

## Regional Project Concept Template (Category A)

The information contained in this template should be uploaded to the PCMF IT platform by the Chair of the relevant regional cooperative agreement or the NLO of the Member State submitting the concept by **31 May 2012** at the latest. Based on this information the IAEA will assess whether this project concept is in line with the TC quality criteria and requirements. Concepts positively appraised will be further developed into full project documents during the design phase.

<b>Region:</b>	Pakistan		
<b>Regional/Cooperative agreement (if applicable)</b>		<b>Priority no. given by regional/cooperative agreement (for concepts proposed under the auspices of regional cooperative agreements)</b>	
<b>Title</b>	Standardization of Quality Assurance in Nuclear Medicine Procedures		
<b>Field of activity</b>	Quality Assurance		
<b>Regional project category<sup>1</sup></b>	<i>Transnational</i> <input checked="" type="checkbox"/> <i>Regional standard setting</i> <input type="checkbox"/> <i>Capacity building for developing countries</i> <input type="checkbox"/> <i>Joint TC activities with a regional or international entity</i>		
<b>Names and contact details of project counterparts and counterpart institutions (starting with the main counterpart)</b>	<p>Project counterparts:- Dr Sadaf Tufail Butt, Dr Shazia Fatima          Contact details: NORI hospital, Hanna Road, G-8/3, Islamabad, Pakistan          MAIN COUNTERPART INSTITUTIONS:</p> <ol style="list-style-type: none"> <li>1. <b>NORI</b>      <b>Nuclear Medicine Oncology &amp; Radiotherapy Institute</b></li> <li>2. AEMC      Atomic Energy Medical Centre, Karachi</li> <li>3. BINO      Bahawalpur Institute for Nuclear Oncology, Bahawalpur</li> <li>4. CENAR      Centre for Nuclear Medicine &amp; Radiotherapy</li> <li>5. CENUM      Centre for Nuclear Medicines, Lahore</li> <li>6. GINUM      Gujranwala Institute of Nuclear Medicine and Radiotherapy</li> <li>7. INMOL      Institute of Nuclear Medicine &amp; Oncology, Lahore</li> <li>8. INOR      Institute of Nuclear Medicine Oncology &amp; Radiotherapy, Abbottabad</li> <li>9. IRNUM      Institute of Radiotherapy &amp; Nuclear Medicine, Peshawar</li> <li>10. KIRAN      Karachi Institute of Radiotherapy &amp; Nuclear Medicine, Karachi</li> <li>11. LINAR      Larkana Institute of Nuclear Medicine and Radiotherapy, Larkana</li> <li>12. MINAR      Multan Institute of Nuclear Medicine and Radiotherapy, Multan</li> <li>13. NIMRA      Nuclear Institute of Medicine &amp; Radiotherapy</li> <li>14. SKMCH      Shaikat Khanum Memorial Cancer Hospital, Lahore</li> <li>15. AKUH      Agha Khan University Hospital, Karachi</li> <li>16. NMC      Nuclear Medicine Centre, Rawalpindi</li> <li>17. SIH      Shifa International Hospital, Islamabad</li> </ol>		
<b>Analysis of regional Gap / Problems/needs</b>	<p>In a developing country like Pakistan in which resources that can be devoted to health care are limited; the problem is frequently compounded by a lack of well trained personnel and difficulties in obtaining equipment &amp; radionuclide supplies. NORI is one of the thirteen Nuclear medicine &amp; Oncology centres run by PAEC. SKMCH Lahore, AKUH Karachi, NMC Rawalpindi &amp; SIH Islamabad are non PAEC Institutes having busy nuclear medicine departments.</p> <p>In most of the institutions even those possessing a considerable number of nuclear medicine facilities – Quality control procedures have still not been put in to practice. Nuclear medicine is a speciality that offers particular advantages for diagnosis of a wide range of malignant &amp; non-malignant diseases. However in order to achieve a high standard of diagnostic reliability at the outset &amp; then maintain it permanently it is essential to institute quality assurance programme.</p> <p>More over there is no uniformity in quality control in nuclear medicine procedures in different institutes. Which leads to non -uniform outcome &amp;</p>		

<sup>1</sup> See the document entitled "Policy and Procedures for TC Regional Projects" at:  
[http://pcmf.iaea.org/DesktopModules/PCMF/docs/2014\\_15\\_Docs/notes/Regional\\_TC\\_Project\\_Policy.pdf](http://pcmf.iaea.org/DesktopModules/PCMF/docs/2014_15_Docs/notes/Regional_TC_Project_Policy.pdf).

	<p>results from one institute are not comparable with the results of the other one. In order to guarantee the necessary uniformity of diagnostic procedures in nuclear medicine; uniformity in quality control tests is important. Quality assurance in Nuclear medicine refers to entire diagnostic process including instrumentation, radiopharmaceuticals &amp; the diagnostic report. Comparison of nuclear medicine investigation methods on a regional level will be of value for both patients &amp; management services. The problem commences at local department level but its logical solution extends to national cooperation.</p>
<b>Why should it be a regional project?</b>	<i>No standard is available for quality control procedures in nuclear medicine &amp; there is non-uniformity in results.</i>
<b>Stakeholder analysis and partnerships</b>	<i>The major stake holders in this project would be PAEC &amp; IAEA. All centres of PAEC have quality control measures in their procedures but they need to be standardized. Rest of the non PAEC nuclear medicine institutes also would be interested / affected parties. Organizational &amp; technical methods will be outlined with the help of IAEA for standardization Quality control in NM procedures.</i>
<b>Overall objective (or developmental objective)</b>	<i>Uniformity of quality control procedures will lead to uniform diagnostic procedures in nuclear medicine will lead to improvement in the quality of diagnostic information</i>
<b>Analysis of objectives</b>	<pre> graph TD     A[results of reports are not comparable] --&gt; B[Variable results of different institutes]     B --&gt; C[no standard QC protocol for NM procedure followed]     C --&gt; D[variety of nuclear quality control procedures]     D --&gt; E[PAEC Nuclear medical centres]     D --&gt; F[NonPAEC nuclear Medicine institutes]           </pre>
<b>Role of nuclear technology and the IAEA</b>	<i>Standardization of Quality assurance procedures, IAEA will provide International experts and previous experience for development of standards</i>
<b>Project duration</b>	<i>3-4 yrs</i>
<b>Requirements for participation</b>	<i>NA</i>
<b>Participating Member States</b>	<p><i>List the Member States expected to participate in this project that meet the requirements established above. Indicate the role of each Member State in the project.</i></p> <p>Country: _____ Pakistan _____ Role: _____</p> <p><input type="checkbox"/> Resource (providing expertise)</p>

	<input type="checkbox"/> Target (receiving expertise)		
<b>Funding and project budget</b>	<i>Provide an estimate of the total project costs and the funding expected from each stakeholder:</i>		
		Euro	Comment
	Government cost-sharing	100,000	(to be sent to the IAEA)
	Counterpart institution(s)		
	Other partners		Who?:
IAEA Technical Cooperation Fund (TCF):	Fellowships / Scientific visits / Training courses/ Workshops		
	Experts	300,000	
	Equipment		
	<b>TOTAL</b>	<b>400,000</b>	

Analysis of regional  
Gap /  
Problems / Issues