

Session 3

Supporting Human Capacity Building and Education through Regional Efforts: The Case of the SESAME Project

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Synchrotron-light for Experimental Science and Applications in the Middle East (SESAME)

A2.5 GeV light source facility, under construction near Amman, Jordan modelled on CERN

Members:

Cyprus, Egypt, Iran, Israel, Jordan, Pakistan, Palestinian Authority and Turkey.

Observers:

Canada, China, Brazil, EU, France, Germany, Greece, Italy, Japan, Kuwait, Portugal, Russia, Spain, Sweden, Switzerland, UK and USA.



Purpose: Foster excellent science and technology in the Middle East (and prevent or reverse the brain drain) and build bridges between diverse societies

Who Has Built SESAME?

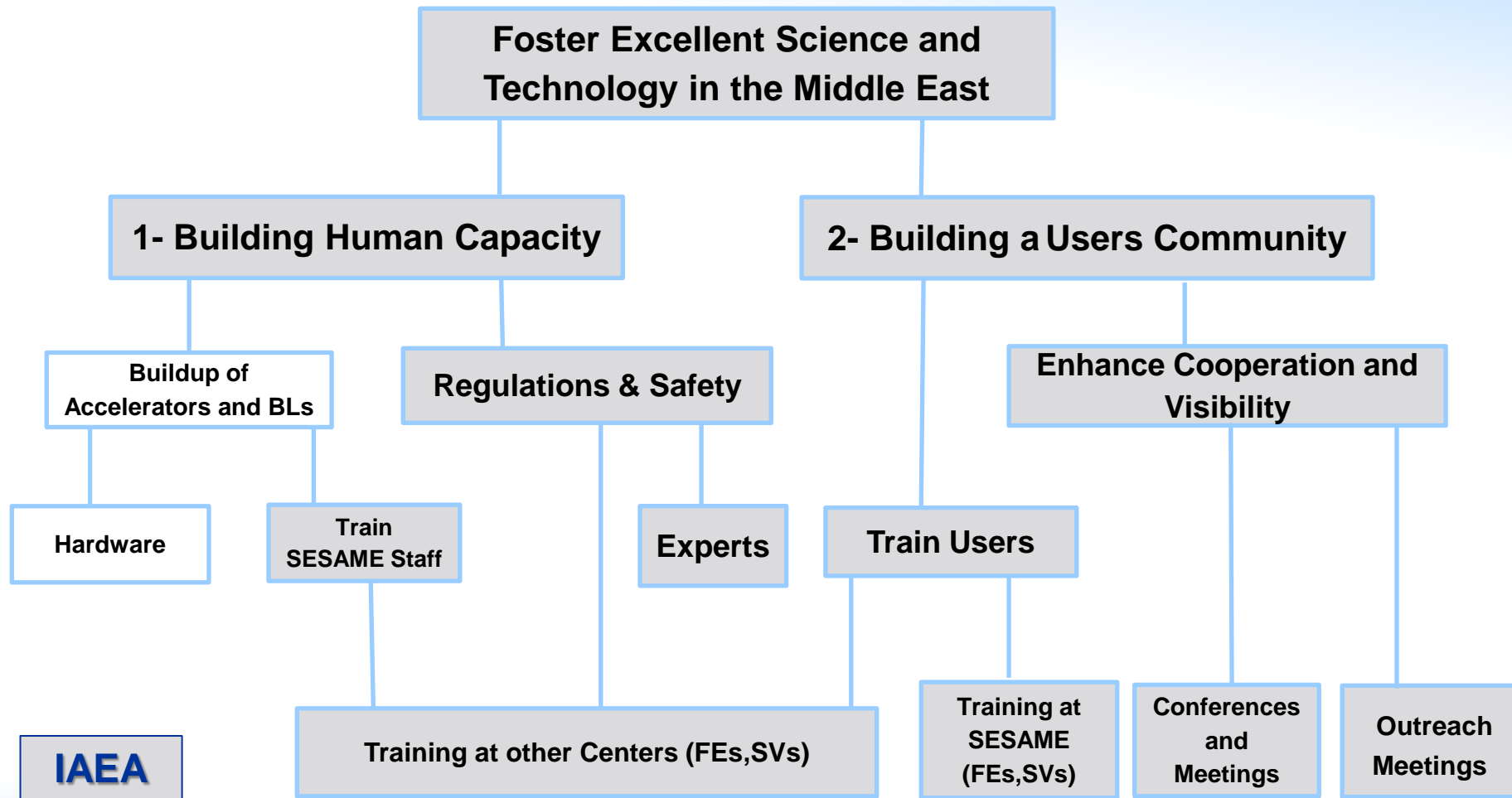
- Senior scientists and administrators worked collaboratively to construct SESAME (Council **from the region** and Advisory Committees from **around the world**)
- Young and senior scientists **from the region** are collaborating in preparing the scientific programme (Users Meetings and Workshops)

IAEA Interregional Projects



- Young scientists and engineers from the region were sent for training in several light source facilities in Europe, Japan, Brazil and USA
- Scientists from several light source facilities around the world came to SESAME to train staff, review designs and check measurements

How did IAEA Interregional Projects Support SESAME?



IAEA Support for SESAME

- Training of SESAME facility users in accelerator physics and synchrotron radiation applications
- Support the efforts of EMRC for the safe commissioning and operation of the SESAME facilities

Interregional Project Title *	Period	Total Budget (Euros)	Activity	
INT1055: Support for Human Capacity Building in the Utilization and Operation of the Synchrotron-Light for Experimental Science and Applications in the Middle East (SESAME)	2007-2012 (Completed)	524,389.21	EMs**	(26) missions
			Meetings	(39) participants
			FEs**	(33) fellows
INT0086: Building Human Capacity for the Construction, Operation and Use of SESAME	2012-2016 (Active)	558,143.01	EMs	(13) missions
			Meetings	(80) participants
			FEs	(25) fellows
			SVs**	(6) visitors
INT0092: Building Human Capacity for the Construction, Operation and Use of Synchrotron-Light for Experimental Science and Applications in the Middle East	2016-till present (Active)	516,899.99	EMs	(6) missions
			Meetings	(33) participants
			FEs	(7) fellows
Grand Total	2007-till present	1,599,432.21	EMs Meetings FEs SVs	(45) missions (152) participants (65) fellows (6) visitors

* In addition to a Jordanian national project (2005-2006) with a total budget of US\$ 136,700 **EM (Expert Mission), FE (Fellowship Training), SV (Scientific Visit)



The Way Forward

- Continue cooperation between the IAEA and SESAME for the mutual interest of the IAEA and SESAME Members (building an IAEA beamline at SESAME that will be dedicated to other IAEA Member States, training of scientists and engineers from these States at SESAME).
- Regional IAEA coordinated research projects (CRPs) to be carried out at SESAME.
- Expand on cooperative modalities with the IAEA and other international organizations and laboratories for enhancing scientific programmes at SESAME.



Thank You

