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COMMUNICATION FROM THE COMMISSION TO THE COUNCIL

concerning an Observer status for the European Union in the International Centre for Synchrotron-light for Experimental Science and Applications in the Middle East (SESAME)

Observer Status for the European Union in SESAME

Summary

SESAME (Synchrotron-light for Experimental Science and Applications in the Middle East)[1] *is an international centre for research and advanced technology, with a seat in Jordan. It is a unique endeavour, established with the aim of using science diplomacy in fostering a culture of peace and cooperation in the Broader Middle East*[2].

Members of SESAME are Bahrain, Cyprus, Egypt, Iran, Israel, Jordan, Pakistan, Palestine and Turkey whereas Brazil, China, Japan, Kuwait, Switzerland, the Russian Federation, the US, as well as several EU Member States (France, Germany, Greece, Italy, Portugal, Spain, Sweden and the United Kingdom) have observer status.

1. CONTEXT

SESAME was launched in 2004 under the auspices of UNESCO with the aim of using science diplomacy in fostering a culture of scientific cooperation in the Broader Middle East. 45 Nobel Prize winners have backed the project in an open letter.

The project has been designed as a science initiative and has a true scientific value. SESAME fosters research and technological excellence in the region and prevents or reverses the brain drain. At the same time it builds scientific and cultural bridges between diverse societies, and contributes to a culture of peace through international cooperation in science. SESAME creates a motivating scientific environment that encourages the region's best scientists and technologists to stay in the region or to return if they have moved elsewhere. It provides a platform for cooperation with scientists from Europe and other countries.

Today, in the Middle East, SESAME is one of the few projects in the region where trans-national dialogue is fostered. SESAME can have a very positive impact on the region - in scientific and socio-economic terms as a synchrotron facility has a very high innovation potential and can deliver quick returns on its investment.

Already now there are more than 200 scientists from the region using SESAME (i.e. the facilities available so far). SESAME is expected to come into full operation in 2016 provided the required capital funding for the completion of its construction is available on schedule. SESAME's annual operating budget is currently $3.2 million, expected to rise to approximately $6 million once it is fully operational.

[1] Synchrotrons use light (beam-lines) that ranges beyond the visible (in the infrared, ultraviolet, X-ray and beyond) to study matter (from biological cells to atoms). They are used for a wide scope of applications – infrared imaging of diseases, designing pharmaceuticals, solar cells enhancement, CO_2 capture, assessing archaeological artefacts, etc.

[2] http://www.sesame.org.jo/sesame/about-us/what-is-sesame.html

2. EUROPEAN UNION'S ENGAGEMENT AND CONTRIBUTION IN SESAME

SESAME is a unique international science initiative in the Middle East that came into being thanks to contributions from Germany and other EU Member States[3]. It was inspired by the model of CERN, one of the pioneers in Europe of using science as a way of fostering a culture of cooperation reaching beyond science. Following this model, SESAME aspires to foster scientific and technological excellence in the Middle East and build bridges between diverse societies through international cooperation in science. Up to now the SESAME initiative has received very strong backing from scientists and governments throughout the EU and beyond. Among the EU Member States Cyprus is a full SESAME Member and eight additional EU Member States are participating in the SESAME Council meetings as observers. SESAME builds on expertise, technical assistance and equipment made available by European partner laboratories (synchrotron facilities from Germany, France, Italy, UK, Sweden, Spain and Switzerland have contributed considerable manpower and resources to the project).

The European Commission has repeatedly expressed its support for SESAME, contributing over the years more than 10 M€ to it: under the 7th Framework Programme (5 M€ CERN-EC Support for SESAME Magnets[4]), 5 M€ bilateral EU-Jordan financial assistance programmes, and specific research projects (e.g. LinkSCEEM 1 and 2[5]). The EU's key technical contribution to SESAME is the magnet system for its main storage ring and is considered a catalyst for the realisation of SESAME. Finding the necessary capital funding has been a huge challenge for SESAME. In this context Commission and EU Member States' contributions have been vital in ensuring the initiative's implementation.

3. THE EU SHOULD SEEK AN OBSERVER STATUS IN SESAME

On 27 March 2014, the European Commission services received a formal invitation from the SESAME Council inviting the EU to become an observer in SESAME. The procedure requires that a letter is addressed to the Director-General of UNESCO confirming that the Union accepts the Statutes of SESAME and notifying her that it wishes to become an observer. Following the receipt of that letter the SESAME Council will be called to vote. Based on the good cooperation so far, the SESAME Council is expected to support the Union's request. Being observer in SESAME would entail no voting rights.

However, this status has the following advantages: observers participate in the executive body of the Centre – the Council, may submit agenda items and proposals for discussion at Council sessions, their nationals may hold staff positions at SESAME and, whenever possible, invitations to tender for the purchase of equipment and supplies is limited to manufacturers and contractors located within the territories of Members and Observers. While members pay financial contributions on a yearly basis, observers have no obligation to make such financial contributions.

SESAME has undoubtedly a great potential to contribute to scientific excellence and broader science diplomacy in the region by fostering scientific collaboration between the EU, the

[3] The idea of basing an international synchrotron light source in the Middle East on the components of the BESSY I (Berlin Electron Storage Ring Company for Synchrotron Radiation) machine was suggested by German and international scientists in the late 90's. The German Government agreed to donate the BESSY I components to SESAME in Jordan where they arrived in June 2002.

[4] cessamag.web.cern.ch

[5] www.linksceem.eu

Middle East and the EU's extended neighbourhood. Through science diplomacy international cooperation in research and innovation can be used as an instrument of soft power and as a mechanism for improving relations with key countries and regions. Science diplomacy can support EU efforts in crisis management and peace-building.[6]

In addition, as a widely-available 'scientific user facility', SESAME is expected to have a broad socio-economic impact. It promotes key innovation factors such as technology transfer, skills and human capital development, academic exchanges, training of researchers, joint research and development actions. In this way, SESAME helps the reintegration of the region into the global social-economic processes fostering knowledge and innovation for the development of a prosperous and stable Middle East.

The EU invests substantial amounts in research and science cooperation in the region and in particular in SESAME[7]. The European Commission therefore considers that seeking an EU observer status in SESAME would:

- adequately reflect the EU's considerable involvement and contribution to the initiative. Major and emerging global actors active in the region enjoy observer status in the project (USA, Russia, China, Brazil and others);
- increase the EU's global visibility and raise the international profile of the Union as important contributor to scientific excellence and development in the region;
- contribute to job creation, growth and stability in the region;
- strengthen technology transfer and innovation in the region;
- demonstrate leadership in global science cooperation in line with its guiding principles, sustainable development and mutual respect among people;
- provide the Union with a good example of a well-functioning science diplomacy instrument;
- raise the project's visibility and consequently mobilise further support from other regional players.

4. CONCLUSIONS

Based on the above mentioned elements, the European Commission considers that the EU would substantially gain visibility and influence by obtaining the observer status in SESAME. The Commission invites the Council to endorse the above outlined approach and support the Commission in preparing actions so that the EU obtains observer status in SESAME.

[6] Report on the implementation of the strategy for international cooperation in research and innovation (COM(2014)567).

[7] EU financial contribution to SESAME so far amounts to more than EUR 12 million, in addition to considerable in kind contribution of EU Member States.