

# Project Concept Template

## Project Proposals for the RCA Programme 2024/2025

### Part 1: Information Sheet

Project proposals for the RCA Programme 2024/2025 are to be prepared using the attached template and submitted **BEFORE 31<sup>ST</sup> OF DECEMBER 2021**. Completed templates will be reviewed by the RCA PAC in January 2022.

Resource documents required for developing Project Concepts can be found in the RCA web-site – ([RCA Regional Office \(rcaro.org\)](http://rcaro.org)), under Projects/Resource Documents. (see below for the list of resource documents).

The Project Concept should be prepared in consultation with the stakeholders of the other participating GPs. Information on RCA stakeholders can be found in the RCA web-site ([RCA Regional Office \(rcaro.org\)](http://rcaro.org)), under Projects/Project Information.

Please request access to the RCA Members Only web-site from RCARO (email: [rcaro@rcaro.org](mailto:rcaro@rcaro.org)) through your National RCA Representative if you do not already have access.

A proposal will be evaluated against the following criteria:

- Alignment of the objectives with priorities set out the RCA Regional Programme Framework (RPF) for 2024/25.
- Whether the project addresses a regional need.
- Whether nuclear technology is an essential component of the project.
- Whether outcomes and achievements of previous projects in this area of technology are considered.
- 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?
- 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 another GP?

### List of Resource Documents on RCA web-site ([www.rcaro.org](http://www.rcaro.org))

1. Timeframe for preparation, review and approval of Project Concepts
2. Brochure on Logical Framework Matrix (Quick Reference Guide on Designing IAEA TC Projects)
3. RCA Regional Programme Framework for 2024-29
4. Details of RCA TC Projects implemented in 2007-2019
5. List of TC Projects being implemented in 2020/21 and projects approved for 2022/24
6. Recommendations on Technical Cooperation among Developing Countries (TCDC)

**Please note that your National Representative will be reviewing the concept document to ensure that it has been prepared in compliance with the RCA and IAEA Criteria for TC Projects**

Please contact the Chair of the RCA Programme Advisory Committee, Dr. Prinath Dias at [prinathd@yahoo.com](mailto:prinathd@yahoo.com) if you need assistance.

## Part 2: Concept Template<sup>1</sup>

### **Title:**

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

### **Improving the Radiotherapy Capacity of Newcomer RCA Governmental Parties**

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

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

*A brief description of the project (max. 300 words)*

*(Should include the problem to be addressed, the objective of the project and the nuclear or related technique to be used)*

**This project aims to assist the newcomer RCA GPs in establishing or improving the radiotherapy capacity in their national cancer control programme.**

**Radiotherapy is an essential part of cancer therapy along with chemotherapy and surgery, and the lack of it directly indicates that their oncology service is inadequate compared to the global standard. However, establishing an adequate radiotherapy service is a significant challenge for LMIC.**

**Out of the 5 newcomer RCA GPs, Cambodia and Nepal have basic level of radiotherapy while Fiji, Laos, and Palau do not have any domestic radiotherapy capability at present. RCA is an ideal platform in assisting the development of radiotherapy capability in these 5 GPs because RCA can offer ample knowledge and experience with a wide range of social/economic/geographic background to the 5 GPs.**

**This project is aimed to take both whole and individual approaches. In the whole approach, the project will provide an RTC or coordination meetings where the professionals or health administrators can gain knowledge and create a network of collaboration/information exchange among themselves: GPs will learn and train on the know-how of how to establish radiotherapy services using information such as the IAEA documents (for example, “Setting Up a Radiotherapy Programme”) or experts from the IAEA or more advanced RCA GPs. In the individual approach, the newcomer RCA GPs can team up with 1 or 2 RCA GPs which would be suitable mentors in the actual task of establishing radiotherapy services in each GP through close communication/collaboration/mentoring including implementing bidirectional expert missions. The model of establishing such mentoring relationships will be an outstanding example of strengthened TCDC.**

**This project will assist in building the basic capacity of the newcomer GPs not only in providing a desired healthcare system but also in participating in more advanced radiation oncology RCA projects in the future and become strong members of the RCA community.**

<sup>1</sup> If you have not been involved in drafting a concept before and if you are not fully acquainted with the RCA and its Programme you are encouraged to support advice and assistance from your RCA National Representative.

*Review the resource documentation and list any past RCA projects that have addressed similar problems/needs in this area of technology. Consider outcomes and achievements of previous projects, and avoid any overlap or duplication.*

**According to the resource documentation, following RCA projects have been implemented in the field of Radiation Oncology from 2007:**

- **RAS6048 – Application of High-Precision 3D Radiotherapy for Predominant Cancers in the RCA region**
- **RAS6053 - Improving Image Based Radiation Therapy for Common Cancers in the RCA Region**
- **RAS6062 - Supporting 3D Image-Guided Brachytherapy Services (NEP)**
- **RAS6065 - Strengthening the Application of Stereotactic Body Radiation Therapy to Improve Cancer Treatment (NEP, CAM)**
- **RAS6066 - Reducing the Shortage of Oncology Professionals through an Applied Sciences of Oncology Course (ASOC)**
- **RAS6072 - Strengthening Intensity Modulated Radiation Therapy Capability in the Region (CAM, NEP)**
- **RAS6085 - Enhancing Stereotactic Body Radiation Therapy for Frequent Cancers in the RCA Region (CAM, NEP, PLW)**
- **RAS6086 - Strengthening Cancer Management Programmes in RCA States Parties through Collaboration with National and Regional Radiation Oncology Societies (RCA) (FIJ, CAM, LAO, NEP)**
- **RAS6096 - Empowering Regional Collaboration among Radiotherapy Professionals through Online Clinical Networks (RCA)**
- **RAS6098 – Standardizing Radiotherapy in Palliative Care (RCA) & RAS6100 – Strengthening Clinical Application of Hypofractionated Radiotherapy (RCA) are to be implemented in 2022-2025.**

**These projects aimed to disseminate the knowledge and provide training for radiation oncology professionals in the RCA GPs. The focus of this project is not so much technology/specialty-focused, but more focused on the improvement of capability in the newcomer GPs to provide basic radiotherapy services. The training materials from previous projects and cooperation with the ongoing or future RCA projects in radiation oncology will be fully utilized in this project as required.**

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

**The project will be tailored towards the newcomer RCA GPs so that they will be able to develop their capability in providing basic radiotherapy care for cancer patients in their country and further foster their capability by adopting the international standards set by the IAEA and taking more active roles in future RCA projects in radiation oncology. This project is also expected to build the network among RCA GPs in supporting the newcomer GPs in the field of radiation oncology while fostering the capacity of more “advanced” developing countries in teaching and mentoring through TCDC activities.**

**Overall Objective:** (Required for the preparation of the IAEA Regional Programme Note)

*State the overall long-term objective to which the project will contribute. This should reflect an impact related to the RCA Regional Programme Framework for 2024/29.*

*Problem and objective analysis using objective and problem trees is recommended. (See pages 9 and 10 of the Quick Reference Guide on Designing IAEA TC Projects in resource documents)*

- **To develop the capacity of newcomer GPs in providing basic radiotherapy service for their cancer patients.**

**Project Outcome:** (Required for the preparation of the IAEA Regional Programme Note)

*The outcome is the planned result of a project, achieved through the collective effort of stakeholders and partners. It represents the change or improvement that occurs as a result of the project. Should be worded in past tense. (eg. The capability for .....developed)*

- **The capability in newcomer GPs to implement basic radiotherapy according to the international safety standard developed.**
- **The visions & future plans in newcomer GPs to strengthen or establish radiotherapy services devised by the end of the project.**

**RCA Projects are to be designed to have a Socioeconomic Benefit:**

*What is the potential socioeconomic benefit that would be realised from the project concept over a 5 to 7-year horizon?*

- **Improvement in cancer-care service in the newcomer GPs.**
- **Improvement in quality of life in cancer patients in the newcomer GPs.**
- **Lives saved in cancer patients by provision of radiotherapy service.**
- **Social economic gain by preventing premature cancer deaths by applying radiotherapy in young or economically productive population.**

**Proposed Participating Government Parties:**

*List the Government Parties expected to participate in the project. Indicate target and resource GPs:*

**Target GPs:**

- Cambodia**
- Fiji**
- Laos**
- Nepal**
- Palau,**

**Resource GPs:**

- Australia**
- Bangladesh**
- China**
- India**
- Indonesia**

**Japan**  
**Korea**  
**Malaysia**  
**Mongolia**  
**Myanmar**  
**New Zealand**  
**Pakistan**  
**Philippines**  
**Singapore**  
**Sri Lanka**  
**Thailand**  
**Vietnam**

**Technical Cooperation among Developing Countries (TCDC) Project Component:**

*Please refer to the resource documents (RPF and Recommendations on TCDC)*

*Will the project design feature partnering arrangements between those advanced and those less advanced in the technology to be transferred through this project?*

*If so, list those expected partnerships.*

**New opportunities of TCDC should be found in this project. The developing GPs in RCA should have ample experience of introducing new centres and technologies of radiation therapy in their own countries, and these experiences should provide extremely valuable knowledge and model cases for the newcomer GPs. The participation of the intermediate GPs, possibly as “donor” status in the project, can become a new possibility of participation and collaboration in RCA projects. In the RTCs for the newcomer GPs and the expert missions, we expect that the developing (intermediate) GPs will be able to contribute significantly by providing their centers as event venues and their personnel as project experts and trainers. The experience and knowledge of developing GPs will be equally (or even more highly) valued as the experience and knowledge of the developed GPs.**

**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.*

**The newcomer GPs (Cambodia, Fiji, Laos, Nepal, and Palau) are eligible for the project as long as they wish to establish or advance the radiotherapy service in their GPs. In GPs currently without radiotherapy service within their countries should be represented by the appropriate authority in health sector or health administration who would be responsible for initiation of radiotherapy service.**

**The requirement for donor GPs is that the counterpart institutions who are providing radiotherapy service within the international safety & QA/QC standards and willing to assist and share knowledge with the counterparts in newcomer GPs. This qualification should be verified by the NRs, LCC, and relevant IAEA TOs if necessary.**

**Stakeholder analysis and partnerships:**

*Briefly describe who are expected to be the end-users and principal beneficiaries of this project. Indicate whether the end-users contributed to development of the Concept.*

**Primary end-users/principal beneficiary of the project will be the radiation oncology professionals, clinical oncology professionals, health administrative officials, and ultimately cancer patients in the newcomer GPs. The radiation oncology professionals and the health administrative officials will be the direct participants in the RTCs, expert missions, and other activities in the projects.**

**The radiation oncology professionals in the donor GPs will be the stakeholders who would be supporting and cooperating with the primary end-users in the newcomer GPs. They will function as the lecturers, experts, and motors in the activities of this project.**

**Partnership with national/regional radiation oncology societies will be extremely valuable and essential in exceling the quality of project activities and maintaining the sustainability of the project activities in the future.**

*Have any extrabudgetary funding possibilities been identified?*

**Extrabudgetary funding source is not yet identified at the current stage.**

**Role of nuclear technology:**

*Indicate the essential nuclear technique that would be used and outline why it is suitable for addressing the problems/needs in question.*

**The nuclear technique to be used in the project area is radiotherapy for cancer: the medical application of external beam radiation therapy using mostly medical linear accelerators and brachytherapy using radioactive isotopes such as iridium-192. Radiotherapy is one of the major and essential treatment modalities for cancer treatment along with surgery and chemotherapy. Therefore, radiotherapy is an essential part for a national cancer program.**

*Is this the only available technique that could be applied to address the problem/ need?*

**As stated above, radiotherapy is one of the major and essential treatment modalities for cancer treatment along with surgery and chemotherapy. Therefore, radiotherapy is not the only technique but an essential part for standard comprehensive cancer care.**

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

**Yes. However, radiotherapy is applied with other modalities as a part of the comprehensive cancer care.**

**Duration of the project:**

*Indicate the number of years required to complete the project.*

**4 years.**

**Part 3: National Representative Endorsement for Project Concept**

**As the RCA NR of ....(RCA GP)....., I have reviewed the Project Concept thoroughly and confirm that it meets the following requirements:**

1. The objective of the Project Concept is aligned with priorities set out the RCA Regional Programme Framework (RPF) for 2024/25.
2. The project addresses a regional need.
3. Nuclear technology is an essential component of the project.
4. Outcomes and achievements of previous projects in this area of technology have been taken into consideration
5. There is no overlap or duplication with current or previous RCA projects
6. Further projects in this area can be justified (if relevant)
7. The Project Concept has a strong TCDC component

**Signature:**



**Name: Takashi Nakano, MD, PhD.**

**Date: December 31, 2021**