es/pegasus-app/public/unit_results/unit.xhtml?harvestId=12&unitId=3
6	Does our current OTM-R policy encourage external candidates to apply?	•	•	•	-/+	http://www.upv.es/entidades/VIIT/info/1030032normalc.html
7	Is our current OTM-R policy in line with policies to attract researchers from abroad?	•	•	•	-/+	http://www.upv.es/entidades/VIIT/info/1030032normalc.html
8	Is our current OTM-R policy in line with policies to attract underrepresented groups?	•	•	•	+/-	Trend in the share of applicants among underrepresented groups
9	Is our current OTM-R policy in line with policies to provide attractive working conditions for researchers?	•	•	•	+/-	Trend in the share of applicants from outside the organisation
10	Do we have means to monitor whether the most suitable researchers apply?				- -	Not implemented
Nr.	Advertising and application phase	O	T	M	A	Indicators
11	Do we have clear guidelines or templates (e.g., EURAXESS) for advertising positions?	•	•		++	https://www.upv.es/entidades/SRH/
12	Do we include in the job advertisement references/links to all the elements foreseen in the relevant section of the toolkit?	•	•		+/-	https://www.upv.es/entidades/SRH/
13	1Do we make full use of EURAXESS to ensure our research vacancies reach a wider audience?	•	•		-/+	MSKCA

14	Do we make use of other job advertising tools?	•	•		-/+	Outreach Plans for each Call
15	Do we keep the administrative burden to a minimum for the candidate?	•			-/+	Number of fields fo fill in
Nr.	**Selection and evaluation phase**	**O**	**T**	**M**	**A**	**Indicators**
16	Do we have clear rules governing the appointment of selection committees?		•	•	++	https://www.upv.es/entidades/SRH/
17	Do we have clear rules concerning the composition of selection committees?		•	•	++	https://www.upv.es/entidades/SRH/
18	Are the committees sufficiently gender-balanced?		•	•	-/+	https://www.upv.es/entidades/SRH/
19	Do we have clear guidelines for selection committees which help to judge 'merit' in a way that leads to the best candidate being selected?			•	++	https://www.upv.es/entidades/SRH/
Nr.	**Appointment phase**	**O**	**T**	**M**	**A**	**Indicators**
20	Do we inform all applicants at the end of the selection process?		•		++	https://www.upv.es/entidades/SRH/
21	Do we provide adequate feedback to interviewees?		•		+/-	https://www.upv.es/entidades/SRH/
22	Do we have an appropriate complaints mechanism in place?		•		-/+	Statistics of complaint
Nr.	**Overall assessment**	**O**	**T**	**M**	**A**	**Indicators**
23	Do we have a system in place to assess whether OTM-R delivers on its objectives?				- -	Not implemented

Action Plan

Organisational information

Key figures

Staff and Students	FTE
Total researchers = staff, fellowship holders, bursary holders, PhD. students either full-time or part-time involved in research	3654
Of whom are international (i.e. foreign nationality)	183
Of whom are externally funded (i.e. for whom the organisation is host organisation)	694
Of whom are women	1227
Of whom are stage R3 or R4 = Researchers with a large degree of autonomy, typically holding the status of Principal Investigator or Professor.	2598
Of whom are stage R2 = in most organisations corresponding with postdoctoral level	434
Of whom are stage R1 = in most organisations corresponding with doctoral level	622
Total number of students (if relevant)	25556
Total number of staff (including management, administrative, teaching and research staff)	5058

RESEARCH FUNDING (figures for most recent fiscal year)	M€
Total annual organisational budget	317,8
Annual organisational direct government funding (designated for research)	111,5
Annual competitive government-sourced funding (designated for research, obtained in competition with other organisations – including EU funding)	36,3
Annual funding from private, non-government sources, designated for research	18,1

Organisational profile

The Universitat Politècnica de València is a public technological institution focused on the fields of engineering, business administration and arts and design. It is the only technical university in Spain present in the most relevant higher education rankings, like the Academic ranking of World University, QS-Ranking or the Times Higher Education Ranking. It is a leading institution research, being one of the most relevant actors in Spain of the Horizon 2020 Program. In teaching has embraced the development of soft-skills as an integral part of its curriculum and the use of ICT in teaching. Its public commitment is also visible on all its

technology transfer activities, leading patents and licensing national rankings, and in continuing education activities.

Strengths and weaknesses of the current practice

This section presents an overview of the organisation in terms of the current strengths and weaknesses of the current practice under the four thematic headings of the Charter and Code.

Ethical and Professional aspects

Ethics is pinnacle to the university activity. UPV is a public institution, the result of public welfare spending. Using tax payer money efficiently is part of our ethics commitment but, in addition, there are several other initiatives that convert UPV on a pioneering institution in terms of ethics: the Ethic Commission that assess activities according to ethical standards, the Commission in Bioethics and Animal Research, and a specific Vice-Rectorate on Social Responsibility.

In Spain there are more than 70 universities. The Universitat Politècnica de València is always ranked in the Top-5 in terms of technology transfer, showing a strong demand from the society regarding the activities of the university. Nonetheless, it was detected that some researchers are too focused and their career development but not so much on the impact of their research in the social good.

It can be said that the existing organisational structure provides sufficient opportunities to all researchers, regardless their background or their contractual situation, in order to target their research efforts into the fields they consider best. All researchers are linked to one research structure, and most of the researchers can also perform their research activity at departments. Researchers are allowed to change their affiliation to different research structure or, moreover, to create new ones provided they reach the required thresholds established. Nonetheless, during the gap analysis, it was detected that less experienced researchers are not always in equal conditions respect their more experienced counterparts. In all cases existing funding schemes can bias the process.

The university has enforced an automatic system to detect plagiarism. This system allow to score every publication in terms of originality. In addition to that, the university is very active on scientific publications, where the peer review process is also supposed to guarantee originality.

The Research Activity Index, already mentioned in different parts of the UPV HRS4R, is monitored by a committee. This committee has dedicated personnel to assess that merits are accredited conveniently. Nonetheless, there have been detected certain drawbacks on this system that have already been mentioned in the GAP analysis.

The exhaustive economic monitoring system conveys a professional attitude on the researchers: they need to amount to certain standards to do their work. Nonetheless, this

system has also been considered "bureaucratic" and a potential threat to some activities if a better balance between effectiveness and control is not found.

Contractual obligations, in the case of researchers with no teaching profile, are considered fragmented. Nonetheless, the proposed action plan already consider several actions to improve the situation.

In terms of intelectual property, there is an extensive training options within the university. Moreover, ad-hoc training in this matter is also possible. Nonetheless, the Gap Analysis reflected some weaknesses, like the fragmentation of this kind of training according to different contractual situations.

Recruitment and Selection

The Human Resources Department provides support for recruitment and selection. There is professional staff knowledgable of the existing legal frameworks, capable of initiate, monitor and finalise the whole process. Nonetheless, some concerns were raised regarding the duration of the whole process. Some improvements could be done on this area, though it is true to say that there are legal requirements in terms of deadlines that are not always in line with the quick reaction researchers are expected to have.

The University is subjected to a strict regulation in terms of recruitment and selection. It is a legal requirement that every job position is open to all potential candidates and is publicly available. Nonetheless, during the GAP Analysis several situations have been detected that need to be improved. Also the OTM-R Analysis has also shed light in some circumstances that need to be tackled. Regardless the fact that the Human Resources Department support also international contracts, it is true to say that the absence of information in English regarding the calls is an important weakness. The Action Plan suggests several improvements.

Researchers with teaching background have a very well defined recruitment process. First they need to be accredited externally, later they can opt to a position at the university. Nonetheless, provision of new positions are constrained by external rules damaging the university autonomy in this field. The Gap Analysis has also shown that this process is not so well defined for researchers with no teaching profile. The Action Plan is also intended to improve this situation.

The University participates in different programs to recruit new researchers, like the Beatriz Galindo Program or the Marie-Sklodowska Curie Action. Universitat Politècnica de València is very active in both programs therefore, we could clearly say that the intention is there. Nonetheless, there is quite a lot of room for improvement, like the lack of a well structured procedure to advertise job positions in English.

In terms of OTM-R we could say that recruitment is open, transparent and merit based, but it is true to say that there is still work to be done in order to state that we fulfil all the OTM-R

Criteria. For instance, there is no OTM-R published online and there is no sufficient training in the OTM-R area. This topic is well covered later in this document.

All selection committees include experts in different areas and skills. The existing legal framework has reduced the gender gap on the composition of this committees. In addition to that, the R&D Committee is responsible to back the different selection criteria, adding an extra layer of assessment to the process.

Working Conditions

Universitat Politècnica de València has an active program to facilitate a balance between working requirements and personal life. The program is called "Plan Concilia" and has been working for more than a decade. In addition, the university has a kinder-garden in the campus, organises activities aimed for kids like summer camps and other activities to facilitate well-being. There is a Health Center were all the university community can access for free to different medical services, like blood tests, medical image, cardiology or consultancy. The University is also member of the Spanish Network of Healthy Universities, to promote a health life style among their employees. Nonetheless, the Gap Analysis has shown that some researchers are not aware of those social benefits, specially those regarding "Plan Concilia", and an action to better disseminate "Plan Concilia" is also foreseen.

In terms of physical infrastructure, the University has one of the biggest Science Parks in Spain, providing cutting edge infrastructure to do professional research in almost all fields of knowledge. There is also important research equipment, like the lab for electronic microscopy, that can be used by the whole research community and assisted by professional staff. The Gap Analysis has also shown that this kind of service should be extended to other equipment that currently is assigned to specific researchers and not available for the whole community. There are certain actions proposed to offer better access to those services.

Researchers with teaching profile are well recognised as professionals, and they have a very well defined career that lead to a long-term contract. This is mainly because they become civil servants of the public administration, and they hold a permanent position at the university. Nonetheless, those researchers with no teaching profile suffer from different conditions that difficult the same recognition than on the other group and not the same stability. In the Action Plan is suggested different options to reduce this gap.

Training and Development

There are 3 units in charge of training and development or researchers at the university: the Doctoral School, the Career Development Unit and the Educational Institute.

The Doctoral School at Universitat Politècnica de València (UPV) is responsible for doctoral studies, at both the academic and administrative level. It is a multidisciplinary school offering doctoral programs in different fields: Engineering and Architecture, Sciences, Arts & Humanities and Social Sciences. The School has its own strategy, which is tied to the strategies of the University's different research programmes. As part of the framework of the 2020 Strategic Plan the UPV has defined as a strategic project a doctoral model that encourages the internationalisation of UPV doctoral programmes (among other objectives).
One of the actions to achieve this goal encourages the participation of internationally recognised researchers in events organised as part of doctoral training. In this context, a new call is made to collect applications from the different doctoral programs with the objective of launching a series of seminars and work days to be developed throughout 2018. The Doctoral School is responsible for training R1 researchers. It offers a program of soft skills taught online. In addition to that, some other training activities are organised to guarantee that R1 researchers get the best training.

The Career Development Unit is part of the Human Resources Service. It is in charge of providing training to administrative personnel and to researchers with no teaching profile. The main goal is to enhance competitiveness of university personnel by enhancing skills and professional capabilities in accordance with societal challenges. Training is provided according to 3 main streams:

- The bi-anual training plan aimed to deliver training based on transversal content and suited for all professional fields, including research

- Training grants to support those employees that do not find their needs fulfilled with the existing bi-anual training plan

- Training in foreign languages in partnership with the Center for Languages Development

In addition, a new self-learning strategy has been launched. It is based on a series of online activities available to every employee.

The Educational Institute pursues improve academic skills on everything related with their work as teachers and researchers. It also supports other agents like students, deans and the university community broadly speaking. In terms of teaching the Educational Institute suggests the following goals:

- To provide a coherent training catalogue in accordance with the needs expressed by the different stakeholders

- Fulfil individual and collective needs for training

- Analyse the impact of training in their daily activities.

As mentioned in the Gap Analysis, the current organisational structure does not provide a coherent view of training for researchers. Each unit is aimed to a different group, and researchers can only apply to those learning activities that are part of the unit they "belong" to. The action to provide a single curriculum for research is considered to help on providing a better option for researchers.

It is worth to mention the online learning platform called Poliformat, based on Sakai platform, and that serves as the basis for all online training at the university.

Actions

This document and the rest of files related with the UPV Human Resources Strategy For Researchers are easily accessible on the following website: https://hrs4r.blogs.upv.es

Ethical and Professional Aspects

A01: To establish a science awareness training program
The goal of this action is to ensure that all researchers disseminate and exploit the work they are involved on. Firstly we are going to identify conduct a survey to assess the state of the art of dissemination and exploitation. Afterwards we are going to design a curricula to train researchers on dissemination and exploitation accordingly. We will be combining online material with face to face interaction. In addition, yearly we will perform an evaluation to monitor progress. This action will also be helping on the detection other actions, in addition to training, that can serve for this purpose.

Nr.	Gap Principles	Timing	Responsible Unit	Indicators / Targets
A01	8 - 9	S1 - S2 - S4 - S6 - S8 - S10	Career Development Unit Doctorate School Educational Institute Communications Office	Number of participants Number of researchers engaged in dissemination and exploitation activities / total population of researchers

A02: To establish a learning program on legal and financial aspects for R&D activities
The goal of this action is to rise awareness of contractual and legal obligations to R1 and R2 researchers. During S3 we are going to create an online course regarding the different type of contracts currently available, with a comprehensive guide on its implications in terms of intelectual property rights and working conditions. During S4 this course will be followed by r all researchers participating in research projects. In addition, we plan to make it mandatory

for every new researcher hired. Every year we will be conducting an assessment to monitor how knowledgeable are researchers regarding this topic.

Nr.	Gap Principles	Timing	Responsible Unit	Indicators / Targets
A02	5	S3 - S4 - S5 - S7 - S9	Career Development Unit Doctorate School Educational Institute	Number of participants Average score on the annual assessment

A03: To produce manual for R&D project management (best practices)

This action aims to enhance R&D practices in the fields of project management, IT management and health and safety procedures. During S1 will perform an online survey to identify best practices. Afterwards, we are going to organise 3 focus groups with key relevant actors detected during the survey. Finally, we are going to compile all material in a single volume available online for all researchers.

Nr.	Gap Principles	Timing	Responsible Unit	Indicators / Targets
A03	7	S1 - S2 - S3 - S4	Research Management Service Vice-Rectorate for Campuses and Sustainability Vice-Rectorate for Digital Resources Legal Department	Number of participants in the survey - Number of participants in the focus groups - Number of best practices identified - Manual produced - Number of downloads

A04: To setup an observatory of research trends

The goal of this action is to ensure that researchers better understand public interest in science and technology and to introduce them to research topics relevant to society. Firstly we are going to identify the main national and international research observatories. Secondly we are going to setup a website that facilitates access to those observatories. In addition, we will be providing reports on research trends based on publications database. Every year we will launch a survey addressed to companies to identify research needs. All information will be presented on a coherent way on a single website.

Nr.	Gap Principles	Timing	Responsible Unit	Indicators / Targets
A04	3 - 9	S1 … S10	Technology Transfer Office Vice-Rectorate for Digital Resources	Number of publications - Number of visitors to the website - Number of papers analysed

Recruitment and Selection

A05: To define a new recruitment scheme based on thematic lines

This actions aims to establish a new R1 and R2 recruitment scheme that reduces the gaps that the existing process create. During S3 we are going to establish a committee that analyse the existing problems raised during our gap analysis. From S4 till S5 we will be validating different alternatives. In addition we will translate all recruitment calls and selection documents in to English.

Nr.	Gap Principles	Timing	Responsible Unit	Indicators / Targets
A05	12 - 13 - 14	S3 … S5	Human Resources Vice-Rectorate for Research, Innovation and Technology Transfer Bursar Communications Office	New scheme defined - Recruitment calls translated into English - Number of participants in the Committee - Number of recruitment calls translated into English

A06: To setup a new merits recognition scheme

The aim of this action is to explore new qualitative selection practices helpful on evaluating the whole range of experience of R1 and R2 candidates. During S5 and S6 we are going to produce a report on selection practices from other Spanish universities. Afterwards we will be expanding this report to other 3 institutions from EU countries. Finally we will be producing a report with recommendations that will be sent to the Ministry. In addition, we are going to update our selection and scoring system according to the insights we get

Nr.	Gap Principles	Timing	Responsible Unit	Indicators / Targets
A06	14 - 16 - 17 - 18 - 19	S5 - S8	Vice-rectorate for Research, Innovation and Technology Transfer - Vice-rectorate for Teaching Affairs and Academics - Doctorate School - Human Resources	Report on Spanish selection schemes produced - Report on EU selection schemes produced - Report with recommendations to the Ministry produced - New scheme defined

A07: To propose an alternative framework for short term contracts in research

The aim of this action is to propose a new type of contract that increase stability in researchers hired for specific research projects. We will be catching up from results obtained in A05. Between S6 and S6 we will seek advice from external legal experts to get insights on the definition of this new type of contract. Afterwards, there will be a committee responsible of producing a proposal.

Nr.	Gap Principles	Timing	Responsible Unit	Indicators / Targets
A07	12 - 13 - 21	S5-S10	Human Resources Legal Department	External report available - New type of contract produced

A08: To establish an automatic merits recognition framework for EU researchers

This action focus on facilitating the incorporation of EU researchers to the university by establishing an automatic merits recognition framework. This framework will be based on the conclusions of the "Study on Obstacles to Recognition of Skills and Qualifications" . We are going to establish a "one-stop shop for advice" website where potential applicants from other EU countries can gather all relevant information. We will be also teaching our staff to have a better understanding of this issue. During S9 will are going to setup an online form where applicants can introduced their merits and assess the chances to be recognised at the university.

Nr.	Gap Principles	Timing	Responsible Unit	Indicators / Targets
A08	19	S7 - S10	Human Resources Legal Department	Merits recognition framework established - Online form set up - Number of queries to the online form - Number of applicants with the new scheme

Working Conditions and Social Security

A09: To design a professional development strategy for researchers

The aim of this action is to reduce the existing fragmentation on the research career detected during the gap analysis. We are going to conduct a focus group to obtain insights that can be helpful for the new strategy. The strategy will focus on creating accompanying mechanisms to the researcher during their development. Continuous training, assessment, awareness and advice will be the 3 main drivers to give coherence to the existing careers. This action will be tightly connected to actions A10, A13 and A15.

Nr.	Gap Principles	Timing	Responsible Unit	Indicators / Targets
A09	22 - 23 - 26 - 28 - 30	S1 - S2	Human Resources Vice-Rectorate for Research, Innovation and Technology Transfer Vice-Rectorate for Teaching Affairs and Academics - Doctorate School	Strategy designed

A10: To explore new incentive mechanisms to foster research

The goal of this action is to enhance the attractiveness of the research career by establishing a better incentive mechanism for the whole research community. Firstly we are going to assess the options to include this kind of incentives in all new contracts for R1 and R2 researchers. Those incentives will be based on productivity indicators. Therefore, we are going to study which indicators can be included as part of this system. This action is linked with action A11.

Nr.	Gap Principles	Timing	Responsible Unit	Indicators / Targets
A10	26	S4 … S6	Human Resources Vice-Rectorate for Research, Innovation and Technology Transfer Bursar Legal Department	New incentive mechanism established

A11: To update the salaries schemes of researchers with short term contracts

Participants complained about the ageing of the existing salaries scheme used in the university to hire R1 and R2 researchers. The goal of this action is to update this score. We will create a committee that analyse the existing score in order to produce a new proposal. In this proposal we will include the recommendations obtained in action A10.

Nr.	Gap Principles	Timing	Responsible Unit	Indicators / Targets
A11	26	S6 … S8	Human Resources Bursar	Salaries schemes updated

A12: To design a teaching recognition scheme for R1 and R2 researchers

The goal of this action is to guarantee teaching opportunities to R1 and R2 researchers. First we are going to study how can we make compatible existing full time contacts with additional obligations like teaching. Secondly, we are going to provide access to specialised pedagogical training. Finally, their teaching practice will also be included as part of their activities at the university.

Nr.	Gap Principles	Timing	Responsible Unit	Indicators / Targets
A12	33	S4 … S6	Vice-Rectorate for Teaching Affairs and Academics - Doctorate School - Educational Institute - Human Resources	Pedagogical training available - Curriculum updated - Teaching recognition scheme designed

A13: To prepare professional guidance material for researchers' career development

The aim of this action is to ensure a certain level of career advice for every researcher depending on how do they progress on the career ladder. Firstly we are going to produce a welcome pack for new researchers. Secondly we will record interviews with researchers from different stages that will remark the key elements on career development. Finally we will re-ignite the UPV mentor program for researcher, selecting a group of experienced researchers that will be available for counselling.

Nr.	Gap Principles	Timing	Responsible Unit	Indicators / Targets
A13	30	S7 - S10	Vice-Rectorate for Teaching Affairs and Academics - Doctorate School - Communications Office	Number of viewers - Number of welcome packs delivered - Number of downloads of the welcome pack - Number of researchers participating in counselling sessions - Number of interviews

Training and Career Development

A14: To facilitate researchers with no teaching profile to participate as PR in research projects

The goal of this action is to explore the possibility to facilitate researchers with no teaching profile become principal researchers in research projects. We are going to setup a committee that will analyse the possibilities to make it real in the existing legal framework. The result of this committee will be available as a set of recommendations that will be taken into account as part of the new strategy for researchers. Recommendations will be made publicly available to open a debate about this with the whole research community.

Nr.	Gap Principles	Timing	Responsible Unit	Indicators / Targets
A14	37 - 40	S7 - S8	Vice-Rectorate for Research, Innovation and Technology Transfer Legal Department	Number of recommendations Number of downloads Participants on the discussion

A15: To design a personalised learning program for researchers

This action aims to ensure that all researchers at any stage of their career, regardless of their contractual situation, are given the opportunity to improve their skills by a personalised learning program. We are going to bring together the 3 main learning providers for researchers at the university. We will be offering a unified training program for researchers

that will be accessible from the HRS4R website. This program will not consider any requisite that constrains access depending on their contractual situation or their teaching status.

Nr.	Gap Principles	Timing	Responsible Unit	Indicators / Targets
A15	38 - 39	S1 - S4	Career Development Unit - Educational Institute - Doctorate School	Number of participants - Number of courses offered - Number of visitors to the website - Number of final registration / Number of candidates

Open Recruitment Policy

The establishment of an Open Recruitment Policy is a key element in the HRS4R strategy. Here we indicate how the university will use the Open, Transparent and Merit-Based Recruitment Toolkit and how we intend to implement the principles of Open, Transparent and Merit-Based Recruitment. Although there may be some overlap with a range of actions listed above, please provide a short commentary demonstrating this implementation. Finally we make the link between the OTM-R checklist and the overall action plan.

The university is a public institution subjected to strict norms related to public employment. The legal framework requires that all positions are open to everyone. In addition, it establish the necessity to to publish the call in order to facilitate all potential candidates to apply. Scores and selection criteria are publicly available, and defined by committees subjected to strict regulation. It could be said that the legal framework guarantees an Open Transparent Merit Recruitment process.

Procedures date back from long time ago and are mainly design to provide with employees to the Public Administration broadly speaking. The University has some special requirements that dos not fit well in those procedures, so the application of the OTM-R principles and the HRS4R is considered to be greatly beneficial. Attracting international researchers is not part of the core public employment policies of the Public Administration. The action A08 aimed to establish an automatic merits recognition framework framework for EU researchers will be highly beneficial on this issue, and will encourage the application of checkpoints 10, 11, 12, 13 and 14.

Action A11 will facilitate the creation of better economic conditions for researchers, so checkpoint 9 will be greatly affected.

The OTM-R checklist, part of the HRS4R process, establish 23 checkpoints that confront existing practices with those required to have a full OTM-R process. The Universitat Politècnica de València has defined an action plan with 15 actions to be conducting during a 5 years timeframe. Those actions contribute to implement the high standards suggested by the HRS4R process. For instance, the action A06 to setup a new merits recognition scheme, will help on better accomplish checkpoints number 6, 7, 10, 12, 16 and 18. During the Gap

Analysis participants raised concerns about the lack of an authentic "professional development strategy". Action A09 will deliver on it, and will help on checkpoints number 1, 2, 3 and 4.

As part of our OTM-R commitment we will launch some specific OTM-R actions, like one to better balance our audience to guarantee a more balanced gender provision.

In our action plan it can also be checked how we plan to translate all job positions into English and our commitment to publish everything in the Euraxess portal.

Implementation

General Overview

Our assumption is that a project to be implemented needs to have a resource allocation scheme and a monitoring system. Hence, we consider of the utmost relevance that the HRS4R strategy becomes part of the UPV Strategic Plan 2021-2025. It will provide additional monitoring systems beyond those described in the next section and the necessary allocation of resources.

For the implementation, a new committee will be defined, the so called "Implementation Committee". This committee will be chaired by the Director of Human Resources, who is also member of the Steering Committee and will be in charge of the implementation itself. The chairperson will coordinate a group that will be conformed by representatives from those units in charge of implementing actions (see Action Plan for more details): Vice-Rectorate for Research, Innovation and Technology Transfer, Vice-Rectorate for Sustainability and Campuses, Vice-Rectorate of Digital Resources, Vice-Rectorate for Teaching Affairs and Academics, Bursar, Legal Department, Doctorate School, Educational Institute, Human Resources, Research Management Service, Technology Transfer Office, Communications Office, Career Development Unit.

We also consider key to involve end users in the implementation, therefore, the existing working groups related with ethical and professional aspects, working conditions and social security, recruitment and selection and training and career development will be transformed into "Consultation Groups", that will monitor how the implementation affects each of their areas. Those groups include representatives from the research community and the support staff of research activities. In addition to that, the annual conference about the HRS4R strategy and the annual survey of end-user satisfaction with the HRS4R process will also be a crucial part of our implementation process.

Finally, the Steering Committee will oversee the whole process and will be in charge of informing the main decision making bodies of the university about how the HRS4R process evolves.

Checklist

How will the implementation committee and/or steering group regularly oversee progress?

We plan to keep the same Steering Committee and Working Group structure set up during the design phase.

The Steering Committee, chaired by the Vice-Rector for Research, Innovation and Technology Transfer, includes representatives from the different researchers groups (R1 to R4), representatives from the research support staff and a representative from the trade unions. The Steering Committee will meet every semester to oversee progress. As a result of the meeting, a monitoring report will be produced, documenting the situation of each action in terms of indicators, risks and potential adjustments to be done. Changes in existing actions will have to be approved by the Steering Committee.

The working groups related with professional and ethical aspects, working conditions and social security, recruitment and selection and training and career development will be transformed into Consultation Groups. Each one will be chaired by a representative of the Steering Committee and will oversee how the HRS4R implementation affects to each area. They will also report to the Steering Committee. There will be a report from each group to assess how the project evolves in each area.

The Implementation Committee will be participated by representatives from each unit in charge of implementing each action: Vice-Rectorate for Research, Innovation and Technology Transfer, Vice-Rectorate for Sustainability and Campuses, Vice-Rectorate of Digital Resources, Vice-Rectorate for Teaching Affairs and Academics, Bursar, Legal Department, Doctorate School, Educational Institute, Human Resources, Research Management Service, Technology Transfer Office, Communications Office, Career Development Unit. The Implementation Committee will be chaired by the Director of Human Resources who will be responsible of overseeing the implementation process in practice and reporting to the Steering Committee during the semester meeting.

The Steering Committee will be in charge of preparing the internal evaluation (3 years after the project starts) and the final evaluation (5 years after the project starts).

How do you intend to involve the research community, your main stakeholders, in the implementation process?

During the design of the HRS4R strategy we have defined 4 working groups: the ethical and professional working group, the working conditions and social security working group, the recruitment and selection working group and the training and career development working group. They include representatives from R1 to R4 researchers and from the support staff related with research activities. Each of these working groups is chaired by a person who is member of the Steering Committee

We plan to maintain the working groups mentioned before so they become consultations groups that will advise the Implementation Working Group (see later). The Consultation Working Groups will meet every quarter to assess that the project is being implemented in

their field and to treat any potential deviation that the project faces or potential adjustments necessary to be done. In the eventuality some actions need to be adjusted, the Consultation Working Group of each field will have the power to amend the existing definition of the project to include the necessary changes.

The implementation of the HRS4R strategy is going to be part of the agenda of the existing governing bodies of the university, like the Governing Council, the Social Council and the University Senate. In addition to that, the Vice-Rector for Research, Innovation and Technology Transfer, who is also member of the University Management Council, will inform to the Rector and Vice-Rectors about the evolution of the HRS4R strategy.

It is planned to organise an annual conference about the HRS4R strategy at the university. Though the format is still to be defined, we plan to include keynote speakers and a round table with the implementation committee to discuss publicly how the project is being implemented. The conference will be opened to all the research community of the university but it will also be possible to have participants from other institutions. The conference will be recorded and will be accessible from the HRS4R website.

How do you proceed with the alignment of organisational policies with the HRS4R? Make sure the HRS4R is recognised in the organisation's research strategy, as the overarching HR policy.
In 2007 the university approved its first strategic plan. In 2015 a new strategic plan was approved to cover the period 2015-2020. The plan is structured according to challenges and projects, which can be financed by the university budget. Assigning economic resources to strategic projects has been a key factor on the implementation of the strategic plan ultimately. One of the strategic projects was to apply for the HRS4R recognition, as a way to spark the implementation of the European Charter and Code at the whole university.

This proposal is the result of the strategic project aforementioned. In 2020 we will be working on the the planning phase of the new strategic plan 2021-2025. All actions included in the HRS4R Action Plan will be part of the new strategic plan 2021-2025. This will be crucial to align the HRS4R process and the institutional policy. In addition to that, if the HRS4R is approved during 2020 by Euraxess, the process will be perfectly in sync with the institutional strategic plan.

How will you ensure that the proposed actions are implemented?
The implementation of the Action Plan relays on two pillars. First, it is necessary to setup an Implementation Working Group that is in charge of implementing the actions. In the Action Plan it has already been defined which units will implement each action: Vice-Rectorate for Research, Innovation and Technology Transfer, Vice-Rectorate for Sustainability and Campuses, Vice-Rectorate of Digital Resources, Vice-Rectorate for Teaching Affairs and Academics, Bursar, Legal Department, Doctorate School, Educational Institute, Human Resources, Research Management Service, Technology Transfer Office, Communications Office, Career Development Unit. It is planned that each unit designates one representative to setup the Implementation Working Group. The working group will be chaired by the

Director of Human Resources, who will be in charge of coordinating the implementation of the HRS4R strategy. In addition, the Director of Human Resources will inform the Steering Committee of how the project evolves.

Second, the allocation of resources is pinnacle to guarantee that the implementation progress at the right page. As mentioned earlier, the HRS4R strategy will be part of the UPV 2021-2025 Strategic Plan. The University has already established a system to allocate resources to the strategic projects of the Strategic Plan. The HRS4R strategy is going to receive funds from the Strategic Plan as part of the regular budgetary process of the University.

How will you monitor progress (timeline)?

The Action Plan has already established a set of indicators. Those indicators will serve as the grassroots to setup balance scored card to monitor key indicators of the implementation. In addition to that we will use the Logical Framework Matrix, which will be set up once the HRS4R Strategy is approved by Euraxess. The Matrix includes general goals, specific goals, results, actions, indicators and assumptions. The assumptions section will serve as a way to define contingency plans in case existing conditions and regulation change during the implementation process.

The Director of Human Resources, who is a member of the Steering Committee and be also the chairperson of the Implementation Working Group, will report to the Steering Committee on regular basis (see earlier).

We consider crucial to involve the whole university community on the implementation of the HRS4R strategy. The HRS4R website is going to include   a section called "monitoring" where every person can check the existing planning and how each project evolves against the existing planning. Indicators for each action will be publicly available. Every individual will be in the position to send feedback about each action so implementation can be conveniently adapted.

In addition to monitor actions and indicators, we will be assessing satisfaction from end-uses, like researchers from different levels or the administrative staff dealing with the changes implemented. For that purpose we will conduct an annual survey to analyse user satisfaction. This survey will include several dimensions related with ethical and professional aspects, working conditions and social security, recruitment and selection and training and career development. We consider the HRS4R implementation will be a success if, in addition to the implementation itself, we can assess higher levels of satisfaction from the end users about the new conditions created by the HRS4R process.

How will you measure progress (indicators) in view of the next assessment?

As mentioned earlier, the Steering Committee will be in charge of the HRS4R internal assessment and final assessment. The report will include a collection of indicators, targets,

challenges and goals. The report will be classified in 4 areas: ethical and professional aspects, recruitment and selection, working conditions and social security and training and career development.

In addition to that, the next assessment will include information about the impact of the HRS4R implementation. Hence, we consider that the addition of the satisfaction indicators, comments from end-users and the feedback we collect during the annual conference will be of the most relevance.

Additional remarks

To conclude, the Steering Committee would like to remark the uniqueness participatory character of the process followed at the university. Besides the number of people who participated during the qualitative analysis phase, that was by itself relevant, we are really proud of the engagement of the university research community with the HRS4R process. Having more than 60% of replies on a voluntary survey shows the level of commitment of the research community with the process. In addition to the results that we show in this report, there are hundreds of comments and remarks made by researchers that will for sure help on building a very promising future for researchers. We commit ourself with this plan and we expect to deliver according the expectations. Finally, we would like to express our gratitude to Euraxess for spurring this process and inspire us to become a better self.