## Interview with Carlos Moedas, European Commissioner for Research, Science and Innovation

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In what kind of common projects, programs and actions does the Commission see the highest potential for the development of research and innovation in the Euro-Mediterranean area?

This year we celebrate the 20th anniversary of the Euro-Mediterranean cooperation, formally launched with the Barcelona Process in 1995. During these 20 years, research and innovation priorities on both shores of the Mediterranean have been coming closer. Numerous bilateral and bi-regional common initiatives have taken place, and we have seen a shift towards a mature research and innovation partnership based on co-ownership, shared interest and mutual benefit.

The European Commission and particularly its Directorate-General for Research and Innovation have always been very supportive of this process. We have devoted a great deal of resources in support of this cooperation, channelled mainly through the EU's framework programmes.

We hold reinforced bilateral dialogues based on Science and Technology Agreements with a number of countries from the Southern Mediterranean – Tunisia, Morocco, Egypt, Jordan and Algeria. Israel is an associated country to the EU framework programme and we are currently holding negotiations with Tunisia for its association to the programme. The bilateral dialogues serve as platforms for regular exchange on research and innovation policy, promotion of the research and innovation cooperation, and elaboration of joint medium and long-term priorities. These bilateral dialogues contribute also to the bi-regional Euro-Mediterranean cooperation in research and innovation, institutionalized in 1995, when

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in the context of the Barcelona process, a Euro-Mediterranean Committee in Research and Technological Development (MoCo) was established – recently renamed Euro-Mediterranean Group of Senior Officials in Research and Innovation (EU-Med GSO). The EU-Med GSO plays a central role in monitoring and stimulating the Euro-Mediterranean cooperation in research and innovation.

The EU-Med GSO has supported two landmark Euro-Mediterranean bi-regional initiatives in Research and Innovation – the Partnership in research and innovation in the Mediterranean Area (PRIMA) and the establishment of a Common Euro-Mediterranean Innovation Agenda.

Work is currently on-going in the European Commission in support of these two ambitious initiatives which will mark even further integration and alignment of the joint Euro-Mediterranean actions in research and innovation.

It is worth noting that PRIMA will mobilise joint research on two of the most urgent challenges to the Euro-Mediterranean area: the efficiency and sustainability of food production and water provision. The initiative paves the way towards a joint programme on the basis of Article 185 of the Treaty on the Functioning of the European Union, aimed at improving the cooperation in research and innovation in the Mediterranean Area and creating a stable long-term and sustainable framework based on mutual benefit, co-ownership, co-decision, and co-financing.

A recent proof of the strong commitment for joint efforts and co-ownership of the countries has been also the joint research and innovation call, launched under the bi-regional Euro-Mediterranean platform − ERANETMED, which resulted in mobilizing around €13 million from 14 countries on both shores of the Mediterranean.

All these initiatives show the great potential of the Euro-Mediterranean research and innovation cooperation and we will continue to support it through various actions. Let's also recall that the EU's Horizon 2020, the world's largest research and innovation programme, is open for participation to the Southern Mediterranean researchers and innovators. In addition they are eligible for automatic funding.



How are for example joint research and innovation programmes supported by the EU?

EU supports joint research and innovation programmes through several instruments. First, it is the Public to Public Partnerships (P2PS) which aim at aligning national strategies and overcoming fragmentation of public research efforts. Second, the ERA-NET instrument which is designed to support public-public partnerships in their preparation, establishment of networking structures, design, implementation and coordination of joint activities as well as topping up of single joint calls and of actions of a transnational nature. And third, Article 185 of the Treaty on the Functioning of the European Union (TFEU) enables the EU to participate in research programmes undertaken jointly by several Member States and Joint Programming Initiatives. This is a structured and strategic process whereby Member States agree, on a voluntary basis and in a partnership approach, on common visions and strategic research agendas to address major societal challenges.

Where does the Commission see the biggest obstacles to creating a Common Knowledge and Innovation Space (CKIS) with the Southern Mediterranean?

The Common Knowledge and Innovation Space between EU and its neighbours has been outlined as a priority of the European Neighbourhood Policy (ENP) after the turbulent events in the Southern Mediterranean in 2011. I believe that research, science and innovation will occupy even more central role in the on-going revision of the ENP. This common space is meant to cover policy dialogue, national and regional capacity-building, cooperation in research and innovation, increased mobility opportunities for students, researchers and academics throughout the region and externally.

The challenging political, economic and security situation in the Southern Mediterranean is certainly among the biggest obstacles to any long-term initiative. But I am an optimist and believe we should continue joining forces with our partners in finding sustainable, knowledge-based solutions to the problems of the region – which in fact are shared problems. We can no longer address alone

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cross-border challenges such as migration, radicalization, food, water and energy security, environment and climate change. Therefore, it is in EU's utmost interest to support the Southern Mediterranean countries' policy shift from short-term economic reforms towards knowledge-based sustainable job creation and human capital development.

Certainly, the efforts on the EU side should be complemented by efforts on behalf of our South Mediterranean partners. They need to adapt and strengthen their research, science and innovation ecosystems in order to benefit fully from existing opportunities. At present, scientific, technological and innovation capacities of most Southern Mediterranean countries remain modest, so there is a need for publicly and privately supported schemes for research and innovation.

Some of the specific challenges to research and innovation in the South Mediterranean include low availability of funding; outdated or non-existent regulation and procedures; public procurement; collaboration across the region (South-South); lack of standardization and value-based quality criteria for both processes and outcome of product development; and costly or non-existent patent procedures. Progress in adapting and developing the research and innovation instruments has been hampered by the absence of monitoring and evaluation of these instruments in a coherent manner, and a lack of sufficient good practices exchange between institutions or across countries.

Despite these challenges, a wide range of research and innovation instruments has been tested in practically all countries, most of which focus on networking, start-ups, incubators, technological poles and industrial clusters. These instruments reflect the need to expand the focus towards more applied research.

Where does the Commission see the highest potential for EMUNI's contribution to development of research and innovation in the Euro-Mediterranean area?

EMUNI is an important actor in the Euro-Mediterranean cooperation enabling the most essential but sometimes challenging bridge between different cultures, religions and mentalities. With its big network of universities from the EU and the broader Southern Mediterranean region, various initiatives and recently opened Centre for Arab, Islamic and Middle Eastern Studies, it could play a key role in narrowing the biggest gap we face today – that between our societies. It has a central role to play also in engaging youth, fostering a culture of tolerance, understanding and a common sense of belonging.

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I would like to stress that we can and should grasp all opportunities to engage the young generation, both of the EU and in the Southern Mediterranean region, building on the highly-educated researchers and innovators as well as providing opportunities for structural partnerships of mutual interest, including joint MA or PhD programmes, twinning, fostering transnational innovation and entrepreneurship and mutually beneficial research and business networks.

All these actions could foster brain circulation, create an enlarged area of scientific and technological excellence, prevent brain drain and contribute to counteracting radicalization by opening minds and providing concrete prospects for development.

The high innovation potential in the Southern Mediterranean, particularly among creative youth, needs to be guided and further developed. This youth potential contrasts with Europe's aging population. It represents untapped potential for cooperation and complementarity and demonstrates the viability of such principles as common interest and shared benefit.

EMUNI is also coordinating a valuable science diplomacy platform funded by Horizon 2020, the Middle East Research and Innovation Dialogue (MERID). It targets the EU-Middle East cooperation in research and innovation and is an example of science diplomacy in practice, involving partners from the EU Member States in addition to Egypt, Jordan, Lebanon and Palestine as well as Iran and Iraq. By engaging scientists, civil society and policy makers in effective dialogue and common activities, it acts as a bridge between science, society and policy. Its ultimate goal is to employ research, science and innovation as channels for nourishing a culture of coop-

eration, conflict prevention and transformation. We are looking at MERID as an important contributor in facilitating the EU-Middle East strategic partnership in research, science and innovation and promoting science diplomacy.

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In which policy areas does the Commission expect the Euro-Mediterranean research community to contribute the most with its research activities and subsequent policy recommendations to the EU?

The Euro-Mediterranean research community is an active and indispensable stakeholder in the broader Euro-Mediterranean cooperation. Given our geographical proximity and interdependence both shores of the Mediterranean face many common challenges. Some of them have a strong scientific and technological dimension, such as food, water and energy security, environment and climate change, or health. Others need a more concerted research effort on behalf of our social scientists, such as migration, brain drain, radicalization, lack of job security and citizens' participation in political, social and economic development. Research, science and innovation are key to addressing these challenges sustainably and providing cross-border solutions.

I have already mentioned a forward-looking initiative, the Partnership in Research and Innovation in the Mediterranean Area (PRIMA). The initiative has been elaborated jointly by several EU Member States and South Mediterranean countries with the objective of integrating national research programmes. It is aimed at mobilizing joint research efforts on two of the most urgent challenges the Euro-Mediterranean area faces – efficiency and sustainability of food production and water provision. This initiative will have an impact well beyond research and innovation due to its strong socioeconomic relevance.

How does the European Commission see the potential of science diplomacy to contribute to the development of research and innovation in the Euro-Mediterranean area? Please refer to the following two sub questions:

Looking at science diplomacy as an instrument of the EU external action



and as an instrument of the EU member states' foreign policies, how does the Commission contribute to the consistency of EU external action implementation in this matter (within the competences it has of course)?

Science diplomacy is not new in the EU context and there have been already a few prominent science diplomacy examples. However it is still an emerging concept and we are working to consolidate it in a dedicated EU strategy or policy.

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As an instrument of 'smart, soft power' and a mechanism for improving relations with key countries and regions around the world, science diplomacy is a key tool of EU's external action. It uses the scientific values of rationality, transparency and universality to foster common understanding, build trust, and promote cooperation between people regardless of their cultural, national or religious backgrounds. It provides the EU with additional communication channels and new directions, particularly in stalemate situations and relations where few other mechanisms are feasible as well as on sensitive bilateral and multilateral issues.

Many of our on-going international research and innovation activities could be considered through the science diplomacy viewpoint, but as an instrument of EU external action, science diplomacy remains largely untapped. That is why I have made it one of my mandate's priorities to promote science diplomacy further through on-going and new actions.

Let's not forget that science diplomacy played an important role for building today's Europe, including through initiatives such as the establishment of the European Organization for Nuclear Research (CERN), which not only aims to solve the greatest mysteries of the universe but has become a model for combining scientific excellence with science diplomacy.

Looking at science diplomacy as a field of international politics, how does the Commission see the potential of progress in this field contributing to improvement of other fields of cooperation in the Europe-Mediterranean area?

Science diplomacy can be highly instrumental in the EU – Southern Mediterranean cooperation as its most explicit 'test' is when it

brings together people in areas of tensions to jointly address shared challenges. It has a particular added value in conflict areas and complex security environments. The universal language of science can open channels of communication and build trust where few other mechanisms are feasible.

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It can also provide space for sharing knowledge and experience on issues such as conflict prevention, crisis management, and societal and human dimensions of security. It can contribute to improving relations between countries when formal political relationships are weak or non-existing, e.g. in protracted conflicts in complex multicultural and multi-confessional environments such as the Middle East.

In this sense, science diplomacy can make an important contribution to stability in the Southern Mediterranean. Science education can provide a counter narrative to violent extremism and youth radicalisation. Investing in human capital development in the region helps us address the root causes of migration. Strengthening the cooperation with the Southern Mediterranean countries' diaspora and highly qualified migrants in the EU and promoting 'brain circulation' programmes will help us make sure that both the EU and the countries of origin benefit from expatriated talent. Creating an enlarged area of scientific and technological excellence – preventing intellectual migration - creates economic stability that gives young people the space they need to dream, aspire and develop. Stability that brings hope and security. Seeking to implement the EU scientific visa (especially for the Southern Mediterranean researchers and scientists participating in EU funded projects and activities) will be a key step in this regard. We are also looking at possible measures to address the needs of the Syrian academic refugees.

Among the instruments of science diplomacy, international research infrastructures are among the most visible and lasting ones. The SESAME research and technology centre in Jordan is a prime example.

SESAME is a unique international endeavour, inspired by CERN and launched in 2004 under the auspices of UNESCO with the aim of using science diplomacy in fostering prosperity and a culture of

peace and cooperation in the Broader Middle East. Its members include Bahrain, Cyprus, Egypt, Iran, Israel, Jordan, Pakistan, Palestine and Turkey. Major and emerging global actors active in the region enjoy observer status in the project (USA, Russia, China, Brazil and others) as well as several EU Member States. EU is a major contributor and supporter of this flagship science diplomacy initiative (more than €12 million so far through various EU instruments, including the EU framework programmes).

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In addition, Sesame is expected to have a broad socio-economic impact in the region as it can be used for a wide range of applications from the imaging of diseases, designing of pharmaceuticals, and solar cell enhancements, to  ${\rm CO_2}$  capture and assessing archaeological artefacts. In this sense, Sesame can make a valuable contribution to investment, employment and local businesses. Even more importantly, it can help to build a modern-day commonwealth of scholars for whom political and religious barriers would be irrelevant.

The EU research and innovation programme Horizon 2020 supports also several multilateral projects such as the Middle East Research and Innovation Dialogue project (MERID) which I already mentioned. Horizon 2020 as well as its predecessor, the Seventh framework programme (FP7), have also funded several research and innovation projects, where Israelis and Palestinians worked jointly to find common solutions to shared challenges in the spheres of energy, climate change, security and social sciences and humanities.



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