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Castilla-La Mancha Action Plan



**Universidad de
Castilla-La Mancha**

Part I – General information

Project: **Fostering Clusters' Interregional Collaboration and Integration into International Value Chains (ClusterFY).**

Partner organisation: **University of Castilla-La Mancha.**

Country: **Spain**

NUTS2 region: **Castilla-La Mancha (ES42)**

Contact person: **Juan Carlos López López.**

Email address: juancarlos.lopez@uclm.es

Phone number: **+34 680 222 237**

Part II – Policy context

The Action Plan aims to impact:

- Investment for Growth and Jobs programme**
- European Territorial Cooperation programme
- Other regional development policy instrument

Name of the policy instrument addressed:

Operational Programme Castilla-La Mancha 2014 -2020

In particular, and in the frame of that policy instrument, the project addresses:

Priority Axis 1: Promotion of research, development, and innovation

This **Axis 1** comprises issues related to the following **objectives**:

1. Increase the competitiveness of SMEs thought
2. Boost the relations between industry and university
3. Increase the technological profile of the region

in line with the Smart Specialisation Strategy (S3) of Castilla-La Mancha.

The **investment priorities** of **Axis 1** are:

- 1a.** Improvement of R&D&I infrastructures and capacities to foster excellence in R&D&I. In particular, the research and technological centers in line with European interests.

1b. Encouragement of business investment in R&D&I, development of links and synergies between all regional actors, private and public sector.

According to the Regional Operational Programme (1; pg. 10) *“the conception of the articulation of the Structural Funds at regional level in this new period 2014-2020 is carried out jointly for ERDF and ESF through a common strategic document that is the Regional Strategy for Implementation of the Structural Funds for Castilla-La Mancha for the period 2014-2020. This Strategy must be understood as the coherent and coordinated planning framework for the implementation of the ESF and ERDF Funds, in order to guarantee an adequate investment of the Structural Funds that maximises the synergies between them, taking into account the specific circumstances of the region, the lessons learned from the 2007-2013 Programming Period and the goals and objectives of the Union's strategy for intelligent, sustainable and inclusive growth (Europe 2020 Strategy).”*

The current Industrial Ph.D. Programme in the region of Castilla-La Mancha is one of the measures of the Regional Government devoted to strengthening the R&D&I ecosystem in the region. This programme has been funded from the beginning by the Regional Operational Programme (ROP) since the evident alignment with the goals established in Priority Axis 1 of such ROP. Therefore, by evolving and improving this tool, it is pursued a better and more efficient use of the funds assigned to the program and, by extension, the policy instrument that supports it.

Part III – Details of the action envisaged

ACTION 1: Improvement of the Industrial Ph.D. Programme through an open and inclusive elaboration process.

1. The background.

According to different national statistics, Castilla-La Mancha is a lagging region as to the investment in R&D&I by both the public and private sectors. There are a number of factors that are preventing regional companies, mainly SME (99%), from incorporating researchers or qualified personnel that could add value to them, through the innovation of processes, services and/or products. On the one hand, the root cause of this situation is related to cultural/mindset factors (i.e. R&D&I is seen as an expense, not an investment in the medium term); on the other hand, it is simply the impossibility to access the funding mechanisms to support the up-front costs of the R&D&I activity.

This action aims to establish a tool in the region of Castilla-La Mancha that would help to improve this situation, contributing to (1) boost the cooperation between industry and

¹ https://fondosestructurales.castillalamancha.es/sites/fondosestructurales.castillalamancha.es/files/po_feder_castilla-la_mancha_2014-2020_version_3.1_aprobado_por_decision_c_2018_9108_final_de_19122918.pdf

academia; (2) raise awareness among the regional companies of the long-term benefits of R&D&I activity; (3) generate new entrepreneurial adventures through innovation and cross-sectorial collaborations; and (4) respond to the needs of the regional industry concerning R&D&I.

As it is stated by ClusterFY overall goal "*ClusterFY aims to improve regional and national policy instruments seeking to intensify Key Enabling Technologies (KET's)-related clusterization processes...*". After three years of intense work and peer learning process under the umbrella of ClusterFY, it can be said that the main conclusion concerning the creation and consolidation of cluster structures is a singular process, quite related to the characteristic of the territories/nations. However, despite of such peculiarities, there is an agreement around the importance of the relationship between industry and academia, as the seed to build strong cluster structures following a bottom-up approach.

Therefore, in line with the specific objective set by ClusterFY project, this action facilitates the cooperation between the regional quadruple helix actors in an open and inclusive model to elaborate and develop new policy instruments that ensure all the regional necessities, societal and industrial challenges. The final goal of this action is to contribute to set the basis of a better, healthier R&D&I ecosystem in Castilla-La Mancha, where a strong and close collaboration between the industry and academia is a cornerstone to create new cluster initiatives. Castilla-La Mancha has learned that this bond was key in many success stories and good practices shown during the ClusterFY project.

The bottom-up approach to cluster establishment and development in territories fits quite well given the specific characteristics of the region of Castilla-La Mancha. Thus, the Healthy Ageing Network Northern Netherlands (HANNN), the Centre of Expertise Water Technology (part of the Water Campus Innovation Chain, Northern Netherlands) and the national research institute RISE in the Fiber Optic Valley (North Middle Sweden) are examples of how the alignment of the regional needs (via S3) with the companies and academia R&D&I activity lead towards a robust triple-helix model. In all of these cases, the strong commitment and willingness from R&D actors, knowledge transfer, uses of regional assets, active support from the regional government, coordinated strategy roadmap and clever use of funding resources are the principal factors of success. One of the key pillars is the funding or co-funding of Ph.D. Thesis as a means to explore new ideas, potentially becoming the seed of new products, processes, and services, that turn out to be the foundation of better start-ups and spin-offs, which subsequently join businesses and clusters. That is why the region of Castilla-La Mancha should implement a series of initiatives to set up a smart development inspired in the mentioned good practices to strengthen the innovation ecosystem, the SME development and how to the regional operational programme or other funds can promote this. Furthermore, the cooperation processes that will promote this action will lead to new ways to introduce and evolve the Key Enabling Technologies (KETs) into the Castilla-la Mancha industry. Especially for the regional SMEs which have more difficulties to develop their innovative concept ideas due to the associated costs to the R&D process.

Currently, in the region of Castilla-La Mancha, there is a call to fund the development of industrial Doctorates within an industrial environment, financed by the Regional Operational Program². However, this instrument needs to be revisited and improved in order to build it a better and more attractive mechanism for the companies and, thus, serve to the actual

² <http://www.educa.jccm.es/idiuniv/es/investigacion/convocatorias-ayudas-rrhh-investigacion/ayudas-predoctorales/ayudas-formacion-personal-investigador-fondo-social-europeo/ayudas-formacion-personal-investigador-fondo-social-europ-1>



objectives of the action. Some of the problems identified are (1) strict requirements that potential Ph.D. students must fulfil; (2) strict of rigid eligibility criteria; (3) absence of a mechanism for the companies to propose Ph.D. topics; (4) absence of a collaboration framework between the industry and academia to align goals and set a common field of play; and (5) a private-public co-funding mechanism to better align the research activity, S3 goals and the strategy of the companies.

Also, the plan of activities proposed for this action keeps in mind the improvement of the elaboration process of the regulatory framework of the renewed industrial Ph.D. programme that will introduce measures to counteract observed weakness. More specifically, the lessons learned from two other good practices identified during the ClusterFY project will be applied. On the one hand, the Open Innovation Call in Northern Netherlands, in which the cooperation among agents come up with initiatives to contribute a specific objective or project, which means that nothing is defined in the call in advance, so all the activities of the project are eligible (subject to basic rules). On the other hand, the governance model presented during the visit to Gävle, Sweden, where the collaboration and coordination of the regional actors set the basis for the regional development based on its strengths. Currently, the development of the policy instruments in Castilla-La Mancha is managed by the regional government as the only actor in charge of the definition process. To overcome the weaknesses of this process, the activities planned in this action will ensure the participation in the policymaking process of all the stakeholders and potential users of this programme, including the different regional government bodies in charge of science, innovation, entrepreneurship and industrial/business policies. As a result, a more aligned, sensible program, closer to the actual needs of all the R&D&I actors in Castilla-La Mancha is expected.

This action is in line with the Priority Axis 1 (Promotion of research, development, and innovation) which is the policy instrument that ClusterFY project address in the region of Castilla-La Mancha. Particularly, this action impacts the objective 2 (Boost the relations between industry and university), because it could be a good manner to engage and move the regional excellent research done in the university closer to the industrial sectors, so as to improve the regional competitiveness, and therefore, the economic and social welfare. Besides, it has a special impact on objectives 1 and 3. Furthermore, it is in line with the two investment priorities 1a. and 1b of the Priority Axis 1 of the regional OP 2014-2020.

2. Action.

This action promotes the regional collaboration among the quadruple helix actors (research, government, industry, and society) in line with the industrial needs and societal challenges of Castilla-La Mancha (according to the RIS3), building bridges between research and industrial environments. For that reason, it is proposed an open and inclusive elaboration process in which all the potential actors could be part of the development of the program and calls. This will be the main output of the action.

3. Players involved

Player	Role
Regional Government of Castilla la Mancha: Regional Ministries of “Education, Culture and Sports” (which holds the competences in R&D&I and University) and “Economy, Companies, and Employment”	<ul style="list-style-type: none"> ● Leader, act as a catalyst for the elaboration process of the call. ● Elaboration of the working calendar and the organization of the stakeholder meetings. ● Policymaker and financing body. ● Collect all the inputs from the rest of stakeholders and incorporate them in a common, agreed vision. ● Provide the necessary (technological) means to gather, publish and match the Ph.D. offers. ● Responsible for the operational development of the call.
Business environment	<ul style="list-style-type: none"> ● User and financing body. ● Provide input concerning the point of view of the industry: needs, difficulties, barriers, etc. ● Source of Ph.D. proposals.
University of Castilla-La Mancha	<ul style="list-style-type: none"> ● Ensure the academic value of the Ph.D. proposals. ● Support, via the different research groups and research centers, the development of the Ph.D. works. ● Provide input concerning the point of view of academia: needs, difficulties, administrative barriers, etc.
Technological and Research Centers	<ul style="list-style-type: none"> ● User and financing body. ● Provide input concerning the point of view of technological and research centers: needs, difficulties, barriers, etc. ● Source of Ph.D. proposals.
Student Associations	<ul style="list-style-type: none"> ● User. ● Provide input concerning the point of view of the Ph.D. students: selection criteria and evaluation process.



4. Timeframe.

The structure of the new version of the industrial Ph.D. programme will be developed in 2020. The first call is expected to be launched before the end of 2020.

Activities to implement the action:

- **Identify the stakeholder group (January 2020).** The main output of this activity is a regional map composed of the potential stakeholders that will participate in the elaboration process of the programme. It will be preceded by an analysis of the needs and capabilities as it is required by the topic of the action. This activity will be carried out by the regional government.
- **Study best-in-class use cases present in other national and international regions (January - February 2020).** The aim of the activity is to analyse a number of successful examples of this kind of Ph.D. program to provide a list of best practices examples, highlighting its essential key factors (the type of funding, thesis delimitations, eligibility criteria...). As a part of this study, the examples which have inspired us to select this action during the ClusterFY interregional activities will be analysed; the Healthy Ageing Network Northern Netherlands (HANNN), the Centre of Expertise Water Technology (part of the Water Campus Innovation Chain, Northern Netherlands) and the national research institute RISE in the Fiber Optic Valley (North Middle Sweden). Thanks to that the players involved can be inspired in order to determine the structure and characteristics of the Castilla-La Mancha Ph.D. program. This activity will be carried out by the regional government with the advice of the ClusterFY regional team. The output of this process will be a report gathering the principal points to be addressed during the elaboration of a programme of this kind, and a battery of alternatives, drawn from the previous study.
- **First stakeholder meeting (February - March 2020).** In this first meeting, the stakeholder working group (output of the first activity) will set up the cooperation and working mechanisms between them in order to achieve the objectives. For such end, the model of Open Innovation Call (Northern Netherlands), which is one of the good practices that inspire this action, will be applied in order to assure the cooperation among agents, leading to a trustworthy networking environment to come up with initiatives to contribute to the specific call. Besides, the governance model presented during the ClusterFY interregional visit in Gävle (Sweden) will be applied to promote the collaboration and coordination of the regional actors. In this meeting, all the participants will be discussed over the draft report elaborated previously, sharing their views about the content, mechanism, and goals of the new Industrial Ph.D. Programme. The output will be a more detailed roadmap for the upcoming elaboration process of the call, and an initial agreement on the master lines to be further developed.
- **Structural development of the call (April - June 2020).** During this period of time, will be elaborated the structure and characteristics of the call based on the

requirements obtained during the previous activity. This activity will require periodic contact between the actors involved in order to obtain the expected results.

- **Develop a tool (website, app, etc.) as a meeting point of proposers (business) and users (students) (June - October 2020).** This interactive instrument will be developed in order to improve the relations between the offering and demanding actors. As well as, this tool will inform the regional government about the principal indicators in order to quantify the expected impact.
- **Operational development of the call (July - October 2020).** As a final step before the official launching, all participant actors must be actively involved in this operational phase. Once again, the governance observed in the Open Innovation Call and in the city of Gävle will be implemented to ensure the proper development of the call in order to maximize the expected impact. The result of this activity will be a final version of the call.
- **Launching of the call (November - December 2020).** In this step, the regional government will be the main player involved, because this is its competence as a managing authority. The call must be published in the regional official Bulletins, in the developed tool and, in the different communicative channels owned by the players involved.
- **Monitoring and evaluation of the call (during 2021).** Once the call is officially launched, it is crucial to monitor it in order to evaluate the expected results. This activity is practical not only to determine if the call is not as good as expected but also it can be the best way to seek errors and barriers that are slowing down the call. So that it is possible to evaluate the deficiency of the call and improve it.

5. Costs.

- Total amount to fund the R&I Ph.D. programme: 600.000 €
- Contribution of the Regional Government (66,6%): 400.000 € (approx. 1/3 of the budget devoted to the 2019 Ph.D. Programme)
- Contribution of the companies (33,3%): 200.000 €

6. Funding sources.

- Regional Operational Programme (66,6%)
- Contribution from the collaborating partners (33,3%)

7. Expected impact.

- The number of regional players involved during the activities to develop the call.
- The number of registered Ph.D. offers by companies, research/technological centers...
- The number of funded Ph.D. offers.
- The number of student applications.



Date: _____

Signature: Ricardo Cuevas Campos
General Director of Universities, Research and Innovation
Regional Government of Castilla-La Mancha

Stamp of the organisation (if available): _____

