

TUNISIA'S POSITION PAPER ON THE 10TH EUROPEAN UNION FRAMEWORK PROGRAMME (FP10)

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INTRODUCTION

More than ever, the world is witnessing a race for technological leadership and supremacy, whose outcome will shape the political, economic, and demographical balances, globally. Undoubtedly, Science and technology (S&T) are now considered as the main enablers of sovereignty and autonomy in all five domains, namely air, land, sea, space, and cyberspace. Those who will make ground-breaking innovations, notably in the fields of Artificial Intelligence (AI), quantum computing, robotics, space technologies, cognitive science and biotechnologies, will acquire a strategic advantage and will be leading our future. In such a challenging context, each nation, or a group of nations, should rethink its regional positioning and endeavours to establish trusted and fruitful partnerships, particularly with the neighbourhood, sharing the same principles and values, and working together for mutual benefits. The next European Union framework program FP10 is being certainly forged with this newly reshaped global context in mind.

Tunisia as a neighbouring country has established a long-standing relationship of friendship with Europe, marked by countless exchanges and agreements in various sectors, particularly in Science and Technology, which climaxed with its association to the EU framework programmes for R&I, Horizon 2020 and Horizon Europe, in 2016 and 2022, respectively. More recently, the signing of a Memorandum of Understanding (MoU) between the European Union and Tunisia, has brought a new dawn in the pursuit of common goals, heralding an accelerated pace for R&I cooperation. Being associated to the largest, excellence-driven competitive R&I funding programme has been instrumental to consolidate the Tunisian national R&I system, prompting to undertake several actions aiming at revisiting R&I strategies, policies, and programmes, in order to gain in terms of competitiveness and to be in line with the European Research Area. Here we would like to share with our partners some views on the successor programme, FP10, from an associated, neighbouring and widening country's perspective.

ON THE PRINCIPLES AND CRITERIA GUIDING FP10

Overall, the compartmentalization of the EU framework programme into three pillars and Widening measures becomes more and more familiar to the scientific community, which is in itself a good point in order to get researchers easily delving into the successor programme, FP10.

Like its predecessors, FP10 should preserve its major objective, which consists in promoting excellent science that open new frontiers in knowledge. Irrespective of the fact that FP10 will or not preserve a pillar entirely dedicated to excellence (Pillar 1), we plead for more integration of widening countries (a sort of “Hop on” in Pillar I collaborative projects), in order to get them infused with excellent science, its requirement and practices. On the other hand, by opening to widening countries, European excellence centres could benefit from specific, still immature findings, and could thus establish a fruitful joint undertaking.

We believe funding for mobility of young talents (PhD and PostDocs) and staff exchanges through MSCA should continue and even get increased.

In our opinion, it is worth considering shifting the “Research Infrastructures” component of Pillar 1 to a more transversal mechanism, that could be more accessible for Widening countries.

STRATEGIC THEMATIC AREAS

·**Health:** enhancing cooperation with neighbouring countries through dedicated funding in the field of pandemic preparedness is of uppermost importance. The pace at which climate change occurs increases the risk for a next pandemic.

As a strategic priority in the Mediterranean, the health sector could particularly benefit from the new European Biotech Act, by addressing regional health issues specificities (rare diseases, cancer, genetic susceptibility, etc.), which may bring out new major discoveries.

We hope that FP10 will launch funding mechanisms addressing these particular health issues.

A particular focus should be devoted to the increase in age-related diseases like Alzheimer’s and dementia remain a challenge.

Developing early diagnostics, brain-training interventions, and assistive technologies could be supported by FP10.

Furthermore, with the rising rates of anxiety, depression, and other mental illnesses, FP10 should support improving diagnosis, therapy (like CBT), and brain-based treatments through better understanding of cognition and emotion.

•**Raw materials:** giving their strategic importance, more funding, and more openness to associated, widening countries, is also needed.

•**Energy:** Tunisia welcomes the new Pact for the Mediterranean, under which an ambitious Trans-Mediterranean Energy and Clean Tech Cooperation initiative will be launched. We do hope that this will be accompanied with several CSA actions, which will help creating a thriving R&I environment.

•**Sustainable Agriculture and Food Security:** Tunisia, like other Mediterranean countries, faces growing challenges from water scarcity, soil degradation, and climate change, which threaten agricultural productivity. Tunisia's vulnerability to droughts, impacting water resources and agricultural systems, makes it essential for FP10 to invest in innovative solutions for water management, drought mitigation, and adaptive farming practices. Focusing on sustainable water use and climate-resilient agriculture is crucial for long-term food security and economic stability in the region, which is of mutual interest to both Tunisia and Europe, given its impact on Mediterranean food security and economic sustainability.

•**Social and human sciences:** By funding large consortia, FP10 should continue exploring new clues to address the major societal challenges, namely poverty, racial discrimination, immigration, gender violence, women's rights, etc.

•**Trending research areas:** As a widening country we constantly seek more inclusion in trending research areas such as space, AI, quantum, personalised medicine, etc. This could be dealt with by launching some "Challenge" (top down) calls under the "widening" funding, to allow Widening countries develop more CSA projects in such emerging fields and become prepared for more ambitious multinational projects. On the other hand, several R&I fields in these particular themes could also benefit to both sides provided that increased exchanges be supported.

•Digital sector:

-Digital disinformation: Supporting measures to fight digital disinformation isn't just a good idea but it's essential for the health of society, democracy, and even the personal well-being. FP10 should support initiatives, tools and strategy to safekeep values in moving digital society.

-Cybersecurity: The rise of disruptive technologies like artificial intelligence (AI) presents significant challenges to preserving a digital transformation that remains centered on human values and ethics. Constantly evolving cyber threats are putting pressure on security, personal freedoms, and economic progress, making ongoing research and innovation essential. As today's leading disruptive force, AI introduces new dimensions to cybersecurity: it is vital to ensure that AI is used safely and responsibly.

-AI, Data, Robotics: The objective in the field of artificial intelligence should be to enhance collaboration within the Mediterranean region or at the very least, between widening and non-widening countries. Achieving this goal calls for a forward-looking approach that goes beyond regulatory frameworks. It must be grounded in trust, safety, and innovation. To support this, FP10 should adopt a comprehensive perspective on the AI innovation landscape, both within Europe and in neighboring countries, and enable flexible adaptation of initiatives in response to evolving needs. Strengthening mediterranean countries strong foundation in research is vital, along with encouraging interdisciplinary research that supports diverse applications rather than isolated, narrowly focused projects. In parallel, it is essential to carry out ongoing research to better understand and manage the risks associated with AI technologies.

-Attention & Technology Overload: Since social media and digital devices are rewiring attention spans, affecting memory, learning, and well-being and mainly for adults and childrens. FP10 should consider studying how digital environments impact cognitive functions and designing healthier tech.

•**Circular Economy and Waste Management:** Tunisia faces significant challenges in waste management, particularly in urban areas. FP10 could play a key role in funding projects that support the country's transition to a circular economy, with a focus on waste reduction, recycling, and resource efficiency.

These initiatives would not only help reduce the environmental impact of Tunisia's industries but also create new economic opportunities, particularly in managing plastic and e-waste. This effort aligns with the shared interests of both Tunisia and the EU, as a successful circular economy will contribute to environmental sustainability and drive economic growth in both regions.

The principles guiding the implementation of EU missions are now well established, yet it has introduced some confusion to the participants, as to whether they represent a distinct funding category, and whether they require a new drafting style. In FP10, EU missions should be introduced in a more simple way providing meaningful guides to ensure enhanced participation of the community. We also wish that EU Missions be announced well before the closing date, since consortia thereof involve actors from various fields.

INCREASED PATHS LINKING ACADEMIA TO THE INDUSTRY

Undoubtedly FP10 will provide an unprecedented push to convert innovation into marketed products. As a widening, geographically unbounded country, whose first economic partner is the EU, Tunisia is very keen to be part of the EU effort to boost innovation, and we look very much forward for strategic measures that fully integrate associated neighbouring countries in the EU innovative ecosystem. Thematic areas like critical raw materials, clean energy, energy storage, agrifood, and life sciences could represent interesting avenues for more cooperative investments between the EU and Tunisia.

Tunisia welcomes the idea of creating a TechEU investment programme involving the EIB Group, which already runs several programmes in Tunisia, and through which new initiatives aiming at supporting startups and SMEs could be launched in conjunction with FP10.

TOWARDS A MORE INCLUSIVE ERA

•**Fluent mobility of R&I actors involved in FP10 consortia:** Immediately after a funding has been allocated, actions towards the implementation of the projects' objectives take place. This is still problematic for researchers coming from outside the Schengen area, since they still suffer delays in obtaining their VISA. We hope that the Commission address this issue with member states diplomatic missions, so that FP10 participants could benefit of a mechanism that expedite delivery of a VISA for the whole time period of the project.

•**Widening:** Establishing new funding schemes to enable Widening countries access the highly competitive EIC funding. Like the Pre-Accelerator funding, we propose a similar mechanism for Pathfinder (Pre-Pathfinder) and Transition (Pre-Transition). We believe that amongst the widening funding schemes available to date, "Twinning" has been the most relevant and impactful at both the individual and institutional levels. We propose that in FP10, "Twinning" calls be launched on a yearly basis.

•**Brain circulation:** Definitely, a more cohesive and inclusive European Research Area should benefit to both member states and associated countries. FP10 should reinforce funding mechanisms, like MSCA and ERA talent.

•**Tightening NCP networks:** Seen from the perspective of a widening country, full immersion of our NCPs in their network, which ensures optimal interaction with their member states counterparts, is crucial to increase participation. We suggest that more flexible funding mechanisms supporting tight interaction among NCPs, and opportunities for NCP upskilling, particularly for newcomers, be implemented under FP10. Additionally, like researchers, NCPs from widening countries also experience difficulties in getting their VISA.