

Project Proposals for the RCA Programme 2020/2021 2nd Round Project Concept Template

Part 1: Information Sheet

Project proposals for the RCA Programme 2020/2021 are to be prepared using the attached template. Completed templates will be reviewed by the RCA PAC at the Meeting in Vienna being held 28 January to 2 February 2018.

- **PLEASE NOTE THAT ALL PROSPECTIVE CONCEPTS REQUIRE INFORMATION THAT IS LODGED ON THE RCARO WEBSITE (access is only required to the RCA information not the whole Members Only site).**
- **YOU WILL HAVE TO APPLY FOR A PASSWORD AND ACCESS CODE TO ENABLE ACCESS TO THIS INFORMATION.**
- **PLEASE GET ENDORSEMENT FROM YOUR NATIONAL REPRESENTATIVE FOR THIS ACCESS.**

The 2nd Round Concept Proposals will be evaluated against the response to the feedback you have received from RCA PAC on your 1st Round Concept Proposals as well as the criteria listed below:

- **Is its aims and objectives in line with priorities set out the RCA Medium Term Strategy for 2018/2023?**
- **Identify which elements of the MTS are being complied with.**
- **Why it should be a regional project.**
- **The essential role of the nuclear technology in the project.**
- **Does the proposal identify links to previous projects in this area of technology?**
- **Does the proposal overlap or duplicate current or previous RCA projects?**
- **Is a convincing case made to justify further projects in this area?**
- **Is there a strong TCDC component to exploit the benefits from the earlier projects?**
- **Is there a readily available baseline against which to measure the effectiveness of the project?**
- **If the proposal is essentially an extension of previous projects in this area that have been implemented for more than 2 TC Cycles, does the proposal include arrangements for the transfer of project leadership to others?**

In addition to the above, please address the following specific questions:

Was this concept identified at the 46th RCA GCM as requiring merger with other similar concepts?	NO.
If “YES” – was this concept prepared as a result of consultation with the other proposers?	
If “NO” - why was this not undertaken?	

(Please note that it is important to address all the dot points in the Concept Template.)

Your National Representative will be reviewing the concept document to ensure that it has been prepared in compliance with the RCA special requirements.

(Please be aware that, if your concept design does not take account of the special requirements for the RCA programme, it will be rejected.)

Part 2: Concept Template

Title:

The title should be as concise as possible and should summarize the objective of the project.

Development of Online Networks for Empowering Regional Collaboration among Radiation Oncology Professionals in the Asia-Pacific Region

Compliance with the RCA Medium Term Strategy for 2018/2023:

All RCA projects have to comply with the RCA MTS for 2018/2023 - please refer to the MTS document.

Briefly indicate to which specific MTS priorities this project proposal contributes.

The project will comply with strategies C.2.2 i and ii:

C.2.2. Priorities in Human Health

- i) Strengthen cancer management programmes in GPs, including training of radiation oncologists, medical physicists and technologists;
- ii) Simplify and harmonize protocols on diagnostic imaging and for treatment/palliation planning and radiotherapy treatment

How will these be achieved?

Tumour Boards are meetings in which cases of cancer, or possible cases of cancer, are reviewed and discussed by groups of physicians, typically representing several different medical specialities such as medical oncology, surgical oncology, radiation oncology, etc. This approach allows improved diagnosis and treatment planning due to the input from several different medical professionals with complementary experience and expertise.

Virtual Tumour Board (VTBs) follow the approach outlined above, except the meeting is held via videoconference or other remote technology instead of in person. VTBs therefore offer significant advantages where time, logistics or costs of travel would otherwise prevent the meeting.

This project will establish regional multidisciplinary VTBs that will enable training and continuing professional education for radiation oncologists through case-based learning, as the management of anonymised individual patients with cancer is discussed. This will include aspects of diagnosis (including appropriate use of diagnostic imaging) and radiotherapy planning of curative and palliative treatments. Case discussions will be supplemented by video presentations on the management of particular cancer types and oncology problems.

Regular discussion of cases will strengthen cancer management programmes by facilitating common approaches to diagnosis, treatment and radiotherapy planning and will facilitate the development of resource-appropriate guidelines and protocols on a collaborative basis.

It is anticipated that the VTBs will evolve to allow participation of other professional groups involved in cancer treatment, including medical physicists and technologists.

Overall Objective:

State the objective to which the project will contribute. (Note this has to be in line with the RCA MTS for 2018/2023. It should be a short description expressed as: To do)

To improve the care of people with cancer in the region, by establishing Virtual Tumour Boards that strengthen and harmonise cancer management among the RCA GPs.

Proposed Participating Government Parties:

List the Government Parties expected to participate in the project.

All GPs to the RCA are expected to participate in the project. Initially the project will most likely involve the GPs with active involvement in radiation oncology societies already operating in the region (see following section on TCDC). These include:

Australia
Bangladesh
Cambodia
China
India
Indonesia
Japan
Malaysia
Mongolia
Myanmar
Nepal
New Zealand
Pakistan
Philippines
Republic of Korea
Singapore
Sri Lanka
Thailand
Vietnam

Once the programme is established it is anticipated that the other GPs with radiotherapy services may join. Fiji is likely to establish a radiotherapy service during the term of the project and would be invited to join. At the time of writing of this proposal we had not yet received information about the status of radiation oncology societies in Laos or Palau. There is also potential to extend the project to other countries in the region that are not yet Parties to the RCA, such as Papua New Guinea, New Caledonia and Pacific Small Island Developing States.

Indicate each of those where you have baseline information on their requirements and needs:

To date, professional organizations representing radiation oncologists in Cambodia, Indonesia, Myanmar and the Philippines have indicated that VTBs would be of educational value for those GPs.

Cambodia has one radiotherapy department that has been using linear accelerator-based technology for less than two years and is still building experience with 3d conformal radiotherapy and IMRT. A second independent department will open in 2018 and will require clinical and technical support. VTBs with international experts would be helpful to both departments. Some informal video links with Thai hospitals have been used to discuss patient care.

Vietnam has multiple radiotherapy departments with widely varying technological capabilities. Some larger departments, such as Ho Chi Minh City Oncology Hospital, support less well-resourced departments with visits and on-site educational programmes, which would be enhanced by regular VTBs.

There are no videoconferencing facilities in radiotherapy centres in Myanmar. International support is mainly through visiting volunteer health professionals. The current establishment of a VTBs is likely to require investment in Information Technology infrastructure, as current bandwidth availability would not support videoconferences. These challenges are likely to exist in other Low Income Countries in the region.

Philippines, Thailand, Myanmar, Cambodia and Singapore use the online meeting facility of the Cure4Kids platform to discuss difficult paediatric cases with St. Jude Children's Research Hospital in Memphis, Tennessee, and other SIOP (International Society of Paediatric Oncology) members, but there is no equivalent programme for adult cancer, nor one that allows sharing of radiotherapy plans. Nevertheless, in developing further the current proposed project, there may be opportunities to learn from the Cure4Kids experience and possibly share technical resources.

Technical Cooperation among Developing Countries (TCDC) Project Component:

Review the documentation on line – www.rcaro.org/ ???.

Outline the TCDC strategies to be used in the project to enhance regional cooperation:

The IAEA established the Africa Radiation Oncology NETwork (AFRONET) in June 2012 as a pilot project for anglophone African countries. The purpose of AFRONET is to strengthen the process of clinical decision-making in radiotherapy centres in Anglophone African countries. The AFRONET project was established as multi-disciplinary VTBs where cancer professionals present, discuss and review challenging cancer cases. A secondary objective was to upgrade the knowledge of radiation oncology residents. It provides a unique opportunity for participating centres to present and discuss cases with experts (from within and outside Africa) both as an academic exercise, and as a way to support an evidence-based management approach.

This RCA project will expand the successful AFRONET platform to the countries of the RCA. This will improve the care of people with cancer in the region, through facilitating the development of a network of radiation oncology professionals, enhancing their knowledge and skills, and promoting the development of guidelines and protocols appropriate to local resource and cultural settings.

The VTB approach supports TCDC by facilitating collaboration directly between the Low and Middle Income GPs, as well as supporting their engagement with counterparts in the high income GPs. There is a spectrum of availability of trained health professionals (number, experience in advanced techniques) and availability of technology within and between RCA GPs. Some, such as Japan, Republic of Korea, China, New Zealand, Australia and Singapore have more highly developed radiotherapy human resources and availability of advanced technology, such as Intensity Modulated Radiation Therapy, Image-Guided Radiation Therapy, and Stereotactic Body Radiation Therapy. In contrast, Cambodia has a single linear accelerator and is commissioning a second. Other GPs in the region, such as Vietnam and Thailand, have established radiotherapy programmes and are in the process of introducing and disseminating more advanced radiotherapy techniques. A possible future RCA GP, Papua New Guinea, has a single cobalt therapy unit and critical shortages of oncology health professionals. The proposed VTB model will allow

transfer of knowledge and skills from more developed to less developed radiotherapy departments. It will also be a means for departments at similar levels of technological development to share solutions to mutual problems that are appropriate to local culture and resources.

Following the approach developed in AFRONET, it is anticipated that VTB meetings would be held monthly using the WebEx platform. The agenda would include case presentations, and a presentation on a pre-announced topic of common interest. Open discussion is allowed to facilitate decision-making and for education. After the meeting, minutes and copies of the presentations are circulated to participants for further comments, suggestions and ready reference.

TCDC can be further enhanced by adopting improvements in the VTB technology that may be derived from the AFRONET project. For example, development of a dedicated website is under consideration for promoting open access. New software tools will be included in order to facilitate and support contouring and plan review exercises. Support from professional/academic bodies and other organizations is being sought to increase impact and meaning.

Will the project design feature partnering arrangements between those advanced and those less advanced in the technology?

Yes. The VTBs will build on existing GP-to-GP and regional relationships established through various medical societies already operating in the RCA region, as listed below.

If so, list those expected partnerships.

The project will build on the existing international partnerships that have been fostered by regional professional groups such as the Royal Australian and New Zealand College of Radiologists (RANZCR), the Australasian College of Physical Scientists and Engineers in Medicine (ACPSEM), the South East Asian Radiation Oncology Group (SEAROG) and the Federation of Asian Organizations for Radiation Oncology (FARO).

The RANZCR is a not-for-profit professional organisation for clinical radiologists and radiation oncologists in Australia, New Zealand and Singapore. It is responsible for training and continuing professional development of radiation oncologists in these countries.

The Asia-Pacific Radiation Oncology Special Interest Group (APROSIG) of the RANZCR aims to develop interaction with and support for radiation oncologists and other radiation therapy professions in Low-Income and Middle-Income Countries in the Asia-Pacific region by developing and supporting bilateral exchange visits, education and training workshops and the twinning of departments in order to promote safe and effective radiotherapy. Existing partnerships link radiotherapy departments in Australia, New Zealand and Singapore with departments in Cambodia, Malaysia, Myanmar and Vietnam, as well as India, Nepal and Sri Lanka. APROSIG has been encouraged by the Section of Applied Radiation Biology and Radiotherapy of the IAEA Division of Human Health to support propagation of the AFRONET model into the Asia-Pacific region.

The Asia Pacific Special Interest Group (APSIG) of the ACPSEM encourages and assists radiation oncology medical physics members to work with similar overseas organisations and institutions in strengthening medical physics and engineering skills, especially in developing countries in the Asia-Pacific region. Existing relationships exist between radiotherapy departments of APSIG members and departments in Cambodia, Myanmar, Papua New Guinea and Vietnam.

SEAROG is composed of national radiation oncology societies of member countries, including Indonesia, Malaysia, Philippines, Singapore and Thailand. FARO is a federation of radiation oncology societies in Asia, including those of RCA GPs Bangladesh, China, India, Indonesia, Japan, Republic of Korea, Malaysia, Philippines, Singapore, Sri Lanka, Thailand and Pakistan. Dr Francis Chin Kuok Choon, President of SEAROG, and Professor Soehartati Gondhowiardjo, President of FARO, have expressed support for this project.

The project will enhance partnerships that already exist between radiotherapy departments and professional organizations (such as between APROSIG and NCC Phnom Penh), but will also support the development of partnerships between radiotherapy centres in Low and Middle Income Countries (e.g. Cambodia & Philippines).

As noted above, it is proposed to introduce the AFRONET platform to the countries of the RCA, beginning with GPs that already have significant links, e.g. through existing medical societies, between radiation oncologists in these countries.

Analysis of gaps / problems / needs as applied to the RCA region:

Outline the major gaps / problems/specific needs to be addressed by the project (~ 300 words):

Cancer is becoming a leading cause of death worldwide. Every year, more than 8 million people die from the disease, making it deadlier than all infectious diseases including TB, HIV/AIDS and Malaria combined. This number is expected to rise to an estimated 12 million deaths from cancer in 2030, a 70% increase from 2002.

Radiotherapy is an important component of cancer management worldwide. However, the availability and distribution of radiotherapy facilities, equipment and personnel vary widely between and even within regions. Despite having 80% of the global cancer burden, Low and Middle Income Countries have access to only 5% of the total available resources. The majority of radiotherapy centres in Low and Middle Income Countries work in relative isolation with limited access to up-to-date published literature, and very limited resources for staff training or attendance at international meetings.

As a direct consequence of the above, patients seen in radiotherapy departments in least developed countries are treated following varied local policies which are not always in line with internationally accepted standards of care. This refers to indications for radiotherapy, its combination with surgery and chemotherapy, prescribed doses, field arrangements, three-dimensional treatment planning, dose schedules, the use of brachytherapy and others.

Telemedicine is defined by the World Health Organization as “The delivery of health care services, where distance is a critical factor, by all health care professionals using information and communication technologies for the exchange of valid information for diagnosis, treatment and prevention of disease and injuries, research and evaluation, and for the continuing education of health care providers, all in the interests of advancing the health of individuals and their communities”. It provides an important opportunity for closing this gap through provision of best possible expert advice and patient care plans across borders. The application of telemedicine in radiotherapy can be as simple as case discussions by telephone, or as complex as conducting real-time remote consultation and treatment planning. It can be used within an educational framework, a clinical framework, or a combination of the two.

Radiotherapy treatment delivery is complex and requires multidisciplinary cooperation between doctors (oncologists), medical physicists and radiation therapy technologists. The proposed VTB platform will allow multidisciplinary participation in videoconferences and could also be used for educational purposes specific to one profession, such as radiation oncologists, medical physicists, radiation therapists and other radiotherapy professions, for which training and education is challenging within Low and Middle Income Countries.

Review the resource documentation and list any past RCA projects that have addressed similar problems/needs in this area of technology.

The following RCA projects have addressed cancer management within the Health Thematic Sector:

- RAS6033 Distance Education in Radiation Oncology (RCA) 1999-2009
- RAS6038 Strengthening Medical Physics through Education and Training (RCA) 2003-2016
- RAS6066 Reducing the Shortage of Oncology Professionals through an Applied Sciences of Oncology Course (ASOC) 2012-2015
- RAS6062 Supporting 3D Image-Guided Brachytherapy Services 2012-2017
- RAS6065 Strengthening the Application of Stereotactic Body Radiation Therapy to Improve Cancer Treatment 2012-2016
- RAS6072 Strengthening Intensity Modulated Radiation Therapy Capability in the Region (RCA) from 2014
- RAS6040 Improvement in Quality of Radiotherapy for Frequent Cancers in the Region (RCA) 2005-2009
- RAS6048 Application of High-Precision 3D Radiotherapy for Predominant Cancers in the RCA region (RCA) 2007-2010
- RAS6053 Improving Image Based Radiation Therapy for Common Cancers in the RCA Region (RCA) 2009-2016

The previous projects have had the goal of strengthening a particular discipline or technology, rather than development of a generalised approach to enhance communication and knowledge-sharing through VTBs.

This proposed project is most closely aligned with the new project RAS6086 “Strengthening Cancer Management Programmes in RCA States Parties through Collaboration with National and Regional Radiation Oncology Societies”, due to commence in 2018. The focus of RAS6086 is to provide education and training on clinical aspects of radiation therapy for health professionals through developing national training courses and the organization of educational events.

The current concept proposal will complement the above projects by providing the opportunity for health professionals to discuss the management of anonymised individual patients and the selection of appropriate treatment modalities, rather than focusing on particular technologies or broad principles of treatment. It will allow professionals, who have benefitted from these earlier projects, to pass on the knowledge and skills gained to colleagues in different radiotherapy centres, with whom they would not otherwise have regular contact. The case discussions will also contribute to their own continuing education.

What are the major additional capabilities/skills in this area of technology that will be provided through this project (~ 200 words).

The skills and capabilities provided will be both general, relating to use of the medium, and specific, relating to patient care. General capabilities include establishment of the international VTB infrastructure, development of skills of presenting and consulting using the medium, and the establishment of clinical networks between individuals and institutions. All of these capabilities will carry into the future to contribute to ongoing patient care and can be extended to other disciplines. For example, medical physicists can gain valuable knowledge of issues faced in the transition from cobalt units to linear accelerator-based radiotherapy, where commissioning of such technology in terms of planning, dosimetry and imaging can be challenging.

Specific skills and capabilities relating to patient care include the development of clinical judgement, particularly in radiation oncology residents and less experienced professionals, who may be practising in relative isolation. It will also benefit more experienced professionals, who may wish to discuss more complex clinical problems, and allow them to develop skills in the application of newly adopted technology.

It is often impractical for practitioners in Low and Middle Income Countries to apply international treatment guidelines and protocols that have been produced by High Income Countries. Discussion of clinical problems common to participants in different countries will promote the development of guidelines and protocols appropriate to the resource and cultural settings, which will increase the capability for cancer care within these countries.

Requirements for participation:

Indicate the minimum requirements that the counterpart institutions in Government Parties would need to meet in order to participate in this project.

Requirements for VTB participation

- Personal Computer
- Internet connectivity (with adequate bandwidth and consistency)
- Good quality (echo cancelling) microphone
- Webcam
- Meeting room with reasonably minimal background noises or interruptions
- WebEx application (through IAEA)
- In the future: other software and platforms to support expansion of activities to include contouring and plan evaluation

Other requirements for GP participation include

- identified radiotherapy departments and clinicians who would benefit from VTB participation
- sponsorship from clinical leaders to allow clinicians time to prepare for and participate in VTBs.

Indicate the status of expected participating Government Parties as “Resource” or “Recipient”.

Resource GPs: Australia, Japan, New Zealand, Republic of Korea, Singapore; possibly also China and India, which have centres with experience in advanced radiotherapy technology, but also some centres with only basic services.

Recipient GPs: Bangladesh, Cambodia, Indonesia, Malaysia, Mongolia, Myanmar, Nepal, Pakistan, Philippines, Sri Lanka, Thailand, Vietnam

Stakeholder analysis and partnerships:

Briefly describe who are expected to be the principal beneficiaries of this project and any role that will be defined for them in the project.

1. Radiation oncologists and clinical oncologists working in radiotherapy centres will be the main target audience of the networks. Future activities will involve other radiotherapy professionals, particularly radiation oncology medical physicists and radiation therapy technologists. Other medical professionals in the fields of radiology / imaging, medical oncology, pathology and surgery may be invited to contribute to discussions as experts in their fields. In particular, an early priority will be to develop the ability to share images so that features relevant to clinical decisions can be demonstrated by radiologists and pathologists.
2. The IAEA, through the Applied Radiation Biology and Radiotherapy (ARBR) Section, is going to play a central role in the implementation of the project. In addition, partnerships through the Department of Technical Cooperation and PACT will also be pursued.
3. Partnerships with regional societies, including FARO, SEAROG and RANZCR will be important for the success of the project. It is intended that this project should complement their own activities. Furthermore, these societies will be approached to provide some central coordination of video conferences, including scheduling, receiving cases for discussion and compiling agendas.
4. Links to other professional societies, centres of excellence, programs and initiatives, including but not limited to international outreach initiatives from ASTRO, ESTRO and UICC, will be beneficial to secure contributions both in the form of experts, funding, and other resources. It has been recognized that academic and professional societies within and beyond the member states are very much interested in opportunities to link their outreach programs to assist other centres in low/medium income countries.

Have any extrabudgetary funding possibilities, sponsors and partners been identified?

The RANZCR has an International Development Fund to provide small grants for overseas development work undertaken by College members or College groups that will improve patient care and raise the standard of practice. SEAROG, FARO have been approached to enquire whether they have resources to support educational activities of members. The National Representatives of RCA Government Parties have also been approached.

Have any sponsors/partners been involved at the concept stage?

APROSIG, APSIG, FARO and SEAROG have been involved. APROSIG has been encouraged by the Section of Applied Radiation Biology and Radiotherapy of the IAEA Division of Human Health to support propagation of the AFRONET model into the Asia-Pacific region.

Have any sponsors/partners made firm commitments of support at this stage?

APROSIG, APSIG, FARO and SEAROG have indicated support for the concept.

Have any sponsors/partners expressed firm commitments to extrabudgetary support?

No.

Role of nuclear technology:

Indicate the essential nuclear technique that is planned be used in this project.

The nuclear technique to be used in the project area is radiation therapy for cancer, both external beam radiation therapy and brachytherapy. External beam radiation therapy uses medical linear accelerators or cobalt-60 treatment units. Brachytherapy uses radioactive isotopes, such as iridium-192, in close proximity to tumours. International literature suggests that approximately 50% of cancer patients should receive radiotherapy and that the percentage should be higher in many Low and Middle Income Countries.

Although radiotherapy is the nuclear technology addressed, this project is about building an online network through Webex. Such networking is a general technical tool, which should be helpful in other sections of the health sector and it can also be applied to other fields of nuclear technology, such as food and agriculture, industry and energy planning.

Outline why it is suitable for addressing the problems/needs in question.

Radiation oncology is a rapidly evolving technological field with small numbers of highly specialized practitioners often separated by considerable geographical distances. Multidisciplinary consultation and international collaboration are essential for patient management and the introduction of improved treatment techniques. Online networks are an ideal means of overcoming the geographical separation and encouraging high quality care.

Is this the only available technique?

Radiation therapy is one of the major and essential treatment modalities along with surgery and chemotherapy.

Does it have a comparative advantage over non-nuclear techniques?

Radiation therapy is often used in combination with surgery and chemotherapy to provide comprehensive care to cancer patients. Radiation therapy is sometimes used in place of surgery in order to preserve organs that would have to be removed if surgery were to be used to cure a cancer. In addition, it is often the most effective, economical and convenient modality for palliation of symptoms due to incurable cancer.

Duration of the project:

Indicate the number of years estimated to be required to complete the project.


Four years. The initial focus will be on establishing the platform in GPs with established radiotherapy services and active involvement in radiation oncology societies already operating in the region. The second phase would expand the VTB platform to other RCA GPs, with consideration given to establishing different videoconferences targeted at different levels of technological development or focusing on the treatment of different patient groups, such as paediatric oncology. It is also intended to extend the VTB to give greater focus to the specific needs of medical physicists and radiation therapy technologists.

Following this, the project will cease and the video conferences will continue as business-as-usual, possibly with some continuing administrative support from the Applied Radiation Biology and Radiotherapy Section of the IAEA and of regional radiation oncology societies.

Part 3: National Representative Endorsement for Project Concept

I have endorsed the proposer to have access to the RCARO web page for the resource documentation necessary to complete the attached concept document.

This 2nd Round Concept meets the RCA project requirements and I endorse it as a priority for the RCA Programme 2020/2021.

Signed: 

Date: 15/1/18

Part 4: RCA PAC 2nd Round Concept Review Template

RCA Project Concept Template Questions	Comment	Acceptable	Revise	Reject
Title: <ul style="list-style-type: none"> <i>The title should be as concise as possible and should summarize the objective of the project.</i> 				
Compliance with the RCA Medium Term Strategy for 2018/2023: <i>All RCA projects have to comply with the RCA MTS for 2018/2023 - please refer to the MTS document.</i> <ul style="list-style-type: none"> <i>Briefly indicate to which specific MTS priorities this project proposal contribute.</i> <i>How will these be achieved?</i> 				
Overall Objective: <ul style="list-style-type: none"> <i>State the objective to which the project will contribute. (Note this has to be in line with the RCA MTS for 2018/2023. It should be a short description expressed as: To do)</i> 				
Participating Government Parties: <ul style="list-style-type: none"> <i>List the Government Parties expected to participate in the project.</i> <i>Indicate each of those where you have baseline information on their requirements and needs:</i> 				

<p>Technical Cooperation among Developing Countries (TCDC) Project Component: <i>Review the documentation on-line - www.rcaro.org/ ???</i></p> <ul style="list-style-type: none"> <i>Outline the TCDC strategies to be used in the project to enhance regional cooperation:</i> <i>Will the project design feature partnering arrangements between those advanced and those less advanced in the technology?</i> <i>If so, list those expected partnerships.</i> 				
<p>Analysis of gaps / problems / needs:</p> <ul style="list-style-type: none"> <i>Outline the major gaps / problems/specific needs to be addressed by the project (~ 300 words):</i> <i>Review the resource documentation and list any past RCA projects that have addressed similar problems/needs in this area of technology.</i> <i>What are the major additional capabilities/skills in this area of technology that will be provided through this project (~ 200 words).</i> 				
<p>Requirements for participation:</p> <ul style="list-style-type: none"> <i>Indicate the minimum requirements that the counterpart institutions in Government Parties would need to meet in order to participate in this project.</i> <i>Indicate the status of expected participating Government Parties as “Resource” or “Recipient”.</i> 				

Stakeholder analysis and partnerships: <ul style="list-style-type: none"> <i>Briefly describe who are expected to be the principal beneficiaries of this project and any role that will be defined for them in the project.</i> <i>Have any extrabudgetary funding possibilities, sponsors and partners been identified?</i> <i>Have any sponsors/partners been involved at the concept stage?</i> <i>Have any sponsors/partners made firm commitments of support at this stage?</i> <i>Have any sponsors/partners expressed firm commitments to extrabudgetary support?</i> 				
Role of nuclear technology: <ul style="list-style-type: none"> <i>Indicate the essential nuclear technique that is planned be used in this project.</i> <i>Outline why it is suitable for addressing the problems/needs in question.</i> <i>Is this the only available technique?</i> <i>Does it have a comparative advantage over non-nuclear techniques?</i> 				
Duration of the project: <ul style="list-style-type: none"> <i>Indicate the number of years required to complete the project.</i> 				

RCA PAC Assessment	
<p>Is the concept recommended for further development? YES/NO</p> <p>If not recommended, what are the major reasons?</p>	
<p>RCA PAC Committee Member:</p>	