

## Action Fiche for Jordan

### 1. IDENTIFICATION

Title/Number	<i>Support to Research, Technological Development and Innovation in Jordan</i> (ENPI/2011/23204)		
Total cost	EU contribution: EUR 5 million		
Aid method / Method of implementation	Project approach – partially decentralised management Technical Assistance for the use of the European Commission through framework contract – Direct Centralized Management		
DAC-code	43082	Sector	Research/Scientific Institutions

### 2. RATIONALE

In response to the "Arab Spring" the European Commission and the High Representative of the European Union for Foreign Affairs and Security Policy adopted two Joint Communications "A partnership for democracy and shared prosperity with the southern Mediterranean"<sup>1</sup> and "A new response to a changing Neighbourhood"<sup>2</sup>. These Joint Communications called for a qualitative step forward in the relations between the EU and its Southern neighbours that should be rooted unambiguously in a joint commitment to common values. More flexible and tailored answers that differentiate between each partner country should be offered in order for the partnership to develop with each neighbour on the basis of its needs, capacities and reform objectives. Supporting sustainable inclusive growth and economic development with a particular emphasis on Small and Medium-sized Enterprises is one of the key objectives laid out in these Joint Communications.

The project "Support to Research and Technological Development and Innovation in Jordan" has been designed as an immediate response to the regional situation in line with the above commitments.

#### 2.1. Sector context

Jordan is a country with few natural resources but abundant, well educated human resources. Despite the level of education, and the number of research centres and universities, little Research and Development (R&D) is commercialised leading to lost opportunities for new industries and employment. As a result, the smartest graduates cannot find fulfilling work in Jordan and are attracted outside the country resulting in a "brain drain" effect. Furthermore, the universities must continue to adapt their regulations to incentivise researchers to conduct applied Research and Development, enabling promotion through the application of research, not just via publication.

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<sup>1</sup> COM(2011)200 of 08.03.2011.

<sup>2</sup> COM(2011)303 of 25.05.2011.

The Higher Council for Science and Technology – and other bodies – recognise these issues and the focus of research funding is now towards applied research rather than basic research, with an emphasis on how the results can be commercialised. However, more can and should be done to improve the situation.

## **EU-Jordan Science and Technology Cooperation**

Jordan signed a Science and Technology Cooperation Agreement with the EU on 30 November 2009. The objectives of the agreement are to establish a framework for cooperation between European and Jordanian researchers to enable joint projects in fields of common interest. A Cooperation Roadmap is now under development to promote the knowledge based society, focus on areas of mutual benefit, and enable reciprocal access to the activities of research programmes of both parties, whilst respecting Intellectual Property Rights (IPR) and other laws and regulations. Expected results from the agreement include improved awareness by Jordanian researchers of European research programmes and opportunities, increased participation in the Framework Programme (FP) and in the European Research Area (ERA), and improved synergy between research and innovation.

### **2.2. Lessons learnt**

Over the past 3 years the EU-funded *Support to Research and Technological Development and Innovation Initiatives and Strategies in Jordan (SRTD) Project*, also addressed these issues through the funding of research and start-up projects, the creation of a research network to provide awareness of EU research opportunities, and the establishment of a national programme of technology transfer and commercialisation.

A monitoring mission was carried out during the first phase of SRTD that finished at the end of 2010, yielding positive results. SRTD's potential sustainability, impact prospects and effectiveness received the highest scores, although it was recommended to enhance SRTD networking with related industry, higher education and research and technology development initiatives in the Euro-Mediterranean region. These lessons will be taken into account in the next phase.

It is worth mentioning that among SRTD's main achievements are the establishing of 50 focal points in the universities, research centres and small and medium enterprises; building the capacity about Research and Technological development programmes; establishing two new incubators; and enhancing the capacity of two incubators (Al Udronia Lil Ebda and IPark) to fulfil the European Business and Incubator Centre Network (EBN) standards and attain full membership ; expanding the national intellectual Property Commercialisation Office at El-Hassan Science city; establishing 11 Technology Transfer Offices and providing 60 research and start up grants.

Over 900 researchers participated in workshops, conferences, info days, brokerage days and internship and as result of these efforts, of the 168 Seventh Framework Programme for Research and Technological Development (FP7) Jordanian applicants, 118 were from SRTD focal points. 27 projects are now running or under negotiation.

"Support to Research and Technological Development and Innovation in Jordan" will build on the research and commercialisation elements of SRTD, providing more focus on supporting applied research based on national priorities, involving the private sector with defining research needs, and supporting strong innovative ideas from research through to commercial viability. It will also further develop EU-Jordan links focused around the 6 key thematic areas of EU's FP7: energy, environment (specifically water), food / agro / biotech, health, Information Communication and Technology and nano-technology, where thematic National Contact Points (NCPs) were established.

### **2.3. Complementary actions**

Complementary actions have been carried out within the EU Seventh Framework Programme for Research and Technological Development. More specifically, under the FP7 capacities programme there are two initiatives in which Jordan is a partner, namely a) the Mediterranean Innovation and Research Co-ordination Action (MIRA) and b) the Enhancement of Jordan-European Science and Technology Partnerships (EU-JordanNet). For both projects the Higher Council for Science and Technology is the local partner so coordination is assured.

The current programme will complement with the initiatives and the EU funded programmes managed by the Jordan Enterprise Development Corporation (JEDCO) at promoting and facilitating the development of private sector competitiveness (Jordan Services Modernization Programme [2007- EUR 16 million], and "Support to Enterprise and Export Development" project [2009- EUR 16 million] ).

The main other donor project running in the area of innovation is the United States Agency for International Development's (USAID) Sabeq project. Sabeq has developed the concept of *Innovation Clusters* around a number of key sectors: clean technology, medical services, information communication and technology, architecture and engineering, and pharmaceuticals. The idea of an Innovation Cluster is to provide a framework where all the key ingredients for successful innovation – from policy and regulation to Research and Development and commercialisation – are integrated and developed in a sustainable manner. The proposed project will consider how it can best fit with the Innovation Clusters where there is sectoral overlap.

### **2.4. Donor coordination**

Donor coordination will be ensured throughout the programme through a number of mechanisms. Cooperation between EU Member States in Jordan is effected through meetings chaired by the European Commission and the EU Presidency. Heads of Mission meet monthly, with a special emphasis on taking forward the previously agreed 'EU road map for donor harmonisation and alignment' and the 'Matrix of EU Development Assistance'. Regular meetings of commercial counsellors ensure coordination on economic issues and related assistance matters.

In July 2007, the Ministry of Planning and International Cooperation established nine donor coordination working groups. In early 2011, following the approval of the new Executive Development Programme, the Ministry of Planning and International Cooperation increased the number of donor coordination working groups to eleven.

The groups aim at providing a "structured and technical level dialogue with donors on Jordan's development needs and priorities". The working groups take place regularly and are attended by representatives from the Ministry of Planning and International Cooperation, the line ministries and the donors.

At the same time a Donor/Lender Consultation Group (DLCG) continues to ensure coordination between major donors in a number of thematic areas.

### 3. DESCRIPTION

#### 3.1. Objectives

The overall objective of the proposed project is to increase the contribution of Jordan's Research & Technological Development and Innovation sectors to Jordan's economic growth and employment.

The specific objectives are to a) further develop Jordan's applied research and technological capacity with a focus on the commercialisation of research and technological development results for use by the private sector, especially Small and Medium-sized Enterprises; and b) continue the integration of Jordan into the European Research Area.

#### 3.2. Expected results and main activities

It is proposed that the project take a thematic approach to delivering the results. Following discussions at the Higher Council for Science and Technology (the proposed beneficiary), four *Key Areas* of Water, Energy, Food and Health are defined as the most important themes to focus on. They fit into Jordan's national research priorities, and the sub-areas will be defined within the first months of the project. For each Key Area, the research and commercialisation activities will be defined and managed from start to finish. The approach will ensure "ownership" by key project staff members and a greater chance of successful commercialisation of Research and Development.

In line with the general and specific objectives the programme's indicative results/activities are:

**Result 1: Increased levels of applied research, targeted towards the agreed priorities and needs of Jordan, and often developed in partnership with the private sector, leading to commercially viable and valuable output.**

**Activities:**

- Define research needs based on National Research and Development Priorities, FP7 priorities, and input from the private sector;
- Support research activities through a Grant Scheme.

**Result 2: Increased numbers of registered patents, spin-out companies, joint ventures and technology licenses created as a direct result of research activities.**

#### Activities:

- Strengthened capabilities of the Technology Transfer network, specifically within research organisations;
- Deliver increased awareness to researchers and private sector regarding the value of research to business;
- Support commercialisation activities through a Grant Scheme;
- Conduct commercialisation activities.

#### **Result 3: Strengthened links between European Union and Jordanian research and commercialisation activities.**

#### Activities:

- Thematic National Contact Points (NCP) capacity building;
- ‘Research-Jordan’ Networking Event;
- Final event;
- Media Support.

#### **Grants**

A large proportion of the budget (EUR 1,800,000) is envisaged for Grants of no more than EUR 25,000 to support additional *applied* research, and the commercialisation of this and other research. For research grants, individual researchers and those applying in partnership with institutions should identify projects within the agreed priority areas and indicate a likely commercialisation approach beyond the grant phase. Ideally, research grant applicants would have a commercialisation partner identified and supportive of the grant. Commercialisation grants would initially focus on the results of SRTD grant output to identify any immediately implementable commercialisation routes. Later, commercialisation grants could be awarded to successful research grant winners.

### **3.3. Risks and assumptions**

A consistent commitment from the Higher Council for Science and Technology to reinforce the science, technology and innovation system is assumed.

Effective commitment of the grant beneficiaries is assumed. Grant beneficiaries will be closely monitored.

### **3.4. Crosscutting Issues**

The programme will have an indirect impact on:

- Supporting the national initiatives for environmental protection and waste management, and rationalization of expenditure through effective utilization of natural resources and renewable energy.

- Gender equality aspects notably through the promotion of women researchers and scientists in programme activities on an equal footing with their male colleagues.
- A focus on developing innovation outside the governorate of Amman, specifically in the north and south of Jordan.

### 3.5. Stakeholders

The main stakeholders of the programme are:

The **Higher Council for Science and Technology (HCST)** is responsible for the development of science and research policy, and partial responsible for research funding. The **Ministry of Higher Education and Scientific Research** has overarching responsibility for universities and research centres. **El Hassan Science City** (where the HCST is a member) includes the Intellectual Property Commercialisation Office (IPCO) established under SRTD I, and the iPark EBN incubator. **Al Urdonia Lil Ebda** (another EBN) manages two incubators outside Amman, but connected to local universities.

Research Bodies, Universities and other organisations, being public or private, active or intending to build capacity in innovation and technology transfer.

## 4. IMPLEMENTATION ISSUES

### 4.1. Method of implementation

The method of implementation will be partial decentralized management through the signature of a financing agreement with the Hashemite Kingdom of Jordan in accordance with Articles 53c and 56 of the Financial Regulation, with the exception of technical assistance, which will be contracted via Framework Contract, being the European Commission the contracting authority (direct centralized management). The European Commission will be the contracting authority for evaluation, monitoring and audit contracts as well.

The Ministry of Planning and International Cooperation will be the beneficiary and relevant representative for the Government of Jordan and will act as Contracting Authority for the project. The Ministry of Planning and International Cooperation will also be the project supervisor

The Higher Council for Science and Technology (HCST) will be the Executing Agency and will carry out the management and implementation of the project.

A Delegation Agreement will be signed between the Ministry of Planning and International Cooperation and HCST which must explicitly designate the two persons who will take on the duties of authorisation (imprest administrator) and payment (imprest accounting officer). In accordance with the powers delegated to them the imprest administrator and the imprest accounting officer shall draw up and implement consecutive programme estimates, award contracts and grants, commit expenditure and make the corresponding payments.

The project will be managed by a Project Implementation Office (PIO) that will be established at the Higher Council for Science and Technology. The PIO will ensure the daily management of the project and report to the Steering Committee and to the EU. The PIO will consist of the national project imprest administrator and the imprest accounting officer appointed by the Higher Council for Science and Technology, local staff, including necessary secretarial and administrative personnel.

The Commission controls ex ante all the procurement procedures except in cases where programme estimates are applied, under which the Commission applies ex-ante control for procurement contracts > EUR 50,000 and may apply ex-post for procurement contracts ≤ EUR 50,000. The Commission controls ex ante the contracting procedures for all grant contracts.

The European Commission will be the contracting authority for technical assistance contracted via the Framework Contract as well as for evaluation, monitoring and audit contracts.

Payments are executed by the Commission except in cases where programme estimates are applied, under which payments are executed by the beneficiary country for operating costs and contracts up to the ceilings indicated in the table below.

The responsible Authorising Officer ensures that, by using the model of financing agreement for decentralised management, the segregation of duties between the imprest administrator and the imprest accounting officer or of the equivalent functions within the delegated entity will be effective, so that the decentralisation of the payments can be carried out for contracts up to the ceilings specified below.

<b>Works</b>	<b>Supplies</b>	<b>Services</b>	<b>Grants</b>
< EUR 300,000	< EUR 150,000	< EUR 200,000	≤ EUR 100,000

The change of management mode constitutes a substantial change except where the Commission "re-centralises" or reduces the level of tasks previously delegated to the beneficiary country, international organisation or delegatee body under, respectively, decentralised, joint or indirect centralised management.

#### **4.2. Procurement and grant award procedures /programme estimates**

##### **(1) Contracts**

All contracts implementing the action must be awarded and implemented in accordance with the procedures and standard documents laid down and published by the Commission for the implementation of external operations, in force at the time of the launch of the procedure in question.

Participation in the award of contracts for the present action shall be open to all natural and legal persons covered by the ENPI Regulation. Further extensions of this participation to other natural or legal persons by concerned the concerned authorising officer shall be subject to the conditions provided for in article 21 (7) of the ENPI Regulation.

##### **(2) Specific rules for grants**

The essential selection and award criteria for the award of grants are laid down in the Practical Guide to contract procedures for EU external actions. They are established in accordance with the principles set out in Title VI 'Grants' of the Financial Regulation applicable to the general budget. When derogations to these principles are applied, they shall be justified, in particular in the following cases:

- Financing in full (derogation to the principle of co-financing): the maximum possible rate of co-financing for grants is 80%. This percentage builds upon the previous successful experience with grant projects under SRTD Phase I.
- Full financing may only be applied in the cases provided for in Article 253 of the Commission Regulation (EC, Euratom) No 2342/2002 of 23 December 2002 laying down detailed rules for the implementation of the Financial Regulation applicable to the general budget of the European Union.
- Derogation to the principle of non-retroactivity: a grant may be awarded for an action which has already begun only if the applicant can demonstrate the need to start the action before the grant is awarded, in accordance with Article 112 of the Financial Regulation applicable to the general budget.

(3) Specific rules on programme estimates:

All programme estimates must respect the procedures and standard documents laid down by the Commission, in force at the time of the adoption of the programme estimates in question.

#### 4.3. Indicative budget and calendar

The total EU contribution to the programme is EUR 5,000,000 with the following indicative breakdown:

##### Indicative Budget

<b>Activities</b>	<b>Amount (in EUR)</b>
Support to Applied Research (mainly technical assistance and grant scheme)	<i>1,700,000</i>
Support to Commercialisation (mainly technical assistance and grant scheme)	<i>1,500,000</i>
Support to networking and links with EU research area(mainly technical assistance)	<i>700,000</i>
Operating Costs	<i>500,000</i>
Audit and Evaluation	<i>250,000</i>
Contingencies	<i>350,000</i>
<b>Total</b>	<b>5,000,000</b>

Based on current information, the counterpart contribution from the Government of Jordan is expected to be in-kind to be provided in the form of staff time, use of office space and equipment, transport and communication, though it is difficult at this stage to make even an approximate estimate of such inputs.



The operational duration foreseen is 48 months from the signature of the Financing Agreement.

#### **4.4. Performance monitoring**

The Programme will be supervised by a Programme Steering Committee (PSC) including representatives from the two key Ministries (Ministry of Higher Education and Scientific Research and the Ministry of Planning and International Cooperation), the Higher Council for Science and Technology, together with key industrial sector representatives and the research community, as deemed appropriate by the Steering Committee. The EU Delegation will participate as observer.

At the start of the project a number of indicators should be agreed between the HCST and EU to gauge the progress and monitoring of the activities.

The project will also benefit from the system of the external European Commission Results-Oriented Monitoring (ROM) missions.

#### **4.5. Evaluation and audit**

The programme will be subject to an annual external financial and system audit launched by the Commission.

A mid-term and final external evaluation for the whole programme will be contracted by the Commission with the aim to provide an independent and reliable assessment with conclusions, recommendations and lesson learned which should assist policymakers and managers in the implementation of the Programme and/or planning of future interventions.

#### **4.6. Communication and visibility**

Communication and visibility are considered a key component of the project. A comprehensive communication strategy will be developed in coordination with all the stakeholders. Activities to improve awareness are envisaged, including workshops, visibility materials and the media.

EU visibility guidelines are to be respected by the PIO and the respective grant beneficiaries. The EU Delegation in Amman will check the visibility component of the actions through field visits and will increase visibility when it is appropriate.

[http://ec.europa.eu/europeaid/work/visibility/documents/communication\\_and\\_visibility\\_manual\\_en.pdf](http://ec.europa.eu/europeaid/work/visibility/documents/communication_and_visibility_manual_en.pdf).