



Institute for Bioengineering of Catalonia

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**MISSION-BASED PROGRESS WITHIN THE NEXT  
FRAMEWORK PROGRAMME (FP9)**

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## MISSION-BASED PROGRESS WITHIN THE NEXT FRAMEWORK PROGRAMME (FP9)

### Essential features that missions should hold

Global challenges should outline citizens' needs and foster collaborations among multiple actors. The new proposed Mission-oriented approach should be transversal and with a clear focus on global challenges that address societal needs. Once this directionality is defined, these missions will engage the citizenry<sup>1</sup> while encompassing social sciences and humanities as well as multiple other disciplines, in a natural way. To achieve mission-oriented goals, multidisciplinary approaches that pursue sustainability and inclusiveness will be needed. As well as looking towards improving or fixing existing mechanisms<sup>2</sup>, Missions should also be risky, transformative and ground-breaking, opening new directions for change and offering added value to Europe's global encounters. For this reason, not all missions would have the same economical weight or see the same rate of growth.

Within FP9, challenges should be shaped on to opportunities for change, for new ways of interacting and innovation led-growth. **Missions are not broad challenges nor sector or technologies, there must be concrete problems solved by different sectors tackling a challenge.** In fact, they must be a vehicle for setting a knowledge-based growth economy, towards the kind of society we pursue.

IBEC definitively agrees that the success of this mission-oriented innovation approach will depend on the risk taken and the obtained impact across society<sup>3</sup>. IBEC suggests the European Commission to use a combination of bottom-up and top-down instruments (combining low and high TRLs) to build up this mission portfolios. Excellent competitive applications, based on the most recent insights in science and technology should be selected.

The mission can be a good coordination envelope clustering existing projects or forthcoming calls for a **common goal**. This approach can result in focus areas that can actuate across FP9 work programs with a **cross-cutting nature** (such as KETs in H2020).

Actually, challenges to be addressed should not only be relevant (digitalisation, circular economy) but attractive to society, as part of their daily-basis problems (health, jobs, etc.).

How the missions will be **implemented** is another key matter, as being only a 20-30% from Global Challenges pillar, and enclosing several instruments inside them. Nowadays, is still hard to imagine the mobilisation of existing funded projects contributing to a mission.

IBEC's agrees with the **five key criteria** selected by Mariana Mazzucato, as missions should possess wide societal relevance, be targeted, be ambitious, stand cross-disciplinary, -sectorial and -actor innovation, as well as bottom-up. Nonetheless, measurable and realistic missions should not carry so much weight versus innovative, risky or ambitious approaches. Finding **intermediate goals** to measure impact is a good management tool, but we consider that it should be restricted to specific scenarios or tools from those portfolios (containing high TRLs). This kind of follow-up, being able to stop certain projects if intermediate milestones have not been achieved, is detrimental to basic research where its intrinsic uncertainty makes it unsuitable for these measures. We only foresee this funding model in a basic research context if extra support is delivered to the beneficiary only when the expected achievements are fully obtained making it a prize on top of a grant. Maybe an intermediate mixed model combining both systems (less reporting and more output) could be the answer, as could closer follow-up by the Project Officer (an expert on the topic) in the reports and meetings.

**Public engagement** seems to be a crucial feature for FP9's missions, and several approaches are suggested to implement it (with social dialogue, polling or co-design)<sup>4</sup>. European civil society is pretty conscient about the problems they need to face every day, R&I community knows the capabilities and the progress areas that can be explored, and finally the industry can disclose the existing market gaps. Therefore, a **trilateral co-design** among these three groups of stakeholders should be pursued in each specific mission. Limiting the co-design to only some of them might be inconvenient for FP9's future.

As said above, missions could be planned as transversal portfolios between the different pillars and work programmes among FP9. If it pretends to be even more transversal, and gather other DGs (SANTE, GROWTH, EMPL, JRC, CNECT, EAC, etc.), a superstructure coordinating it must be created. Keeping it as simple and transparent as possible should be a must, as **governance** is not an easy duty, and where lessons-learned from other similar initiatives should be applied (HBP, GRAPHENE, PRIMA, etc.). What is true, is that without regional and national authorities' commitment in this mission-oriented model, no stable horizon is envisaged.

Furthermore, mobilising private investments, and not only funding private bodies with public money is an important asset for this mission approach<sup>5</sup>. For that reason, industry should have the same weight as other stakeholders (civil society, RTOs, academia, member states, etc.), and participate in the governance of it. Again, transparency and the same rules settled for the rest of FP9 work programmes should regulate missions, avoiding unclear scenarios.

Finally, whenever needed or requested IBEC will be a pro-active participant in the co-design of this mission-based R&I, and try to solve certain undefined aspects:

### Evolution plus Revolution

Tring to find the proper balance among possible "Accelerating missions", which help to accelerate process/technology development/innovation in a certain area and "Transforming missions" with transformative potential for society<sup>6</sup>. This mission approach must be "an evolution and not a revolution", as Commission points out very wisely to preserve feasibility and tangible results. Nevertheless, it must be considered that citizenry progress and needs also require a high-risk, disruptive growth towards the current policy that goes beyond the existing regulation. In other words, **evolution and revolution can co-exist** nurturing EU with simultaneous growths at different speeds.

### Size matters

Recent reports have addressed the granularity of the missions on a scope basis<sup>3</sup>. Indeed, being scientifically narrow might be an advantage to implement missions in an accurate way. However, not very much has been said about the dimension of these missions. Are we talking about 10M€ initiatives, 100M€, or even 1B€ as

other running initiatives? We understand that different challenges will need different budgets, however, some **thresholds could be applied to be able to cluster the needed instruments within these 'new focus areas', and to assure a certain commitment of accomplishment**. In that sense, we oversee a potential match of the mission concept with FET-FLAGSHIP preparation actions for FP9. Thus, IBEC encourages to have those FLAGSHIP proposals with wide societal relevance, as candidates reinforcing the mission-oriented approach to global challenges (focused on societal relevance and impact). FLAGSHIPS could enhance even more the moon-shot concept that is being sought.

### Needs and Wills

Which challenges will be addressed is also another key aspect. One of the European Union principles is subsidiarity, justifying its intervention when Member States are unable to achieve the objectives of a proposed action satisfactorily, and when added value can be provided. Therefore, would missions execute goals oriented towards a common good that Member States do not adequately perform? Thus, **will the Commission fund issues that are relevant for European society but not properly addressed, or will they bend to the media's hot topics and bandwagons?**

<sup>1</sup> First Gago Conference on European Policy. 14th of February 2018.

<sup>2</sup> Mission-oriented R&I policies: In-depth case studies. Case Study Report: Energiewende. 2018

<sup>3</sup> Mission-Oriented Research & Innovation in the European Union. A problem-solving approach to fuel innovation-led growth. Mariana Mazucato. European Commission. 2018

<sup>4</sup> Mission-Oriented Research and Innovation Policy: A RISE Perspective. European Commission. 2018

<sup>5</sup> Towards a Mission-Oriented Research and Innovation Policy in the European Union: An ESIR Memorandum: Executive Summary. European Commission. 2017

<sup>6</sup> The Structure of FP9. Norges Arktiske Universitet. Thorbjørn Hroarsdotir 25.01.2018.

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