



**IAEA**

International Atomic Energy Agency  
*Atoms for Peace and Development*

# Fourth Meeting of the South East European International Institute for Sustainable Technologies (SEEIIST) Steering Committee

Vienna

27 November 2018

# TC Programme Cycle Management

## PROGRAMME PLANNING & APPROVAL

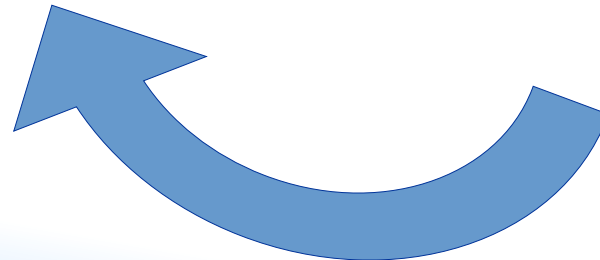
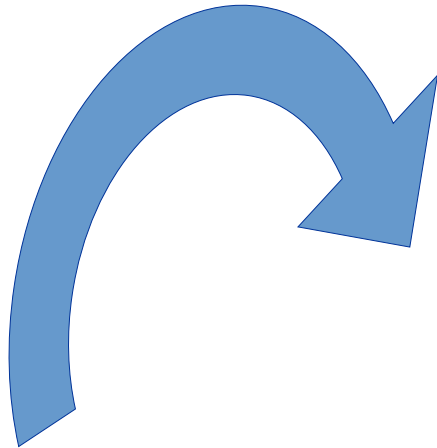
1. Upstream work
2. Concepts & Prioritization
3. Project design
4. Resourcing & budgeting
5. Internal Approval
6. Approval by TACC/Board

## PROGRAMME IMPLEMENTATION

1. Operational execution
2. Monitor progress
3. Make adjustments
4. Report performance / Self Assessment
5. Project closure

## PROGRAMME REVIEW

1. Independent Evaluation
2. Self Assessment
3. Impact Assessment
4. Follow-up adjustments and implementation of recommendations

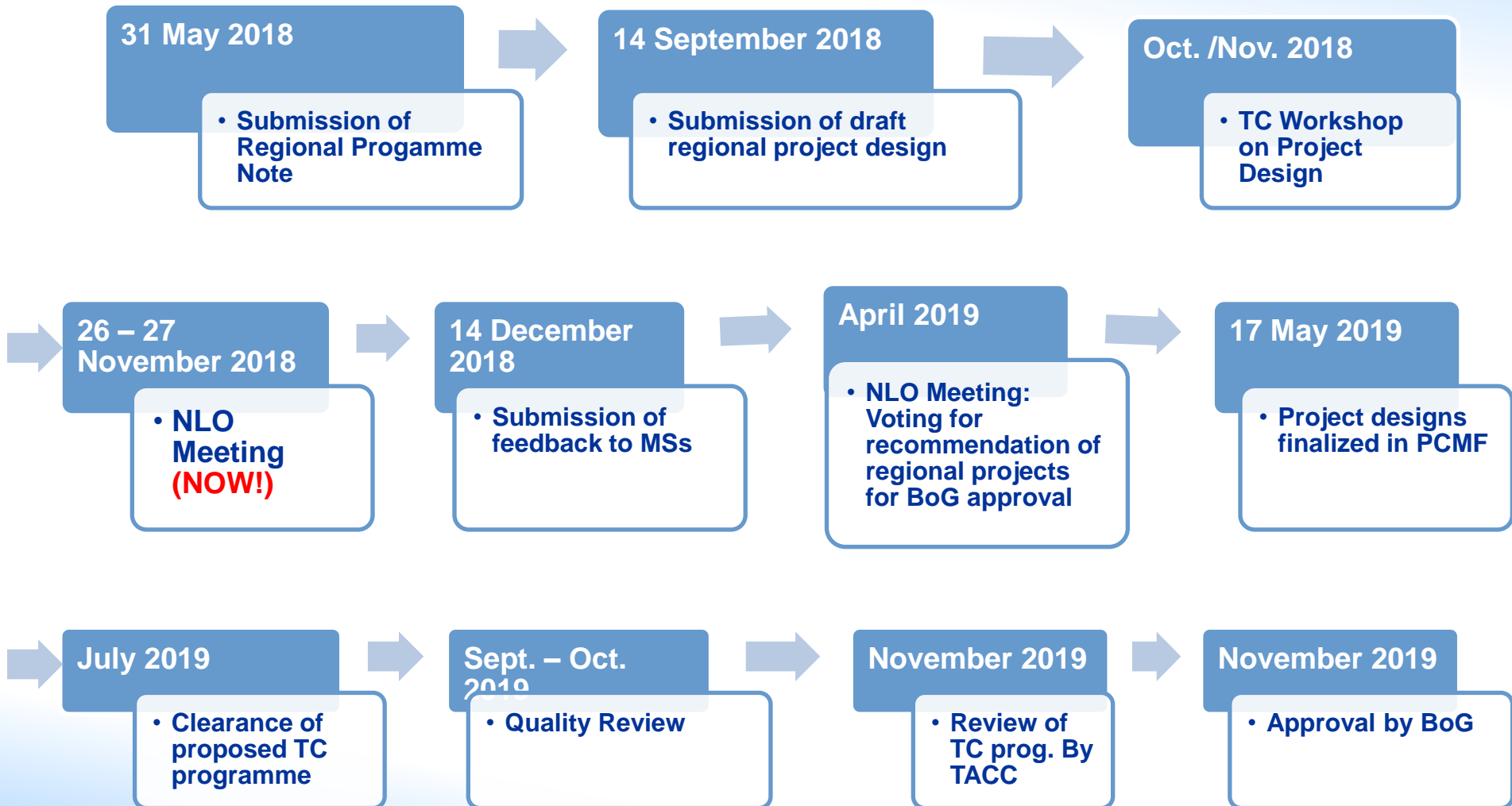


# TC Programme Cycle

Bi-annual cycle + 2 preparation years



# What's next? - project design phase



# TC project types



## **National**

Infrastructure building

Address country's specific needs

About 60-65% of the programme

## **Regional**

Networking and  
experience sharing

Address issues of  
common interest and  
issues of regional  
dimension



## **Interregional**

Networking and  
experience  
sharing

Address issues  
of common  
interest to the  
four regions



# TC Programme Services



Training fellowships  
& scientific visits



Equipment &  
materials



Training courses &  
workshops

Capacity building  
Networking  
Knowledge sharing  
Partnership building

TC Programme aims to support  
sustainable socioeconomic  
development in Member States

**Technical Cooperation (TC)  
Projects**

Expert  
assistance



Conferences,  
symposia &  
seminars





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## **RER2018009 PROJECT PROPOSAL**

**Title:** Human Resources Development for setting-up a Hadron Therapy Centre within a Joint South-East European International Institute for Sustainable Technologies (SEEIIST)

**Development Objective:** To build a critical mass of initially needed human resources for design, construction, operation and developing the scientific program for the merits of the emerging hadron tumour therapy and research facility –SEEIIST

**Target countries:** Albania, Bosnia and Herzegovina, Bulgaria, Montenegro, Serbia, Slovenia, and The Frmr. Yug. Rep. of Macedonia



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## **RER2018009 FOCAL PROBLEM**

The initiative by the SEEIIST to establish a state-of-the-art ‘Facility for Tumour Therapy and Biomedical Research with Protons and Heavier Ions’ will require building of human resource capabilities in the SEE Region.

The IAEA is requested to provide capacity building support for:

- designing and building of an accelerator-based large-scale research facility,
- training of scientist, medical practitioners, and engineers in various specialized fields and their networking.



# Expected Project Results

<b>Outcome</b>	<b>Critical mass of researchers, engineers, technicians and medical doctors needed to design, construct, and operate the hadron tumour therapy (HT) facility, established</b>
<b>Outputs</b>	<ol style="list-style-type: none"><li>1. Scientists and engineers have acquired knowledge to design, construct, operate the hadron tumour therapy facility (Infrastructure aspects).</li><li>2. Medical practitioners and engineers acquired knowledge on fundamentals of the HT (clinical and operational aspects)</li><li>3. Sustainable communication and dissemination platform introduced among different partners to promote networking, knowledge sharing, and scientific research in HT</li></ol>
<b>Activities</b>	<b>Fellowships, Scientific Visits, Expert Missions, Workshops, etc.</b>

# Memorandum of Understanding



Signed on December 2006



*Consistent with the efforts to promote regional and interregional cooperation in the peaceful uses of nuclear science ....*

***Have agreed to implement the interregional human resources project in accordance with the arrangements and understandings in a spirit of friendly cooperation.***

Bahrain, Cyprus, Egypt, Iran, Israel, Jordan, Pakistan, Palestine, Turkey

**Observers:** China, France, Germany, Greece, Italy, Japan, Kuwait, Portugal, Russian Federation, Sweden, Switzerland, UK, USA

# SESAME: an Interregional project

## 2007-2010:

**INT1055:** “Support for Human Capacity Building in the Utilization and Operation of the Synchrotron-light for Experimental Science and Applications for the Middle East (SESAME)”

To strengthen international cooperation among Member States participating in SESAME through the use of accelerator physics and synchrotron radiation applications.

## 2012-2015

**INT0086:** “Building Human Capacity for the Construction, Operation and Use of SESAME”

To support the human capacity development for the installation, commissioning, safe operation and utilization of the SESAME facility as an international center of excellence for research and applications in the Middle East.

## 2016-2019

**INT0092:** “Building Human Capacity for the Construction, Operation and Use of Synchrotron-Light for Experimental Science and Applications for the Middle East”

To establish SESAME as a leading research center of excellence open to all scientists, thereby fostering science and technology in the region and building bridges between the different cultures and countries of the region (Science for peace).



# The IAEA TC on SESAME

## **Examples of Expert support :**

- Construction and installation of the Booster
- Site acceptance tests of the Booster power supplies
- Review of Vacuum System of the SESAME Storage Ring

## **Some fellowships on:**

- Capacity building plan of SESAME
- Implementation of the personnel safety
- Performing measurements on synchrotron facilities
- IT infrastructure for the accelerator computer network
- Design and analysis of girder-magnets support system
- RF electronics
- Theoretical and experimental training on accelerator physics
- Extended X-ray absorption

IAEA participates in the Council meetings

# The IAEA TC on SESAME

The users of the SESAME facilities were trained in accelerator physics and synchrotron radiation applications.

The operators of the SESAME facilities were trained in operation and maintenance of the synchrotron.

The project contributed to the establishment of the legal documentation for the safe commissioning and operation of the SESAME facilities.

The project strengthened the international cooperation among Member States participating in SESAME through the use of accelerator physics and synchrotron radiation.



Technical  
Cooperation  
Programme

*Technical cooperation:  
delivering results for  
peace and  
development*

