**CRITERIA AND MECHANISMS GOVERNING THE PROPOSAL, DEVELOPMENT, APPROVAL AND OPERATION OF THE RESEARCH PROJECTS**

# Coordinated Research Activities and the RCA Programme

The IAEA Coordinated Research Activities (CRAs) are long-established and have encouraged and assisted research in the peaceful application of atomic energy. Many RCA GPs have participated extensively in the IAEA CRAs and it could be advantageous, if the criteria and procedures adopted by the RCARO in any support for research projects within the RCA programme, were similar. A fact sheet outlining the proposed RCA CRPs is given in Annex 1.

The RCA Programme in the 1980s and 1990s had had an extensive research programme supported through the IAEA CRAs but this had not been sustained into the 2000s. This was a consequence of the transfer of responsibility for the RCA Programme from the then Department of Nuclear Applications to the Department of Technical Cooperation, because research projects could not be funded through the TC programme.

As set out in the 2014 revision of the RCA Guidelines and Operating Rules (GoR), the objective of the programme in the framework of the RCA is the promotion and coordination of cooperative research, development and training projects in nuclear science and technology, covering subjects in the fields of isotope and radiation applications in agriculture, human health, industry, hydrology, and terrestrial and marine environments.

The two streams identified in the RCA Programme are: **Cooperative Projects** and **Coordinated Research Projects**. The objectives for the **Coordinated Research Projects** are described as *essentially networks of national research institutions which work within an operational framework for research with a similar and well defined regional theme or problem focus that is relevant to, or can be resolved through, nuclear science and technology*.

# Overall Priorities and Criteria for RCA Coordinated Research Projects

The priorities and criteria for the Coordinated Research Projects selected as part of the RCA Coordinated Research Activities (CRAs) Programme, should be consistent with those in the Cooperative Projects and in particular:

* be relevant to the RCA Vision, Mission and Strategic Priorities;
* have research directions and imperatives that support the medium to long term needs of the RCA Programme, those of the individual RCA Government Parties (identified through consultations with relevant stakeholders) and the expected contribution of such research to national and regional outcomes;
* have national level commitment so as to maximise the extent and depth of the research collaboration;
* demonstrate the benefits and advantages of the application of nuclear techniques;
* have the potential for development into an RCA technical cooperation project; and,
* have the potential for improving the utilisation of established national research organisations/institutes, increasing regional research networks and resources and adding value to future inputs to that particular area of research.

# Mechanisms for the Proposing, Developing, Prioritising and Approving Cooperative Research Projects

The current mechanisms for the proposing, developing, prioritisation and approval of the technical cooperation projects of the RCA Programme could be readily adapted to cover the introduction of Cooperative Research Projects. These mechanisms are well-tested and, through them, the RCA Programme has benefitted substantially from the strong support provided by the IAEA under the IAEA Technical Cooperation programme, as well as the support that has been provided from other technical cooperation arrangements such as the RCARO/UNDP projects, which have been implemented outside of the IAEA Technical Cooperation programme.

While the adoption of all the measures used for the technical cooperation projects would not necessarily always be applicable to Cooperative Research Projects, the National Representatives Meetings should remain key elements in the process for proposing, developing, prioritising and approving CRPs.

## Proposing a Cooperative Research Project

All proposals for the establishment of a RCA CRPs should be tabled by a National Representative (NR) or a group of National Representatives at a Regional Meeting of the NRs (NRM) and, if recommended at the NRM for review as a potential CRP, the proposals should be forwarded to the Director RCARO for evaluation by the Research Review Committee.

Proposed CRPs should be focussed on a well-defined regional theme, problem or need that is relevant to, or can be resolved through, nuclear science and technology, with consideration given to the RCA Strategic Priorities as well as complying with the priorities and criteria listed above in Section 2.

### Research Review Committee (RRC)

The RCA PAC would take on the role as the Research Review Committee (RRC) and would refer the technical aspects of the CRP proposals to experts in the research fields relevant to a CRP proposal, or already a part of an active CRP.

The major tasks for the Research Review Committee would be:

* to review proposals for the establishment of CRPs;
* to advise the RCARO on the suitability of research proposals as contracts or agreements as part of an approved CRP;
* to review the annual reports of the CRP members and advise the RCARO on the progress being made;
* to review the reports of the Research Coordination Meetings (RCMs) and advise the RCARO on any related matters; and,
* to carry out such advisory tasks as required by the RCARO to support the RCA CRAs Programme.

## Approval of a Proposal for a Cooperative Research Project

At RCA National Representatives Meeting held following the initial proposal for a CRP, the NRs would take account of advice from the Research Review Committee (RRC) concerning the expected contribution of the proposed CRP to the achievement of insight and understanding related to the stated regional theme, problem or need, as well as its potential to support the overall research focus of the RCA CRAs. The Meeting would also take account of advice from the RCARO concerning the availability of funds to support the proposed CRP.

If the NRM decided to proceed with the implementation of the CRP as a component of the RCA CRAs, the NRs would be requested to consider whether they wished to participate in the CRP and to prepare a proposal outlining their proposed research contribution to the CRP using an agreed template, which would be adapted from that used for the IAEA CRPs.

## Participation in an approved RCA Cooperative Research Project

National Representatives could seek advice from their respective National Thematic Sector Coordinators and Technical Advisors concerning:

* the identified regional theme, problem or need expressed in the proposed CRP;
* the national research benefits from such participation;
* the specific area of research that could be proposed as the national contribution to the CRP;
* any overlap or duplication with existing national research projects in that selected area; and,
* identification of suitable national research organisations/institutes able to accommodate such research cooperation within their existing human and physical resources.

It would be noted that no more than one national research proposal from a GP would be accepted as a component of each CRP and the total number of GPs participating in a CRP would normally be expected to be between 8 and 12. The duration of a CRP would normally be expected to be between 3 and 5 years.

As with the IAEA CRPs, there would be two modes of participation; as a **Contract Holder** or as an **Agreement Holder**. GPs would be encouraged to consider participating as Agreement Holders to maximise the financial support that could be provided to the whole RCA CRAs programme. Research Contracts would be initially for one year and could be renewed each year for the duration of the project, based on the RRC's advice concerning satisfactory completion of yearly reporting and progress with the research component. Research Agreements would be for the duration of the CRP.

### Contract Holders

If a request for the RCA’s financial support of a proposed research contribution were successful, such support would be normally in the form of a lump-sum cost-sharing contract[[1]](#footnote-1) between the nominated research institute and the RCARO. The institute would be expected to bear the major part of the cost of the project and including operating costs, overheads and other expenses. Owing to limited financial resources, it would be expected that the financial support that could be offered, would probably average no more than €6000 per annum per contract. In addition, the Chief Scientific Investigator (CSI) nominated in the contract would be invited to attend the periodic Research Coordination Meetings (RCMs)[[2]](#footnote-2) at the RCA’s expense.

### Agreement Holders

If no request were made for financial support from the RCA and this proposal were accepted, participation would be as an Agreement Holder. Under such Agreements, no financial award would be made to the Agreement Holder, other than the Chief Scientific Investigator (CSI) nominated in the Agreement, who would be invited to attend the periodic RCMs at the RCA's expense[[3]](#footnote-3).

### Processing of Research Proposals

GPs wishing to participate in the CRP would prepare a proposal outlining their proposed research contribution to the CRP using one of the agreed CRP templates and the NR would submit this to the Director RCARO for review by the Research Review Committee (RRC).

After careful consideration of the technical merits of the proposals, the compatibility of the research project proposals with the RCA’s agreed criteria, the availability of appropriate facilities and personnel in the nominated institutions and any previous research work that had been carried out related to the projects, the RRC would select which specific proposals for research could be supported and make the decision to award either a research contract or a research agreement as appropriate.

The Director RCARO would advise the NRs of the Committee's findings and confirm the proposed CRP start date.

## Roles and Responsibilities related to the RCA CRPs

### The Role of the RCARO

The role of the RCARO would be:

* to administer and manage the RCA CRPs;
* to arrange for on-going financial support of the CRPs;
* to arrange and implement the approved activities in each Coordinated Research Project (CRP) that was approved under the CRAs programme;
* to be the focal point for communications by the CRP Holders; and,
* to be the depository for the CRP Members' annual reports.

The Director RCARO would represent the CRAs Programme on behalf of all the CRPs Holders and their Members and would be responsible for the day-to-day operations of the CRP.

The Director RCARO would report to each NRMs on the progress of the overall CRP and its individual research components and advise on progress being made and availability of funding for the CRPs. The NRM would consider the report and make recommendations concerning the extension of each of the CRPs for another year.

### The Role of the Chief Scientific Investigator

Each nominated Chief Scientific Investigator would be responsible for the implementation and coordination of their portion of the CRP and the provision of timely periodic reports to the Director, RCARO.

### Roles and Responsibilities related to the Research Coordination Meetings

Research Coordination Meetings (RCMs) would play a major role in the conduct of the CRP. All nominated Chief Scientific Investigators (CSIs) would be invited to attend together with the Director, RCARO and such technical experts as deemed necessary.

An initial Research Coordination Meeting (RCM), which would take place at the commencement of the CRP. Following this RCMs would be held periodically (an average of no more than once every 18 months) to discuss progress with the individual portions of the CRP and enable the CSIs to exchange research findings. The timing of the final RCM would be in phase with this timing frequency.

Each RCM would provide a report on substantial matters related to the progress of the individual contributions as well as the contribution of these to the overall objective of the CRP. This report would be compiled with the assistance of the Director, RCARO, who might seek advice from the RRC and appropriate experts before submitting this report to the National Representatives at the next available NRM.

**Annex 1**

**What are the RCA CRPs?**

The CRPs will be an important mechanism for organising research work amongst the RCA GPs to achieve specific research objectives consistent with the RCA's medium term strategy and strategic priorities. The RCA CRPs are designed to encourage the acquisition and dissemination of new knowledge about the use of nuclear technologies and isotopic techniques that are of direct relevance to the needs and priorities of the RCA GPs and are an investment for future technical cooperation activities.

RCA research institutions will collaborate on well-defined research topics, to address problems of common needs and interest. The RCA CRPs will not only further nuclear knowledge in the GPs, they also contribute to the improvement of national and regional research capacities.

RCA CRPs will be initiated and approved by RCA National Representatives (NRs) through well-established mechanisms. Research themes will be selected that stimulate cooperation between RCA research institutions as well as the achievement of the innovative approaches to regional needs and priorities and support future approaches to these through the RCA cooperative projects.

Once a CRP has been approved, the NRs will submit proposals outlining their proposed research contribution to the selected of CRP and nominate the proposed cooperating research institution as well as the proposed Chief Scientific Investigator. The RCARO, in conjunction with a specially constituted Research Review Committee, will liaise with the Chief Scientific Investigators from the different RCA GP's research institutions involved in order to develop and manage the overall research programme.

The RCA CRPs will normally have a duration of 3 to 5 years and will involve an average of 12 GP's research institutions.

1. Subject to the financial rules and regulations governing the use of the CRP funds being administered by the RCARO. [↑](#footnote-ref-1)
2. RCMs would generally be held at 18 month intervals subject to satisfactory progress of the Contractor's portion of the CRP and the availability of funding. [↑](#footnote-ref-2)
3. Subject to the availability of funding and satisfactory progress of that portion of the CRP. [↑](#footnote-ref-3)