

Human Resources Strategy for Researcher (HRS4R)

# HR Strategy and Action Plan

Self-Assessment



CTTC<sup>R</sup>

CENTRE TECNOLÒGIC de  
TELECOMUNICACIONS de CATALUNYA

Centre Tecnològic de Telecomunicacions de Catalunya

29 January 2018

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### TEMPLATE 3: INTERNAL REVIEW

Name Organisation under review:

Centre Tecnològic de Telecomunicacions de Catalunya (CTTC)

Organisation's contact details:

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Web-link to published version of organisation's HR Strategy and Action Plan:

<http://www.cttc.es/hrs4r-human-resources-strategy-for-researchers/>

Web-link to organisational recruitment policy (OTM-R principles):<sup>45</sup>

The filled OTM-R checklist is attached to this self-evaluation form as annex.

**SUBMISSION DATE TO THE EUROPEAN COMMISSION:** 31 JANUARY 2018

## 1. ORGANISATIONAL INFORMATION

<b>STAFF &amp; STUDENTS<sup>2</sup></b>	<b>FTE</b>
Total researchers = staff, fellowship holders, bursary holders, PhD. students either full-time or part-time involved in research	*90
Of whom are international (i.e. foreign nationality)	*32
Of whom are externally funded (i.e. for whom the organisation is host organisation)	*3
Of whom are women	*16
Of whom are stage R3 or R4 <sup>1</sup> = Researchers with a large degree of autonomy, typically holding the status of Principal Investigator or Professor.	*35
Of whom are stage R2 = in most organisations corresponding with postdoctoral level	*35
Of whom are stage R1 = in most organisations corresponding with doctoral level	*20
Total number of students (if relevant)	
Total number of staff (including management, administrative, teaching and research staff)	*110
<b>RESEARCH FUNDING (figures for most recent fiscal year)</b>	<b>€</b>
Total annual organisational budget	7.277.068,98
Annual organisational direct government funding (block funding, used for teaching, research, infrastructure,...)	3.129.148,81
Annual competitive government-sourced funding (designated for research, obtained in competition with other organisations – including EU funding)	2.780.991,32
Annual funding from private, non-government sources, designated for research	1.366.928,85
<b>ORGANISATIONAL PROFILE (a very brief description of your organisation, max. 100 words)</b>	
<p>The Centre Tecnològic de Telecomunicacions de Catalunya (CTTC) is a non-profit research center from a public initiative. Research activities at CTTC are organized into four divisions: Communication Networks, Communication Systems, Communication Technologies, Geomatics. One advisory body, Scientific, supervises CTTC's activities. The facilities are two buildings, where researchers have access to 8 laboratories and 7 test-beds. CTTC annually produces over 210 papers and has an IPR portfolio of 73 Patents. CTTC participates in numerous research projects and collaborates with industry, at national and international level. The R&amp;D management system is compliant with norm UNE-166002 Aenor, as credited by annual external audit.</p>	

For more information, please visit: <http://www.cttc.es>.

<sup>1</sup> [http://ec.europa.eu/euraxess/pdf/research\\_policies/Towards\\_a\\_European\\_Framework\\_for\\_Research\\_Careers\\_final.pdf](http://ec.europa.eu/euraxess/pdf/research_policies/Towards_a_European_Framework_for_Research_Careers_final.pdf)

<sup>2</sup> CTTC data of the considered fiscal year (2016). <http://sites.cttc.es/annualreport2016/>. Final numbers 2017 will not be available till June 2018.

## 2. NARRATIVE

CTTC endorsed the “European Charter for Researchers” and “The Code of Conduct for the Recruitment of Researcher” in October 2013, and was awarded with the Excellence in Human Resources in Research certification, obtaining the logo in November 2015. Currently, CTTC is implementing the Action Plan, organized in four different work packages according to the 4 thematic areas of the Charter and Code:

- WP1: Ethical and professional aspects
- WP2: Recruitment
- WP3: Working conditions and social security
- WP4: Training

With respect to the priorities for the short- and medium term envisioned at the beginning of the process, most of the actions have been performed or are ongoing. However, the circumstances in which our organisation operates have been changed and this have had an impact on the HR strategy: as a result, during the implementation phase, some actions have been prioritized and some other rescheduled, as detailed in the following of the document. To this regard, it is worth mentioning that CTTC has suffered leaves (three maternity leaves, one of them initially extended and then converted to definitive) and turnover of key members involved in the HRS4R Plan definition, in the strengthened HRS4R process and responsible for the HRS4R implementation, including the Project Management Coordinator and the General Administrator. This has been an impact on the implementation of the HRS4R according to the initial envisioned scheduling of actions, causing some delay in some specific actions, especially the ones having as a responsible the Project Management Coordinator. Recently, a new CTTC Management Team member has been nominated to replace the previous one to take over this task for the strengthened HRS4R process. Thus, the self-assessment of the HRS4R implementation has been an opportunity to carefully perform an internal review of the Action Plan status, reflect and document our progress and provide new actions towards the next step of the process. It is envisioned that all the ongoing and rescheduled actions will be completed in the next phase and new actions will be performed as specified in the updated/ revised Action Plan.

Within WP1, among the most representative actions, we highlight the yearly update on productivity policies regarding dissemination and exploitation of results and other aspects. Documents for information on that respect are distributed to the staff. Every year we evaluate the research and administration personnel based on their productivity. Every year the procedure is revised in order to improve the process and update the criteria of evaluation based on the strategic objectives of the institution. This action is considered continuous and thus it will be extended also to the next phase. Furthermore, CTTC is implementing a policy for Open Access dissemination of the outputs of the research, according to the recommendations of H2020 and of national funding agencies. All the publications of CTTC are uploaded in the European Open Access repository, taking into account, for each specific paper, the indications and limitations of the related editor. This action will be continued during the next phase, as well. It is also important to mention that, related to WP1, and according to the Gender Equality Plan, CTTC has prepared a “Gender Issue Toolkit” organized in three parts. The first one presents the internal analysis of the Institution. Then the regulations and laws on Gender Equality are presented. Finally, documents and material produced by EU Commission on Gender and Research are reported. Annual Statistics taking into account the gender dimension in CTTC are provided. The gender diagnostic is included in the Annual Report prepared for the Board of Trustees.

Regarding WP2, an extensive self-assessment analysis on recruitment has been performed thanks to the OTM-R checklist (provided as attachment to this form). Among the procedures of the CTTC R&D Management Systems periodically revised and yearly audited (AENOR certification of the quality standard UNE 166002 for R&D Management Systems), it should be mentioned that procedure P10 (MUSOL manual) is specifically dealing with recruitment aspects, where improvement and further updates according to the HRS4R Action Plan are taken into account. As an example, one of these updates of the procedure results in additional details on the selection procedure for temporary staff. Discrimination and gender issue are taken into account since the

job advertising phase. According to CTTC's commitment to raise awareness among the personnel and also to provide tools to assist researchers in the process of evaluating if the research carried out requires considering gender-specific issues, the Gender Equality toolkit, has been disseminated to the personnel and included in the welcome pack given to the new personnel. Additionally, a video on Recruitment Bias in Research Institutes has been disseminated as an important tool to improve the evaluation and selection process, and further strengthen and promote gender balance. Moreover, the institutional web page is continuously updated regarding job advertising and transparency aspects. Looking forward to the next phase, our internal procedures and recruitment policy will be further improved, updated and extended according to the OTM-R toolkit, from the advertising to the appointment phase, through the evaluation and selection phase.

In the framework of WP3, actions on the working conditions and social security have been performed. Information on regulations on safety and health condition in work environment is available to the staff in the internal public folder and provided to new personnel in the welcome pack. Widespread support from HR Unit is offered to new personnel. Courses are offered to all the staff. In 2017, a course on how to reduce stress in work environment has been proposed and related material has been made available to the staff in the internal public folder. It is worth mentioning that in November 2017 CTTC has been awarded with the certification "Zero és més" by MC Mutual for its commitment on risk prevention in the work environment. Benefit policies have been further developed including parental benefit (kindergarten tickets), tax deduction policies and training, which can be deduced by taxes. An extensive document produced by the Administration unit and concerning all the improvements that could be done, to facilitate the personal and professional reconciliation, have been analysed by the Direction Committee. A recent annual survey on the personnel's satisfaction, revealed that the most appealing improvement for the employees would be an extension of the work from home program. This is why an extension of this program has been approved by the Direction Committee, and activated in July 2017. It is envisioned that in the next phase, further improvement in the framework of this WP will be carried on, also according to the annual survey results (including 2017 survey and the planned next ones) and the study on the most suitable coaching and career advice support to offer to the researchers.

In addition to the video Recruitment Bias in Research Institutes, within WP4, training for gender diversity management has been offered to intermediate positions and Division Heads. A "Gender diversity management" training course for intermediate positions and Division Head has been attended in July 2016 by 13 members of CTTC. In the same WP4, internal policies and procedures towards the host of visiting researchers at all stages of their career have been further developed, as well as written rules and procedures about undergraduate and Master thesis students. In particular, we have recently further worked on admission regulations for students from external universities together with their home universities, agreeing on specific collaboration agreements, which safeguard both CTTC and the student under different aspects, such as the coverage of insurances, the supervision, the availability of CTTC infrastructure resources, etc. Ongoing work to further define the role of the supervisors of early stage researchers will be completed in the next phase.

Further actions are related to the Gender Equality Plan of the Institution, with the objective to obtain a more balanced presence of men and women in the Institution, improve working policies towards better reconciling work and family life, prevent discrimination and gender violence, inform the staff regarding laws and rules in gender equality, provide training in gender equality, gender mainstreaming, equal access to job post and promotions within the Institution. In view of improving/promoting gender balance in CTTC direction and management staff, a good gender balance (6 men and 5 women) has been pursued at the end of 2016 within the Direction Committee composed of Director, General Administrator, Director of R&D Programs, Director of IPR & Corporate Development, Director of Institutional Relations, Project Management Coordinator, Scientific Coordinator and the Division Heads. In 2015 CTTC also received funding from the Spanish "Instituto de la Mujer y para la Igualdad de Oportunidades" for the elaboration and implementation of the Gender Equality Plan.

We do firmly believe that continuing working on the strengthened HRS4R process is really valuable to improve our OTM-R, HR strategy and the quality of our research.

### 3. ACTIONS

The list of all actions submitted as part of our HR strategy for the initial implementation phase has been analysed and revised. The overview of the current status of these actions with the corresponding indicators is presented. We have indicated the actions that have been rescheduled (rescheduled timing indicated in red), extended to the next phase (extension timing indicated in green) or added as new actions (“New action” green label included in the title of the action) of the revised Action Plan to be implemented in the next 3-year implementation phase (January 2018 - December 2020). A commentary for each action has been provided.

<i>Title action</i>	<i>Timing</i>	<i>Responsible Unit</i>	<i>Indicator(s) / Target</i>	<i>Current status</i>
<i>WP1 – Ethical and professional aspects</i>				
<i>Compile a code of best practices in research</i>	<i>31 March 2017 Rescheduled June 2019</i>	<i>Project Management Coordinator</i>	<i>Final release available in the internal public server to the staff.</i>	<i>This action has been rescheduled to be further worked with Human Resources and HRS4R work group, and be finally approved by Direction Committee.</i>
<i>Further improve and update MUSSOL [3] procedures, according to the actions defined by the Human Resources Strategy for Researchers.</i>	<i>Continuous action January 2016- December 2017 Extended January 2018- december 2020</i>	<i>Project Management Coordinator</i>	<i>Annual revision of MUSSOL Manual and Procedures and updated version including improvements</i>	<i>MUSSOL procedures are continuously revised and improved as yearly certified by AENOR. This action has been extended to be continuous also in the next phase.</i>
<i>Yearly update productivity policies regarding dissemination and exploitation of results and other aspects. Distribute to the staff documents for their information on that respect.</i>	<i>Continuous action January 2016- December 2017 Extended January 2018- december 2020</i>	<i>Institutional Relations</i>	<i>Productivity policies documentation yearly defined, approved by Direction Committee and distributed to the staff.</i>	<i>Implemented: presented each year, approved by Direction Committee and distributed to staff. Action extended to the next phase to be continuously fulfilled.</i>
<i>Implement a policy for Open Access dissemination of the outputs of the research, according to the recommendations of H2020.</i>	<i>30 of September 2016</i>	<i>Institutional Relations</i>	<i>All CTTC publications are systematically uploaded in the Open Access repository.</i>	<i>Completed. CTTC is already implementing a policy for Open Access dissemination, as detailed in the institutional web page: <a href="http://www.cttc.es/open-access-repository/">http://www.cttc.es/open-access-repository/</a> All CTTC publications are uploaded in the ZENODO repository.</i>
<i>Follow improving communication actions and outreach activity programs. Advertise on institutional web page and institutional social networks those</i>	<i>30 of June 2016 and 30 of June 2017 Extended June 2018 June 2019 June 2020</i>	<i>Institutional Relations</i>	<i>Annual report on CTTC web page. Published each June.</i>	<i>Continuously implemented. Annual report updated yearly and published on CTTC web page on June (<a href="http://www.cttc.es/press-kit/">http://www.cttc.es/press-kit/</a>).</i>

<i>activities.</i>				
<i>Prepare a gender and discrimination issue toolkit with all legislation related with discrimination and diversity, detailed information on existing policies in CTTC, rights for conciliation of family and professional life, etc.</i>	<i>30 of June 2016</i>	<i>Human Resources, Institutional Relations, Project Management coordinator</i>	<i>Toolkit and info on existing policies in CTTC available in the internal public folder and included in the welcome pack.</i>	<i>Completed. CTTC has prepared a "Gender Issue Toolkit" disseminated to the personnel and included, together with the existing policies in CTTC, in the internal public folder as well as in the welcome pack given to the new personnel.</i>
<i>Annual diagnostic of gender and discriminatory issues to include in the annual report for the Patrons.</i>	<i>31 of December 2016 31 of December 2017 Extended: December 2018 December 2019 December 2020</i>	<i>Human Resources</i>	<i>Yearly diagnostic performed on December and included in annual report.</i>	<i>Yearly performed, included in the annual report and in the report for the Patrons. Action extended to the next years.</i>
<i>Revise all official documentation and institutional web page to see if it is written in neutral language.  Include in communication and dissemination actions participation of minority communities, such as e.g. women, etc.</i>	<i>30 of September 2017 Extended to be completed and continuous January 2018-December 2020</i>	<i>Human Resources</i>	<i>Complete revision of CTTC documentation. New documentation written in neutral language.</i>	<i>Most part of the official documentation and the institutional web page have been revised according to this action. The action has been extended for revision completion.  The responsible of Human Resources attended a course on corporative communication on the gender perspective to improve skills on this aspect.  Participation of minority communities is promoted in communication and dissemination (e.g. in the open calls advertising and in CTTC events). A new corporative video has been produced assuring gender balance. The action has been extended to be continuous.</i>
<b>WP2 – Recruitment</b>				
<i>P10 procedures [3] will be further improved according to the Code of Conduct for the Recruitment of</i>	<i>30 of September 2016 Extended May 2018</i>	<i>Human Resources, Project Management Coordinator</i>	<i>Yearly updated version of the MUSSOL P10 procedures</i>	<i>Ongoing action. MUSSOL procedures are continuously revised and improved as yearly certified by AENOR.</i>



<p>Researchers when appointing or recruiting researchers. In addition, they will be further updated to take into account discrimination and gender issue new policies</p>	<p>May 2019 May 2020</p>			<p>Discrimination and gender issue are taken into account in the job advertisement and recruitment process. Further efforts will be devoted in the next phase to update P10 procedures according to the OTM-R toolkit.</p> <p>The action has been extended for including further improvement, in line with OTM-R toolkit, in the updated version of the MUSSOL procedures, also involving HRS4R work group for further inputs and feedback.</p>
<p>P10 procedures [3] will be further extended in order to include more details on the selection procedures to follow for temporary staff.</p>	<p>31 of December 2016</p>	<p>Human Resources, Project Management Coordinator</p>	<p>Updated MUSSOL P10 procedures</p>	<p>Completed. MUSSOL P10 procedure has been updated accordingly. Now more details on the selection procedures to follow for temporary staff have been included.</p>
<p>P10 procedures [3] will be further extended to include recommendations for the selection of committees, assuring e.g. a gender balanced selection.</p>	<p>31 of December 2016 <b>Rescheduled May 2018</b></p>	<p>Human Resources, Project Management Coordinator</p>	<p>Updated version of P10 procedures includes recommendations for the selection of committees.</p>	<p>Rescheduled action.</p>
<p>The details of the job advertisement policy that is already carried out at CTTC will be included in the internal procedures and openly published in the institutional web page, together with the newly generated recruitment policy.</p> <p>An explicit link to EURAXESS web pages where all CTTC openings are published, will be included in the institutional web page.</p>	<p>30 of September 2017 <b>Rescheduled for completion: July 2019</b></p>	<p>Project Management Coordinator</p>	<p>Updated MUSSOL P10 procedures and policy availability on institutional web page Link to EURAXESS web pages already included in institutional web page: <a href="http://www.cttc.es/hrs4r-human-resources-strategy-for-researchers/">http://www.cttc.es/hrs4r-human-resources-strategy-for-researchers/</a></p>	<p>To be completed. An explicit link to EURAXESS web pages, where all CTTC openings are published, is included in the institutional web page within the section related to Transparency. The action has been rescheduled to include all the updates on internal procedures and be published in the institutional webpage.</p>
<p>The new recruitment policy should be further elaborated taking into account transparency</p>	<p>30 of June 2017</p>	<p>Human Resources</p>	<p>The selection process results are published in the transparency section of the institutional web page (<a href="http://www.cttc.es/job-vacancies-candidates-selected/">http://www.cttc.es/job-vacancies-candidates-selected/</a>)</p>	<p>Transparency aspects are taken into account in the recruitment policy (e.g. in the transparency section of the institutional web</p>

<p>aspects, and the information that the candidates have to receive during the recruitment process. The institutional web page, will be updated with this information, in the section related to transparency.</p>				<p>page the selection process results are published at <a href="http://www.cttc.es/job-vacancies-candidates-selected/">http://www.cttc.es/job-vacancies-candidates-selected/</a>). Candidates also receive information during the process (ack of application reception and email on outcome). The recruitment policy is detailed in the internal P10 procedures. In the next phase it will be further updated and reported also in the institutional web page.</p>
<p><b>New Action</b></p> <p>Further develop and improve the quality control mechanism of OTM-R</p>	<p>September 2020</p>	<p>Human Resources, Project Management Coordinator</p>	<p>Updated P10 procedures and complaints mechanism</p>	
<p><b>New Action</b></p> <p>Facilitate and make OTM-R process agile for people involved in recruitment</p>	<p>December 2019</p>	<p>Human Resources, Project Management Coordinator</p>	<p>Flow of steps of OTM-R to follow (with indication on related reference units) and supporting checklist of actions for people involved in recruitment</p>	
<p>P10 procedures [3] will be further extended to include recommendations on the judging merits - considering also gender and discriminatory issues - to be considered in the evaluation process.</p> <p>P10 procedures [3] will be further extended to include appropriate recommendations on mobility programs.</p> <p>P10 procedures [3] will be further extended to include further developed written rules for the recruitment of post-docs and temporary staff.</p>	<p>30 of September 2017</p> <p>Extended to be completed and continuous: May 2018 May 2019 May 2020</p>	<p>Human Resources, Project Management Coordinator</p>	<p>Yearly update of the MUSSOL P10 procedures.</p>	<p>Gender and discriminatory issues are taken into account in the process as specified in the text of each job opening call. This will be explicitly indicated in the next updated P10 procedures.</p> <p>Within the internal public folder available to the staff and provided to any new recruited people (as reported in P10) a specific documentation with recommendations on mobility related to the PhD program is reported.</p> <p>A section of P10 is devoted to the recruitment of post-docs and temporary staff.</p> <p>This action has been extended to include each update and/or revision of these rules/recommendations on the yearly updated release of the MUSSOL P10 procedures.</p>

<i>New Action</i>  Further elaborate recommendations on mobility for the career development strategy.	June 2020	Human Resources, Institutional Relations	Revision of internal regulation documentation to include recommendations on mobility.	
The new recruitment policy will be made openly available through the institutional web page.	30 of September 2017 <i>Rescheduled July 2019</i>	Human Resources	Availability of the new recruitment policy on the institutional web page.	Rescheduled action.
<i>WP3 – Working conditions and social security</i>				
Information on regulations on safety and health condition in work environment will be made available to the staff in the internal public folder.	31 of March 2016	Human Resources	Set of documents and regulations on safety and health condition in work environment available in the internal public folder.	Completed. Specific documentation covering this information is available to the staff in the internal public folder. In November 2017 CTTC has been recognized (MC Mutual "Zero és més" award) for its commitment on risk prevention in the work environment.
Further develop benefit policies including: parental benefit, tax deduction policies, transportation tickets, training which can be deduced by taxes, EU pension plans, like RESEEVER, etc.	30 of June 2016 <i>Extended June 2019 June 2020</i>	Human Resources	Document produced by the Administration unit concerning all the improvements that could be done, to facilitate the personal and professional reconciliation.  Revision and update of the document to include additional benefits in the CTTC policies towards this target.  Feedback from annual survey on personnel's satisfaction.	Parental benefit (kindergarten tickets), tax deduction policies and training, which can be deduced by taxes, have been included in the benefit policies offered by CTTC. Widespread support from HR Unit is offered to new personnel. An extensive document produced by the Administration unit and concerning all the improvements that could be done, to facilitate the personal and professional reconciliation, have been analysed by the direction committee. In addition, annually, CTTC performs a survey among the staff to know their opinion regarding certain issues, including working conditions, quality of the different units, representation of the staff towards the direction, discrimination policies, strategic goals and IPR policy. Following the results of a recent survey, the most appealing benefit for the employees would be an extension of

				<p>the work from home program. This is why an extension of this program has been approved by the direction committee and activated in July 2017.</p> <p>This action has been extended to study and provide further benefits in the next phase of the process also according to the results of the future planned annual surveys.</p>
<p>Further develop internal policies and procedures towards the host of visiting researchers at all stages of their career. Add an explicit link to EURAXESS portal in CTTC institutional web page</p>	<p>30 of September 2016</p>	<p>Institutional Relations</p>	<p>Internal policies and related documents for the host of visiting researchers. Explicit link to EURAXESS in the institutional web page.</p>	<p>Completed. Internal policies and procedures have been developed including mandatory agreement (including mandatory insurance, etc..) for all visiting students and researchers at all stages of their career.</p> <p>An explicit link to EURAXESS portal is available in CTTC institutional web page within the section related to Careers (category: Support to the Mobility of Researchers).</p>
<p>Study how to offer coaching and career advice support to researchers.</p>	<p>31 of December 2017</p>	<p>Direction Board</p>	<p>Direction Committee meetings minutes and related material.</p>	<p>Different options and offer types for coaching and career advice support to researchers have been collected and discussed during the Direction Board weekly meetings. It has been agreed to offer an initial internal coaching course/module to be organized in 2018. According to the staff feedback/interest, further modules and/or specific support will be offered in the future. This study will drive additional actions for the next phase of the process.</p>
<p><b>NEW Action</b></p> <p>Offer coaching and career advice support to researchers.</p>	<p>Continuous July 2018-December 2020</p>	<p>Direction Board, Human resources</p>	<p>Organize at least 1 course/module in 2018; in 2019 and 2020 other specific courses/modules according to researchers' needs, targeting guidance for the personal and professional development of researchers will be offered. Feedback from survey on staff attending the course.</p>	
<p><b>New Action</b></p> <p>Further develop</p>	<p>February 2020</p>	<p>Direction Board, Human resources,</p>	<p>Updated internal procedures (e.g. revised P10) on career development.</p>	

<i>internal policies and procedures on career development for researchers at all stages of their career.</i>		<i>Project Management Coordinator</i>		
<i>Written practices regarding the ownership of R&amp;D results and rights.</i>	<i>31 of December 2016</i>	<i>Corporate Development Director</i>	<i>Written practices in the internal public folder.</i>	<p><i>Completed and further improvement ongoing. Since the end of November 2016 CTTC is using as written practices regarding the ownership of R&amp;D results and rights, the declarations and rules established in a specific documentation available to the staff in the internal public folder (CTTC letter Policy regarding Industrial and Intellectual Property/Concepte participació ingressos IPR revCD)</i></p> <p><i>CTTC staff has been taught about its content and use in a formal seminar session as well as by ad-hoc advise in all necessary cases, the documentation has been enforced in several projects, as required.</i></p> <p><i>Nevertheless, also considering the advice collected from different evaluation committees, a new document on Intellectual Property Policy @ CTTC has been elaborated in December 2017 to substitute the former Policy regarding Industrial and Intellectual Property and it is under discussion of CTTC Direction committee.</i></p>
<i>New Action</i>  <i>Update and further develop internal P07 procedures on Intellectual Property Rights and Technology Transfer recommendations</i>	<i>May 2019</i>	<i>Project Management Coordinator, Corporate Development Director</i>	<i>Updated version of the MUSSOL P07 procedures, according to the new internal documents.</i>	
<i>Further establish a complain policy. Include it in the internal</i>	<i>30 of June 2016</i> <i>Rescheduled</i>	<i>Project Management Coordinator</i>	<i>Written document on complain policy in the CTTC internal regulations.</i>	<i>Rescheduled action to be further worked with Human Resources and</i>

regulations of CTTC [4].	September 2019			HRS4R work group, and be finally approved by Direction Committee.
Further develop internal communication policies about organization of events, PhD thesis defences, new people joining CTTC, etc.	31 of March 2017 Extended to be continuous 2018-2020	Institutional Relations	Internal communications on events, PhD thesis defences, new people joining CTTC and relevant news regularly received by the staff. Weekly dissemination of Direction Committee meeting summary. News/events published on the institutional web page ( <a href="http://www.cttc.es/news-events/">http://www.cttc.es/news-events/</a> )	Ongoing action. Internal communication has been further developed improving the summary of the weekly Direction Committee meeting to provide more detailed information to the staff. The staff is also informed on organization of events, PhD thesis defences, new people joining CTTC and any relevant news. News and events are also published on the institutional web page ( <a href="http://www.cttc.es/news-events/">http://www.cttc.es/news-events/</a> ). This action has been extended to be continuous in order to improve continuously the communication policies at CTTC.
<b>WP4 – Training</b>				
Further develop written rules and procedures about undergraduate and Master thesis students.	30 of June 2017	Institutional Relations	Internal documentation on visitors admission, rules for confidential information and agreement template.	Completed. Written rules and procedures have been further developed about undergraduate and Master thesis students. In particular, we have further worked in 2017 on admission regulations for students from external universities together with their home universities, agreeing on specific collaboration agreements, which safeguard both CTTC and the student under different aspects, such as the coverage of insurances, the supervision, the availability of CTTC infrastructure resources, etc.
Further define the role of the supervisors of early stage researchers, to be included in regulation for predoc and for undergraduate students.	31 of March 2016 Rescheduled March 2019	Institutional Relations	Revise and extend internal document, accordingly.	Ongoing action. The definition has to be further discussed and improved also involving the work group for a more extended feedback and further analysing annual surveys on this respect.
Further develop benefit policies in order to	30 of June 2016 Extended	Human Resources	Additional benefits/solutions provided. Number of offered courses.	Training tickets (for tax deduction) have been included in the benefit

<p><i>provide solutions for tax deduction to help the personnel fund training courses.</i></p> <p><i>Organize internal courses to properly handle diversity, discrimination and gender issues, and to form group leaders on these matters, and towards a balanced recruitment policy.</i></p>	<p><i>July 2019</i> <i>July 2020</i></p>		<p><i>policies offered by CTTC.</i></p> <p><i>On July 2016, a "Gender diversity management" training course for intermediate positions and Division Head (given by an external Human Resources consulting) has been attended in July 2016 by 13 members of CTTC, including Division Heads. On July 2017 the CTTC Internal Seminar titled: "Management of disability" (given by a foundation for the labour integration of people with functional diversity) has been organized and attended by the staff. In addition, on September 2016, a video on Recruitment Bias in Research Institutes has been disseminated among the personnel involved in the recruitment process, as an important tool to improve the evaluation and selection process, towards a balanced recruitment policy. This action has been performed during the initial implementation phase (24 months) and has been extended to the next phase to further develop benefit and organize courses.</i></p>
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All the mentioned documents are available upon request.

References [3] and [4], mentioned in the Action Plan refer respectively to:

[3] Manual del sistema de gestión de la I+D+i. Centre Tecnològic de Telecomunicacions de Catalunya. CTTC R&D Management Systems, recognized by AENOR with the certification of the quality standard UNE 166002, controls the procedures that must be followed to ensure the efficiency management of the R+D activities. This certification has been internally implemented as a group of 12 procedures (referred to as P-01 up to P-12, within the MUSSOL manual, e.g. procedure P10 specifically deals with recruitment and career development aspects).

[4] Internal Regulations. Centre Tecnològic de Telecomunicacions de Catalunya.

As the establishment of an Open Recruitment Policy is a key element in the HRS4R strategy, in the following we indicate how CTTC is working towards an Open, Transparent and Merit-Based Recruitment Policy, providing a short commentary on this implementation and how we will continue to address the OTM-R principles in the years to come.

Since CTTC has entered the HRS4R process prior to the publication of the OTM-R toolkit and recommendations by the European Commission (2015), we have filled out the OTM-R checklist, attached at the end of this self-evaluation form.

**Comment on the implementation of Open, Transparent, Merit-Based Recruitment principles:**

Among the procedures of the CTTC R&D Management Systems periodically revised and yearly audited (UNE166002 certification), it should be mentioned that procedure P10 is specifically dealing with recruitment aspects. Specifically, in procedure P10, the selection process for the recruitment of researchers is detailed according to the different positions.

The process starts with an open call published on the CTTC web page (<http://www.cttc.es/career-category/job-openings/>), including HR statements according to HRS4R that explicitly encourage women and individuals with disabilities to apply, in order to increase the number of women in those areas where they are underrepresented and the number of such qualified individuals in CTTC workforce. Actually, CTTC is committed to consider the gender dimension in research by including sex and gender analysis along the research process, when applicable, towards improving the quality and excellence of technological and scientific outcomes and towards targeting larger group of end-users in the developments.

The open call published in the CTTC web is also announced in specialized portals and/or distribution and contact lists. An explicit link to EURAXESS web pages, where all CTTC job openings are published, is included in the institutional web page (<http://www.cttc.es/hrs4r-human-resources-strategy-for-researchers/>).

Once received the applications by means on an online application form, the curricula of the applicants are evaluated externally and/or internally, depending on the position (permanent or temporary), as specified within the internal P10 procedures. Then, the Division Head and/or the Coordinator of the Department revise the evaluation results and the selection process continues with interviews to the most promising candidates. Also optionally the candidate could be requested to perform exercises and/or work plan related to the position. Finally, the best candidate is selected. P10 procedures also foresees Direction Committee supervision (e.g. selection reports should be presented to the Direction Committee).

For assigning PhD student or researcher grants, the process is based on external evaluation as specified in the P10 procedure. Depending on the grant, the Director of Institutional Relations performs the interviews for selecting the candidates or the process indicated by the funding entity is followed.

Transparency aspects are taken into account in the recruitment policy: in the transparency section the selection process results are published at <http://www.cttc.es/job-vacancies-candidates-selected/>; the candidates also receive information during the process (e.g. acknowledge of application reception and communication of selection outcome).

Further improvements and updates of P10 procedure are planned to be implemented during the next phase of the process, as reported in the revised and updated HRS4R Action Plan (see revised and new actions of WP2 on recruitment), to improve the OTM-R practices at CTTC according to the OTM-R toolkit. In the next phase, the updated OTM-R policy will also be published in the institutional web page.



## 4. IMPLEMENTATION

While approaching the completion of the first 2 years after the Award being granted, we have started the self-assessment process. The internal review has been prepared, starting with a detailed analysis of all the points of the CTTC Action Plan, based on the EC templates (HRS4R Template 3 and B), with special focus on recruitment (OTM-R checklist), and following the reports and guidelines from the documents of EC Policy Library for strengthened HRS4R process, in order to carefully reflect and document our progress and provide new actions towards the next step of the process. People involved in the process implementation have been interviewed to precisely collect information and assess the status of each action, the related documentation, policies and procedures. Please note that, at the time of the Internal Review, the Institutional Relations Director, previous contact person for the HRS4R process, is on maternity leave (the information regarding her responsibilities was collected before her leave). Considering the outcomes of the Internal Review, the HR strategy and the Action Plan have been assessed and revised, towards the next phase. Particularly, some of the actions have been extended and/or rescheduled and newly added actions have been provided/planned for the implementation of the principles of the Charter and Code within the next 36-month phase. The revised Action Plan has been approved by the Direction Committee on 29/01/2018. Upon completion of the internal assessment and approval by the Direction Committee, the outcome of the Internal Review, including the revised Action Plan for the next implementation phase, will be submitted to the EC and published on the CTTC's website.

The next steps will be the implementation and continuous monitoring of the proposed actions according to the enhanced Action Plan, incorporating feedback/recommendations from the Assessment report performed by the external experts. If any room for further improvement would be found during the monitoring, the Action Plan would be updated accordingly. Internally at CTTC a monitoring work group (formed by representatives of different staff categories at CTTC, keeping a gender balance) has been set up to perform the day-to-day control of the implementation of the Action Plan as well as to suggest improvements to it. Considering the turnover and leaves of the group members during the initial phase, new people have been included to form the group for the next phase and act as implementation committee regularly overseeing progress. Alarm mechanisms will be activated in case of delays or critical issues. In addition to the weekly Direction Committee Meetings, periodical meetings of the work group (including CTTC Direction Committee members) are envisioned to discuss the progress and possible improvements of the revised HR strategy and Action Plan, according to different feedback collected during the year, such as advices from evaluation committees and any input received from the researchers at all stages of their career. Particularly, also during the next phase, it will be considered the feedback from the results of the annual surveys, performed each year to know staff's opinion regarding certain issues, including working conditions, quality of the different units, representation of the staff towards the direction, discrimination policies, strategic goals and IPR policy. Since the HRS4R is recognized in the CTTC research strategy, there is a strong alignment of organisational policies with the HRS4R: it is included in the Strategic and Functional plan, periodically revised by the CTTC Scientific Advisory Board and the HRS4R is considered one of the target strategic objectives to accomplish in the framework of "Contrato Programa" (i.e. Frame Contract) signed by CTTC with Generalitat for the years 2017-2020. Thus, CTTC Trustees & Boards are involved in the implementation of the process. Furthermore, the HRS4R and HR policies are also embedded in the CTTC R&D Management Systems, recognized by AENOR with the certification of the quality standard UNE 166002, periodically revised and yearly audited. So that it will be continuously revised and updated according to the HRS4R revised Action Plan and new actions. HRS4R and gender equality commitment of CTTC is shared and promoted within the research community through EU-funded collaboration projects and Marie Skłodowska-Curie Actions as Innovative Training Network (ITN) and European Industrial Doctorates (EID), attending and organizing events and conferences, as well as by means of the institutional web page and social media. We believe and work on that the methodology above described, involving the work group, the staff, different committees, Trustees and Boards, and the commitment of CTTC with the HRS4R process, since the Award being granted, ensure that the proposed actions are also being implemented and the progress carefully monitored, in view of the next phase and towards the final external review.

**Template 1 – Annex: Open, Transparent, Merit-Based Recruitment Check-list** *OTM-R Checklist for organisations*

	<b>Open</b>	<b>Transpa- rent</b>	<b>Merit- based</b>	<b>Answer: ++ Yes, <i>completely</i> +/-Yes, <i>substantially</i> -/+ Yes, <i>partially</i> -- No</b>	<b>Suggested indicators (or form of measurement) &amp; comments</b>
<b>OTM-R system</b>					
1. Have we published a version of our OTM-R policy online (in the national language and in English)?	x	x	x	--	[weblink] OTM-R policy not yet published online, but recruitment policy reported in the procedures of CTTC R&D management system, periodically revised and yearly audited (AENOR certification of the quality standard UNE 166002).
2. Do we have an internal guide setting out clear OTM-R procedures and practices for all types of positions?	x	x	x	+/-	[Date of latest update; ensure that it is sent to all staff] Procedures and practices are reported in the internal documentation of CTTC R&D management system (internally implemented as MUSSOL project consisting of a manual with 12 procedures); P10 procedure is dealing with recruitment and career development. Date of latest update: March 2017; audited for certification renewal (obtained in May 2017). Each updated version of MUSSOL manual and procedures is available in the internal public folder for all the staff. Further improvements are envisioned in the next three years, as reported in the WP2 of the revised Action Plan.

3. Is everyone involved in the process sufficiently trained in the area of OTM-R?	x	x	x	-/+	<p>- Existence of training programmes for OTM-R</p> <p>- Number of staff following training in OTM-R</p> <p>People involved in the process are experienced researchers, Heads of Division and/or Heads of Department. MSCA ITN and EID coordinators also usually attend specific EC events/Info-Day. In September 2016, a video on recruitment bias in Research Institute has been disseminated to people involved in the process. Indeed, in the next phase of HRS4R process we will further improve this training aspect (as reported in WP4 last action of the revised Action Plan).</p>
4. Do we make (sufficient) use of e-recruitment tools?	x	x		++	<p>Web-based tool for (all) the stages in the recruitment process</p> <p>The application form for all open positions at CTTC is online on CTTC webpage (link in the job advertising at <a href="http://www.cttc.es/career/">http://www.cttc.es/career/</a>). WordPress tool is used to internally manage the applications to be shared with people involved in the recruitment. Further improvement can be envisioned in order to make it even more practical/agile for (all) the stages of the process.</p>
5. Do we have a quality control system for OTM-R in place?	x	x	x	++	<p>CTTC R&amp;D management system, including P10 procedure, dealing with recruitment, is periodically revised and yearly audited (AENOR certification of the quality standard UNE 166002). P10 procedures also foresee Direction Committee supervision.</p>
6. Does our current OTM-R policy encourage external candidates to apply?	x	x	x	++	<p>Trend in the organization / Trend in the share of applicants from outside the institution</p> <p>CTTC encourages external candidates to apply, fostering excellence and diversity and offering a highly international environment, as stated in the job advertising. From statistics of year 2016, the 62% of recruited people are external candidates.</p>

7. Is our current OTM-R policy in line with policies to attract researchers from abroad?	x	x	x	++	<p><b>Trend in the share of applicants from abroad</b></p> <p>All CTTC job openings are in English and are advertised in EURAXESS and other job portals. From statistics of 2016, people recruited from abroad are above 60% (see also comment on point 6 of this checklist).</p>
8. Is our current OTM-R policy in line with policies to attract underrepresented groups?	x	x	x	+/-	<p><b>Trend in the share of applicants among underrepresented groups (frequently women)</b></p> <p>As stated in each job opening, CTTC seeks to increase the number of women in those areas where they are underrepresented and therefore explicitly encourages women to apply. From statistics of 2016, 31% of recruited people are women.</p> <p>P10 procedures will be further improved in the next phase to include this aspect in the CTTC OTM-R policy (see WP2 of revised Action Plan).</p>
9. Is our current OTM-R policy in line with policies to provide attractive working conditions for researchers?	x	x	x	+/-	<p><b>Trend in the organization / Trend in the share of applicants from outside the institution</b></p> <p>CTTC offers a highly international environment at an exceptionally attractive location, fostering excellence and diversity, while providing a fertile environment for research cooperation and innovation between different disciplines, as stated in our job advertisements. Furthermore and in accordance with WP3 of CTTC HR strategy (see revised Action Plan), working conditions and benefits to facilitate the personal and professional reconciliations (e.g. parental benefits, training which can be deduced by taxes and work from home program), as well as widespread HR support for new personnel, are offered and continuously developed, also taking into account the feedback received from the annual surveys on personnel satisfaction.</p>

					This aspect could be further included/embedded in the OTM-R policy in the next implementation phase.
10. Do we have means to monitor whether the most suitable researchers apply?				++	Means to monitor:  In the recruitment phase: applicant profiles fit the job description requirements and evaluation results are satisfactory (above a certain scoring threshold).  After recruitment: according to CTTC productivity policy, researchers' activities are monitored. The Head of Division, where the researcher has been recruited, can assess if the researcher's performance is satisfactory.
<b>Advertising and application phase</b>					
11. Do we have clear guidelines or templates (e.g., EURAXESS) for advertising positions?	x	x		++	A template for job advertisement (giving guidelines on structure / description of requirements and including reference/statements on CTTC equal opportunities policy) is available. EURAXESS and others reference portals are used for advertising positions. Procedure P10 will be updated in order to clearly include this aspect.
12. Do we include in the job advertisement references/links to all the elements foreseen in the relevant section of the toolkit? [see Chapter 4.4.1 a)]	x	x		+/-	Most of the references listed in the toolkit are included in the job advertisement.  Further improvement in our OTM-R policy is planned in order to address all the relevant sections of the toolkit (see WP2 of revised Action Plan)
13. Do we make full use of EURAXESS to ensure our research vacancies reach a wider audience?	x	x		++	- The share of job adverts posted on EURAXESS; - Trend in the share of applicants recruited from outside the organisation/abroad All CTTC job openings are posted on EURAXESS (an explicit link to EURAXESS job portal is also included in CTTC webpage: <a href="http://www.cttc.es/hrs4r-human-resources-strategy-for-researchers/">http://www.cttc.es/hrs4r-human-resources-strategy-for-researchers/</a> ). From statistics of 2016,

					people recruited from outside the organization/abroad are above 60%.
14. Do we make use of other job advertising tools?	x	x		++	We make use also of other job advertising portals and social media tools (depending on thematic and type of vacancy, the most suitable lists are considered) for job advertising.
15. Do we keep the administrative burden to a minimum for the candidate? [see Chapter 4.4.1 b)]	x			++	In the online application form, the supporting documents requested are limited to CV and academic record to upload electronically.
<b>Selection and evaluation phase</b>					
16. Do we have clear rules governing the appointment of selection committees? [see Chapter 4.4.2 a)]		x	x	-/+	<p><a href="#">Statistics on the composition of panels</a></p> <p>Procedure P10 on recruitment specifies if external and/or internal selection committee should be appointed.</p> <p>P10 will be further improved, in the next phase of the HRS4R implementation (see WP2 of revised Action Plan), to further develop/include clear rules on this aspect in line with Chapter 4.4.2 a) of the toolkit.</p>
17. Do we have clear rules concerning the composition of selection committees?		x	x	+/-	<p><a href="#">Written guidelines</a></p> <p>The composition of the committee differs according to the profile and type of contract (permanent or temporary), as defined in procedure P10. In case of permanent positions, external members are appointed; the committee composition (and related evaluation) is reported in a selection report presented to the Direction Committee.</p> <p>P10 rules will be further developed on this aspect.</p>
18. Are the committees sufficiently gender-balanced?		x	x	-/+	Gender balance (at least one third representative of each gender) is targeted where possible.

					Recommendations on diversity will be included in updated P10 procedures to improve this aspect.
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?			x	+/-	<p><b>Written guidelines</b></p> <p>A template (excel) with guidelines (evaluation criteria) for assessing merit is available to be filled in line with the description of requirements of the job advertisement.</p> <p>Further improvement of P10 procedures will be performed to explicitly include this aspect.</p>
<b>Appointment phase</b>					
20. Do we inform all applicants at the end of the selection process?		x		++	Applicants are informed by electronic notice at the end of selection process.
21. Do we provide adequate feedback to interviewees?		x		-/+	Clear rules on this feedback will be further worked.
22. Do we have an appropriate complaints mechanism in place?		x		--	<p><b>Statistics on complaints</b></p> <p>Complaints mechanism is foreseen to be included in the quality control system (WP2 new action of the revised Action Plan).</p>
<b>Overall assessment</b>					
23. Do we have a system in place to assess whether OTM- R delivers on its objectives?				+/-	<p>CTTC R&amp;D management system, periodically revised and yearly audited (AENOR certification of the quality standard UNE 166002), includes a procedure (P10) specifically dealing with recruitment and career development.</p> <p>Further efforts will be devoted in the next phase of the HRS4R process for the implementation and embedding in the system of an OTM-R according to the toolkit guidelines, as specified in the revised Action Plan, with the supervision of the CTTC Direction Committee, HR Unit and HRS4R work group (including CTTC Gender Equality Committee members). Furthermore, the OTM-R policy will be published on CTTC website.</p>