# Preliminary Spanish Stance on the **K** Framework Programme



ministerio de ciencia, innovación y Universidades

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### **Table of Contents**

Introduction

Strategic Orientationss

Programme Structure Review: Stability and Predictability

Tools and Implementation

Initiatives Associated with the Framework Programme





# Introduction

The European Union's future Framework Programme (FP10) for research and innovation will enter into force in 2028. **Spain** has a **leading position** in Horizon Europe as shown by the participation data in the current programme. Currently, Spain ranks second in participation in Horizon Europe and is the third recipient of funds. Without prejudice to the negotiations that will take place on the future multiannual financial framework, this document establishes a leading position for Spain on matters regarded as being of relevance.



## Strategic Orientations

**Excellence, quality and impact** must act as the **basic principles** underpinning the Framework Programme (FP). The Framework Programme boasts a high international reputation, which is due to the fact that project selection follows high quality standards with independent evaluation. In this sense, excellence must be maintained and even reinforced. Moreover, the impact of the advances generated during its development must be even more obvious for citizens as the objectives are aimed at solving the problems and main challenges of society through research, knowledge generation and innovation (R&I), while promoting knowledge transfer, industrial competitiveness and value creation.

Excellence requires safeguarding and increasing the budgetary allocation of the Programme, which must be exclusively aimed at financing R&I activities. The Programme must be maintained stable and continue being the lighthouse of R&I in Europe. This budget must be in line with the objectives of the Programme, as well as with the distribution made between the different pillars to achieve them. Funds must be aimed at strengthening the EU's international competitiveness with excellence criteria in all research, innovation and transfer initiatives and must therefore function as a lever in favour of European strategic autonomy.

Setting these objectives means that that the FP must use its funds to support a balanced distribution **throughout the entire knowledge value chain** (research, innovation and transfer) from the initial stages of its most basic generation to its implementation in industry, assimilation by the market and impact on the daily life of our society.

This makes it necessary to strengthen the transition between the most basic and the most applied science, by minimising or eliminating discontinuities, stratifying aid based on the different Technology Readiness Levels (TRLs) where appropriate and ensuring on the one hand that all projects at their different stages have funding opportunities, including those aimed at basic and disruptive science. On the other hand, it is important to achieve a higher impact of the results of scientific and technological projects by ensuring and increasing support measures aimed at financing "bridge projects" between different parts of the FP, improving interactions and synergies between the pillars.

The FP is important for boosting the EU's competitiveness, but it must also take into account projects regarding certain **critical technologies** (artificial intelligence, biotechnology, telecommunications, semiconductors, space or quantum) that condition the **Union's strategic autonomy**. For this reason, it must take research safety into consideration, implementing codes of good practice and scientific integrity guides, as well as providing the necessary support to identify and evaluate the possible risks of international collaboration.

In this quest for the Union's strategic autonomy, and taking into account the current international context, it is necessary to increase the participation of allied third countries in issues of mutual interest, with common roadmaps and



reciprocity. More specifically, it is considered of high interest for the Union to enhance collaboration with countries in the Latin American and Caribbean (LAC) area as well as the Mediterranean region, taking advantage of multilateral discussion spaces and signing agreements of association with the Programme such as those already existing with other countries. Collaboration with industrialised third countries with great research and innovation capacities must likewise continue being reinforced.

Furthermore, given the current geopolitical context, it is necessary to recognise the defence dimension and the **dual use of technologies** obtained with public civil research funds. Promoting synergies between existing EU civil and defence R&D programmes can contribute to the development and adoption of dual-use technologies within the EU.

Promoting **synergies and ensuring coordination** between the different EU funds is essential, generating clear rules from the start so as to allow the Member States (MS) to make an appropriate design at a national level and in relation to the European decentralised management programmes (ERDF). We must imitate the regulation of the recovery and resilience funds (RRF), which solution has made it possible to generate synergies with simplicity and coherence. We must also ensure the relationship and synergies with other European programmes with an R&I component, such as the Space programme, Erasmus+, Digital Europe, EU4Health or Life.

**Territorial cohesion** policy is one of the main policies of the European Union. It benefits all regions and cities within the European framework and promotes economic growth, job creation, business competitiveness, sustainable development and environmental protection. The FP must also take this priority into account and bear in mind the makeup of the industrial fabric of the Union and its Member States. It is essential to strengthen regional innovation ecosystems: these mechanisms allow, on the one hand, to use centers of excellence in less emerging and moderate regions and MS, so as to facilitate the transfer of high-quality knowledge; and, on the other hand, to use cohesion policies in order to accelerate the adoption of structural measures at a national and regional level where there are no centers that can generate high-quality knowledge, thus making them more competitive with Smart Specialisation Strategies. Moreover, research and innovation activities must be clearly linked to territorial development so that, in the less innovative regions and MS, a high-quality knowledge transfer can be carried out in collaboration with regions of excellence, the latter acting as driving agents.

It must also be considered essential to strengthen and prioritise the participation of **SMEs** and **startups** (including spin-offs) with specific measures aimed at covering both aspirations, as well as their scaling and growth.

Transnational collaborative projects, selected through open and competitive calls, must be the fundamental tools of the FP, since they make it possible to address ambitious and complex initiatives, favour multi- and interdisciplinarity and contribute to the transfer of knowledge thanks to the participation of different types of actors.

It is certainly of vital importance to continue **gender equality** policies in research and innovation in the FP; to continue efforts to integrate the gender perspective as a horizontal principle in research and innovation; to promote and accelerate institutional and business change by actively working to achieve gender equality goals in careers at all levels and ensure balanced representation in decision-making.

It is also important to promote practices and new knowledge on aspects such as, among others,





open access, citizen science, scientific communication, ethics and integrity in research.

Finally, it is essential to design an appropriate follow-up and monitoring of the Programme. The monitoring of the Programme should lead to more detailed knowledge of the Programme's impact in its various areas, especially the social area, so as to ensure that the different advances are accessible and benefit the whole of the citizenry, improving their quality of life and their confidence in knowledge; and the economic area, favouring financial activity with an increase in private investment (startups, SMEs and industry) and in public investment in the short, medium and long term; as well as industrial transfer.

### Programme Structure Review: Stability and Predictability

The future FP must have a **continuist** structure in order to facilitate access to participants. A structure based on **three vertical pillars** and a transversal axis, similar to that existing in Horizon Europe (HE), is regarded as appropriate, without prejudice to those adjustments that improve interactions and synergies between and within the pillars.

It is necessary, to facilitate bridges between Pilar I and II by strengthening their traditional instruments through proof-of-concept modalities executed by consortia, their purpose being to access applied research and innovation or to include cross-cluster calls to improve the effectiveness of the corresponding cluster.

### Pilar I

Fundamental and disruptive research, as well as training and mobility, should be supported through

the European Research Council (ERC) and the Marie Skłodowska-Curie Actions (MSCA).

#### ERC

Maintaining ERC's **independence** and strengthening its structure and schemes is essential, as it is ensuring long-term funding that encourages the development of excellent research staff, especially in relation to early career stages and the consolidation of cutting-edge research teams. Likewise, transnational collaboration between research groups could be encouraged for this purpose.

#### Maria Skłodowska-Curie Actions

The MSCA programme is a reference for attracting and mobilising talent. Its structure and schemes must be maintained by providing it with the necessary budget to maintain reasonable success rates. It is necessary to promote actions showing a **greater** regional/national **impact**, such as the MSCA-COFUND schemes, which in addition encourage cultural changes in research entities.





Furthermore, actions such as those mentioned above contribute to attracting talent that allows Europe to be a world reference in research. Moreover, the participation of the non-academic sector in the whole programme must be promoted, especially industrial doctorates.

#### **Research Infrastructures**

Research infrastructures (RI) are a **key pillar** of excellent research and innovation (R&I) ecosystems in the MS and the EU as a whole, providing researchers, innovators and other stakeholders with the capacity to develop excellent knowledge and expertise, which are necessary to perform cuttingedge fundamental and applied research, to expand the frontiers of knowledge and, in turn, to develop cutting-edge technologies, fueling innovation.

European Research Infrastructures (RIs) must be further developed and consolidated as the backbone of both the public and private R&I ecosystem, promoting the transfer of knowledge, ensuring a fair and balanced distribution between the countries of the Union and ensuring the mobility of European researchers.

### **Pilar II**

Pillar II is a **central core of transnational collaborative R&I**. In this sense, it is essential to properly organise the priorities of the future structure.

The creation of the clusters in the present FP has had positive aspects, favouring multi- and interdisciplinarity. However, some of them have proved to be excessively complex, as they group together too many thematic priorities, which complicates discussions and work between the MS and the European Commission (EC) at the level of the Programme Committees, as well as the management of the Work Programmes and the detection of opportunities by potential participants. Therefore, it is necessary to consider a review of the clusters that is in line with current priorities.

The promotion of basic research should also be included in Pillar II calls. It is essential to strengthen the transition between the most basic and the most applied science so that there are no discontinuities and the impact of the results and their application to society is increased.

In addition, "Key Technologies" or KET should be more prominent and visible than they have been in HE and should be reinforced in the next FP.

It would be advisable to open the possibility to reform some of the transformative instruments for the validation of first use cases (*first of its use*) so that the investments they require are eligible, or to propose a more effective system for missions, in which the size is achieved with a cluster structure (small projects that are integrated into global solutions in which regional/national funds are integrated at the end).

### Pilar III

In the current Pillar III, Innovative Europe, the disruptive role of the European Innovation Council (EIC) (Accelerator, Pathfinder, Transition) should be strengthened, and its actions, which must maintain a focus on open-themed calls, should be given greater visibility and increased in terms of impact.

Likewise, the "Seal of Excellence" should be appropriately analysed and used with associated seed funding that could be a previous step to the Accelerator. Synergies and complementarities with the EIC and other parts of the PM should be improved.

The **evolution of the EIT** must be promoted to respond to its vocation of addressing the challenges of our society with greater transparency and



harmonisation with the rest of the programme, with a mission orientation, thus reaching a transformation towards a more competitive knowledge-based economy with a long-term impact.

In this sense, the EIT and the Knowledge and Innovation Communities (KIC) must be promoted as instruments to **promote "place-based" innovation**, with a focus on the creation of synergies and collaboration between sectors and between regions, using it as an instrument of the Regional Innovation Valleys in coherence with the Smart Specialisation Strategies. The KICs, always keeping their focus on the social challenges for which they were created, must achieve models of financial sustainability; but also take into account the social challenges they address, training in innovative skills and capabilities, the promotion of regional and cross-sector collaboration. These should not always be measured by their profitability. The KICs must encourage interrelations between them to ensure synergies and to be able to anticipate and respond to crises and challenges in Europe.

The possibility of supporting cooperative projects in disruptive science, similar to the FET (*Future and Emerging Technologies*) in the past programme, should also be considered.

Programmes for **attracting and retaining research and innovation talent** must be promoted, following the example of the successful experience developed by the KICs, paying special attention to regions that are less developed and are coordinated with the MSCA programme.

### Tools and Implementation

**Simplification** should be a continuous process that takes into account the needs of participants, while favouring the swiftness and rationalisation of procedures.

The size of projects, in terms of budget and number of participants, has grown in HE. A larger size does not ensure a greater impact and increases the administrative burden for participants.

**Continuity in the rules**, which should be simple, has to be a priority and any changes, whenever necessary, should be introduced gradually to facilitate the adaptation of participants with an analysis of the impact on the debureaucratisation of the programme.

The use of **lump sum** funding should be limited except in specific cases where its use is more advantageous, as it complicates the preparation of the proposal and does not favour the entry of new participants in the FP (newcomers) due to the uncertainty it generates, which means there is a tendency to work with known partners, for reasons of trust and risk reduction.

The PM **evaluation** process is of **high quality** and has an internationally recognised reputation. However, it could be improved in some aspects,



such as a more uniform application of the evaluation criteria, and better information provided to participants on the results of the evaluation of their proposals (more useful and detailed SRCs).

The simplification of the Programme cannot come at the expense of equality plans, which must be preserved as an eligibility criterion for FP beneficiaries.

Furthermore, to ensure the efficiency of resources and a greater impact of the results, the **open science** principles of the programme must continue to be promoted. It is therefore important to consider the CoARA protocol in scientific research, as well as the inclusion of qualitative evaluation. Similarly, the next FP must reinforce scientific communication with specific opportunities for this area.

Finally, it is necessary to promote and establish clear guidelines in the programme on the incorporation of **Artificial Intelligence** into research projects throughout their life cycle, constantly ensuring an ethical approach and respect for current regulations, including intellectual property regulations.

# Initiatives Associated with the Framework Programme

The R&I support scheme via **partnerships** is considered to be highly useful for ERA objectives, especially for co-funded projects (including those that are institutionalised and require national cofinancing). The partnership scheme should be applied for special cases in which the classic instruments of support for R&I are not operational, so as to prevent them from affecting conventional research calls. The current selection system for approving partnerships should be reviewed to improve its effectiveness, minimising or avoiding the different barriers that have already been identified for co-programmed projects and the limitations of the co-financed projects so that ERA objectives can be more effectively met. Co-funded **Partnerships** can facilitate the entry of less frequent participants, but they increase the complexity of the programme, as they have uneven rules and can generally create problems when it comes to implementing them, homogenising rules (funding) and processes, using common tools for submitting proposals and publishing opportunities on the *F&T portal*. In the cases of the Health Cluster or the *Key Digital Techs* (now called *JU Chips*), European co-funded Partnerships have managed to achieve a prioritisation of thematic areas and have favoured a greater impact and implementation of research, also promoting transnational research, innovation and *widening*.

**PRIMA** is a success story that could extend its model to other geographical regions such as



countries in Latin America and the Caribbean or Africa, always ensuring that participation in these countries is balanced and open to all member countries.

Given the significant contribution of national and regional budgets to co-funded partnerships, these co-funded European Partnerships must ensure effective collaboration between MS and the EC when it comes to directing scientific policy in these priority thematic areas.

For some Partnerships, especially co-funded and institutional ones, it is necessary to improve openness and management structures by reducing access barriers. Measures should also be taken to avoid conflicts of interest that arise whenever certain entities are part of the sponsoring consortium and may subsequently be eligible for EU funding through the calls they launch. It is also important to promote synergies and complementarities between partnerships. The themes addressed by the EU Missions on HE are relevant and have made it possible to explicitly direct R&D&I efforts towards the major social challenges we face as a continent from a perspective that combines sustainability, equity and competitiveness. In order to increase the programme's added value and impact in its implementation, the development of the governance systems (European, state and local) of the missions must gain in depth, in order to combine forces with other programmes and initiatives beyond the FP, paying special attention to the capacities needed for an approach with which the missions can work in an integrated manner. The FP should mainly finance the R&I activities necessary to achieve its objectives, as well as the appropriate support actions for guaranteeing the relevance and impact of the knowledge generated in the systemic transformations linked to each one of the missions.



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