

**RCA Programme Advisory Committee
Meeting 17 – 21 February 2014**

Comments on RCA Project Concepts for the 2016/17 TC Cycle

Concept number

#3

Title

Advancing technologies for monitoring and analysis of the extent and impact of radioactive releases from nuclear power plants (NPPs) to Asia-Pacific marine ecosystems

Names/Contact details

Demonstrates well-established network of counterparts, beyond RCA, including Pacific Island Nations.

Update address of NZE-NPC

Nepal has no coastline but will probably benefit overall from technology and knowledge transfer.

Gaps/problems/needs

Clear and concise problem and gap analysis

New project will go beyond the previous benchmark study under RAS7021, to advance technologies for monitoring and extend this to non-Fukushima isotopes.

Statistical information on nuclear power plants appears to have been copied from a previous document and should be updated.

Why regional

The proposal gives a clear justification for regional project, taking advantage of the investments, achievements and networks developed under previous projects.

Stakeholders/partnerships

Wider range of stakeholders at different levels (government, industry) is presented. The partnerships with other international agencies, developed under previous projects are expected to be consolidated.

Overall objective

An overall objective is clearly demonstrated and formulated as an outcome of a recent mid-term review meeting of RAS7071.

Objectives analysis

The overall objective is based on three sub-objectives/outcomes, which are designed along inter-linked disciplines with varying degrees of competency between Member States.

An objective tree is presented which, however, does not quite follow the project design structure established by TC.

Role of nuclear and IAEA

The role of nuclear technology and of the IAEA's specialised expertise, knowledge and equipment are well described.

Project duration

A four-year duration of the proposed project appears reasonable.

Requirement for participation

The requirements for participation are clear. The project has a significant TCDC components which will enable all MSs to enhance their capabilities throughout the duration of the project.

Participating Member States

The list of participating Members States is slightly inconsistent with the list of counterparts in RCA Member States listed earlier.

Funding, budget

No draft implementation plan has been provided and it is therefore impossible to provide a comment on whether the budget estimate of €900,000 is realistic or not.

Does it conform to key requirements for preparation of RCA Project Concepts 2016/17?

Recommendation 1: The proposal clearly demonstrates that it addresses a regional need.

Recommendation 3: Not applicable because the precursor project has only been active for on TC cycle.

Recommendation 5: No skeleton implementation plan has been provided.

Recommendation 6: Member States have so far not had the opportunity to comment and make suggestions on any draft concept but this is expected to be possible once the documents are submitted as background document for the 2014 NRM in New Zealand.

Recommendation 8: The project documents is the outcome of a recent mid-term project review meeting so has input from other project team members.

Recommendation 10: As the RCA MTS2012-17 has in this context been overtaken by recent events, strictly speaking does not fully adhere to the strategy but its implementation has been fully agreed by all NRs.

Recommendation 17: N/A

Recommendation 19: No information in implementation provided so this requirement cannot be assessed.

Recommendation 20: The final version of the project concept may benefit from a brief table listing the key achievements of the precursor project and how they will contribute to the success of this planned project.

Recommendation 23: As the document is based on discussion at a recent mid-term review meeting, it can be assumed that advice has been obtained from the Agency TOs.

Recommendation 27:

Overall comments

Concept number

#6

Title

Impact of air particulate matter in the RCA Region

Names/Contact details

The list of counterparts demonstrated a well-established network.

Gaps/problems/needs

It is hard to follow the logic that the problem is the sustainability of air particulate monitoring. This is quite technique-focused. The question should be answered what societal problems and gaps are addressed by air particulate monitoring as a tool?

Explain how an interregional approach with AFRA/ARCAL could be realised and facilitated through the project.

Why regional

Justification for a regional approach is based on the trans-boundary nature of air pollution but this argument is somewhat weakened as the project is moving more into impacts of local industries, urban regions and cultural heritage.

Stakeholders/partnerships

Precursor projects have demonstrated strong end-user engagement. The proposed new project will consolidate these stakeholder relationships and partnerships and is planning to establish new ones in the area of cultural heritage.

Overall objective

This should be one overall objective, yet quite different and complex objectives are presented which may demonstrate lack of focus and raises the question whether all these objectives can/should be addressed in one project, particularly because this project is proposed for only one TC cycle.

It would be helpful to provide here a concise summary (table?) of all air pollution projects under RCA to date with their respective objectives so progress can be demonstrated at one glance.

Objectives analysis

Again, what is the overall objective? How does the text match the problem/objectives tree that is attached?

Role of nuclear and IAEA

The role of nuclear technology and of the IAEA is well demonstrated. This project is planned to build on a well-established network of RRUs.

Project duration

The project is only planned for one TC cycle and the authors may want to critically assess whether achieving a very complex list of sub-objectives over such a short period of time is realistic.

Requirement for participation

The authors make the valid point that the requirement for participation is not just technical capability but also active linkages with relevant end-users.

Participating Member States

As in precursor projects, most RCA Members States are expected to participate.

Funding, budget**Does it conform to key requirements for preparation of RCA Project Concepts 2016/17?**

Recommendation 1: The regional need of improving air quality is listed in the RCA MTS

Recommendation 3: NZE has led air pollution programmes for many years and succession planning should be part of further project discussions.

Recommendation 5: As the document is based on the full project design template, an implementation plan is provided.

Recommendation 6: Member States have so far not had the opportunity to comment and make suggestions on any draft concept but this is expected to be possible once the documents are submitted as background document for the 2014 NRM in New Zealand.

Recommendation 8: No information whether this has happened.

Recommendation 10: Improving air quality is one aspect of the RCA MTS.

Recommendation 17: Linkages with end-users are transparent and IP protection aspects should be addressed in the final version of the document.

Recommendation 19: Two project management meetings are proposed for this two-year project which represents a high focus of resources on the management of the project instead of direct technology and knowledge transfer through seminars and training courses.

Recommendation 20: The final version of the project concept may benefit from a brief table listing the key achievements of the precursor project and how they will contribute to the success of this planned project.

Recommendation 23: No information provided.

Recommendation 27: N/A

Overall comments

Authors have used Project design template, not project concept template.

Concept number

#7

Title

Delivering the promise of food irradiation to socio-economic development through strengthening promotion, acceptability and trade

Names/Contact details

The list of counterparts demonstrated a well-established network.

Gaps/problems/needs

The main problem described in the document is the major barrier to greater utilisation due to the perception that consumers will not buy irradiated foods.

It is unclear whether this new project is planned to run in parallel with the current RCA project on food irradiation. As the participating counterparts are mostly the same individuals, this may put significant strain on the availability of these individuals.

One previous project (RAS0022) had the subject of public acceptance of food irradiation and it would be useful to present the key outcomes of this project and how they differ from those of the project suggested here.

Why regional

The main justification is that food irradiation is being promoted in a number of Member States and that the varied experiences of commercialisation in MSs will have a synergistic effect on project resources as capacities of technically advanced countries can be used to address the needs of less advanced countries.

Stakeholders/partnerships

One key stakeholder mentioned is the iiA but significant work still has to be done to establish tangible linkages with the food trade.

End-users exist in some MSs at the national level but are still absent at the regional level.

Overall objective

The overall objective statement is a good representation of

Objectives analysis**Role of nuclear and IAEA**

Well demonstrated.

Project duration

The main work of the project is expected to be completed within one TC cycle but there will be ongoing monitoring in line with the requirement of project sustainability in the RCA GOR.

Requirement for participation

Relevant expertise in food irradiation is existent in most Member States as an outcome of previous project involvement.

Participating Member States

All RCA MSs are expected to participate, either as resource countries or target countries.

Funding, budget

Does it conform to key requirements for preparation of RCA Project Concepts 2016/17?

Recommendation 1: Food irradiation is mentioned in the RCA MTS as a tool to address societal outcomes. However the public acceptance per se is not a regional priority.

Recommendation 3: The project and its precursor have been led by NZE for a number of TC cycles and consideration/preparation should for succession planning.

Recommendation 5: The proposal is mad on the template for project design instead of project concept and therefore a draft implementation plan is provided as requested by that template.

Recommendation 6: Member States have so far not had the opportunity to comment and make suggestions on any draft concept but this is expected to be possible once the documents are submitted as background document for the 2014 NRM in New Zealand.

Recommendation 8: No information whether this has happened.

Recommendation 10: Food irradiation is one aspect of the RCA MTS?

Recommendation 17:

Recommendation 19:

Recommendation 20:

Recommendation 23:

Recommendation 27:

Overall comments

Authors have used Project design template, not project concept template.

Concept number

#8

Title

Application of mutation techniques to breed green super crop for sustainable agricultural production

Names/Contact details

Counterparts are all listed.

Gaps/problems/needs

Regional gap is well described but no problem tree provided

Why regional

Document makes reference to RCA-MTS and good justification for regional project.

Stakeholders/partnerships

The stakeholder/partnership analysis is very broad and unspecific and sounds more like an objective.

Overall objective

OK

Objectives analysis

The objective tree is confusing

Role of nuclear and IAEA

The role of nuclear technology is well described but no information provided on the role of IAEA

Project duration

OK

Requirement for participation

There is a clear description of requirements for participation.

Participating Member States

Good and clear description of participating MSs and their respective roles (resource/target)

Funding, budget

As no skeleton implementation plan is provided it is impossible to say whether budget is reasonable or not.

Does it conform to key requirements for preparation of RCA Project Concepts 2016/17?

Recommendation 1: Document addresses RCA MTS

Recommendation 3: CPR has led Projects in this area for a number of TC cycles. The implementation plan should address the issue of leadership succession planning.

Recommendation 5: No implementation plan is provided.

Recommendation 6: There is no evidence that the document has been circulated to other MSs to enable them to make comments or suggestions.

Recommendation 8: There is no evidence of input from other project team members.

Recommendation 10: Reference to the RCA MTS is well demonstrated.

Recommendation 17:

Recommendation 19: Cannot be assessed as no implementation plan provided.

Recommendation 20: The project appears to be a follow-on and strongly related to previous RCA projects in this thematic area. However, no specific criteria or performance indicators are provided to enable evaluation of how well the implementation of the current project(s) has advanced.

Recommendation 23: No evidence that assistance from TOs has been sought

Recommendation 27: n/a

Overall comments

The document provides good justifications in many areas but some aspects should be further refined (e.g. stakeholder analysis). The lack of an implementation plan makes it impossible to comment on how reasonable the proposed budget is and how likely it is that the objective can be achieved. The project appears to be a follow-on to previous and current projects and there is no clear explanation of exactly what is new in this project. A number of key requirements for the 2016/17 TC cycle have not been addressed.

Concept number

#10

Title

The preclinical application of transdermal oxygen enzymes on the treatment of skin injuries induced by acute radiation accidents.

Names/Contact details

No names and contact details of counterparts in other MSs are provided.

Gaps/problems/needs

The problem statement is relatively clear. However, it does not provide information on any technology transfer aspect. As it is formulated at the moment, the proposal is a research project rather than regional technology transfer project.

Why regional

The document is focussed on research activities in CPR and here is no satisfactory explanation why this should be a regional project. No link is made to RCA MTS and only CPR national projects are listed.

Stakeholders/partnerships

Only partners/stakeholders listed are from CPR which again raises the question why this should be a regional project.

Overall objective

There is no clear/succinct objective statement. Although the instructions explicitly ask for one objective, the authors list a total of four. These are research objectives and there is no aspect of regional technology transfer.

Objectives analysis

See above

Role of nuclear and IAEA

The role of nuclear technology is restricted to inducing damage to skin specimens with the main investigation not being related to nuclear technology. Expected role of the IAEA is to facilitate linkages with ROK and JPN but this would be quite narrow for a RCA regional project.

Project duration

No explanation is provided why it will take three years to conduct the project.

Requirement for participation

Not provided.

Participating Member States

Only ROK and JPN, which would make it a very 'narrow' RCA project.

Funding, budget

Significant co-funding is provided by CPR, but there is no information on what activities and inputs are planned .

Does it conform to key requirements for preparation of RCA Project Concepts 2016/17?

Recommendation 1: Not demonstrated

Recommendation 3: Not applicable as this would be a new area.

Recommendation 5: Implementation plan not provided.

Recommendation 6: No evidence that MSs have been able to comment or make suggestions.

Recommendation 8: No evidence that other team members have been consulted.

Recommendation 10:

Recommendation 17:

Recommendation 19: No implementation plan provided, hence no assessment can be made on appropriateness of number of project meetings.

Recommendation 20: Not applicable as this would be a new area.

Recommendation 23: No evidence that assistance/advice from TOs has been sought.

Recommendation 27:

Overall comments

The proposed project appears to focus on research activities rather than technology transfer between RCA Member States. Collaboration is planned with only two additional MSs. The role of nuclear technology and the IAEA has not been convincingly described. No reference to the RCA MTS has been made. Financial aspects cannot be assessed as no implementation plan has been provided. Most key requirements for the TC 2016/17 have not been addressed.

Overall, in its present form, the project concept does not appear suitable to advance further into an RCA project design.

Concept number

#11

Title

Advancing technologies for monitoring and analysis of the extent and impact of radioactive releases from nuclear power plants (NPPs) to Asia-Pacific marine ecosystems

Names/Contact details**Gaps/problems/needs****Why regional****Stakeholders/partnerships**

Insufficient End-user statement, only mentions decision-makers in governments.

Overall objective

Objectives 1 and 2 are purely research-driven, not knowledge/technology transfer.

Objectives analysis**Role of nuclear and IAEA****Project duration****Requirement for participation****Participating Member States****Funding, budget****Does it conform to key requirements for preparation of RCA Project Concepts 2016/17?**

Most requirements not addressed.

Overall comments

The document provides only very rudimentary information, which makes it impossible to provide meaningful feedback on most of the above aspects. This document only marginally differs from the earlier draft version on which the RCAPAC has already provided feedback.

Concept number

#13

Title

New type of freight vehicle radioactive inspection system.

Names/Contact details**Gaps/problems/needs****Why regional****Stakeholders/partnerships****Overall objective**

The objective appears research-focused, rather than knowledge/technology transfer

Objectives analysis**Role of nuclear and IAEA****Project duration****Requirement for participation****Participating Member States****Funding, budget**

The project budget of \$3,000,000 is unrealistic as it almost exceeds the entire RCA budget.

Does it conform to key requirements for preparation of RCA Project Concepts 2016/17?

Most requirements are not addressed.

Overall comments

The document provides only very rudimentary information, which makes it impossible to provide meaningful feedback on most of the above aspects. It only marginally differs from the earlier draft version on which the RCAPAC has already provided feedback.

Concept number

#14

Title

Application of electron accelerator in irradiation processing

Names/Contact details**Gaps/problems/needs**

The problem stated is the ineffective promotion of irradiation processing technology with regards to food safety, health care and chemical material modification. As such, this does not describe a societal problem but the current “absence of a solution” which should not be used as starting point for problem analysis under the PCMF.

Why regional

No information is provided why/how this project links to the RCA MTS.

Stakeholders/partnerships

Partnership is currently restricted to one CPR institution.

Overall objective

The objective statement is more meaningful than the problem analysis as it refers to the enhancement of technology, knowledge and human capability.

The paragraph on end-users states “immediate” benefits which appears doubtful for a three-year project.

Objectives analysis**Role of nuclear and IAEA**

The justification builds on the foundations of the use of nuclear technology for irradiation purposes and argues that electron accelerator technology has the advantage of ensuring nuclear safety. The role of the IAEA is mostly with regards to providing a network for information exchange.

Project duration

The project is proposed for a three-year duration.

Requirement for participation**Participating Member States**

All RCA MSs are listed except NZE. Is there a particular reason?

Funding, budget

The budget estimate refers to only the first two years of project duration. What is planned for year 3?

Does it conform to key requirements for preparation of RCA Project Concepts 2016/17?

Overall comments

This concept significantly overlaps with others related to food irradiation and the authors may want to further discuss the risks of overlap and potential for synergies.

Concept number

#15

Title

Strengthening food irradiation applications through education and training in RCA Member States

Names/Contact details

No names and contact details are provided.

Gaps/problems/needs

The discussion provides a good example of a list of all RCA projects that have been conducted over the past 25 years with regards to food irradiation. This provides some context to the reader. It would be even more helpful if the key outcomes from each project had been stated.

The authors should be aware of the risk that their justification reads like the promotion of a technique rather than plans to address a societal issue. The absence or under-utilisation of a solution (i.e. food irradiation) is not a valid aspect of problem analysis under the PCMA.

Why regional**Stakeholders/partnerships**

The author's response reads more like an objective statement and does not answer the questions.

Overall objective

The authors present a number of activities and not an objective/improvement that is expected to have occurred at the end of the project.

Objectives analysis

As above, creating awareness of a certain technique is not a valid objective under the PCMA and the RCA MTS.

Role of nuclear and IAEA**Project duration****Requirement for participation****Participating Member States****Funding, budget**

Does it conform to key requirements for preparation of RCA Project Concepts 2016/17?

Overall comments

Significant overlaps with #7 even regarding structure of problem/objective tree.

Concept number

#16

Title

Isotopic Techniques in the Assessment of Groundwater Resources for Sustainable Management.

Names/Contact details

The list provides evidence of a well-established network.

Gaps/problems/needs

The authors present a good description of the problems and needs, i.e. cleaner water and the factors influencing its quality and quantity.

However, there is no clear information on how the project is going to achieve its goals and how that differs from previous projects. The currently active RAS7022 has a very similar title and if this proposal is intended to be a follow-on project, then a good description of the elements of the currently active project with achievements against key performance indicators should be presented.

Why regional**Stakeholders/partnerships**

The list of stakeholders could be expanded to include health authorities, farmers, and industry. What is the particular reason for the non-existence of partnerships?

Overall objective

The stated objective does not differ from that of the currently active RAS7022.

Objectives analysis**Role of nuclear and IAEA****Project duration****Requirement for participation****Participating Member States****Funding, budget**

Does it conform to key requirements for preparation of RCA Project Concepts 2016/17?

Overall comments

Concept number

#17

Title

Diagnosing and optimising industrial processes using radiotracers and sealed-source techniques

Names/Contact details

The list of counterparts provides evidence of a well-established network.

Gaps/problems/needs

It would be highly beneficial to the reader if clear examples of exactly what “complex industrial processes” could be addressed by the project.

Why regional**Stakeholders/partnerships****Overall objective****Objectives analysis**

The authors indicate that an analysis of objectives will be provided with the LFM. However, an analysis of objectives must be provided at the project concept stage already.

Role of nuclear and IAEA

Good explanation of the role of nuclear techniques but not the role of the IAEA.

Project duration**Requirement for participation****Participating Member States****Funding, budget**

Two project meeting for a two-year project would use up a disproportionate amount of financial resources for project management alone.

Does it conform to key requirements for preparation of RCA Project Concepts 2016/17?**Overall comments**

Concept number

#21

Title

Ecosystem management function in view of anthropogenic influence and climate change trend and impact.

This title is unclear and the authors may want to consider revising

Names/Contact details**Gaps/problems/needs**

Provide a better indication of the novel aspects of this proposal and what the achievements were made in previous projects

Why regional

The authors make no reference to the RCA Medium-term Strategy.

Stakeholders/partnerships

There is a good description of end-users but no information provided on potential partnerships.

Overall objective

Only one objective is requested to be stated. Furthermore, the authors provide a list of mostly activities, not objectives. These are very broad and unlikely to be implemented in one project.

Objectives analysis**Role of nuclear and IAEA****Project duration****Requirement for participation****Participating Member States****Funding, budget**

In the absence of a skeleton implementation plan, it is not possible to comment on how realistic the proposed budget of USD200,000 is.

Does it conform to key requirements for preparation of RCA Project Concepts 2016/17?

Overall comments

Concept number

#22

Title

Defining the Precise Role of Hybrid Positron Emission Tomography-Computed Tomography in the management of Infectious and Aseptic Inflammatory disorders

Names/Contact details**Gaps/problems/needs**

The problem statement is quite basic and does not indicate how the participating countries will benefit from the proposed technique.

Why regional

The authors provide a good justification for an RCA project – although they do not directly refer to the RCA Medium-term Strategy.

Stakeholders/partnerships

End-users: While it is true that the patients are the ultimate beneficiaries, a number of other stakeholder groups also benefit, e.g. health authorities through cost savings.

No potential partnerships are listed, and only one Indian institution is listed under physical infrastructure/human resources.

Overall objective

The authors provide activities, not objective in this chapter.

Objectives analysis**Role of nuclear and IAEA****Project duration****Requirement for participation****Participating Member States****Funding, budget**

In the absence of a skeleton implementation plan, it is not possible to comment on how realistic the proposed budget of USD150,000 is.

Furthermore, the authors indicate that planning and programme development will be the main focus of activities in the first year. It is unrealistic to spend 25 % of project time simply on project planning and administration without implementing knowledge and technology transfer initiatives.

Does it conform to key requirements for preparation of RCA Project Concepts 2016/17?

Overall comments

Concept number

#23

Title

Defining the Precise Role of Hybrid Positron Emission Tomography-Computed Tomography in the management of Infectious and Aseptic Inflammatory disorders

Names/Contact details**Gaps/problems/needs**

The overall problem is not well described, e.g. low curation rate of patients, cost-benefit, unnecessary damage of healthy tissue during radiotherapy.

Why regional**Stakeholders/partnerships****Overall objective**

The authors state activities, not an objective.

Objectives analysis**Role of nuclear and IAEA**

Ultrasound is strictly speaking not a nuclear technique but in this case it provides the underpinning information for the application of radiotherapy as a nuclear technique.

Project duration**Requirement for participation****Participating Member States****Funding, budget****Does it conform to key requirements for preparation of RCA Project Concepts 2016/17?****Overall comments**

Concept number

#24

Title

Multicentric trial on chemotherapy (CT) added to palliative radiotherapy (RT) in palliation of advanced carcinoma esophagus

Names/Contact details**Gaps/problems/needs****Why regional**

There is no conclusive justification why this should be a regional project.

Stakeholders/partnerships

The analysis provided under "End-users" does not answer the question of who will benefit from the results of the project.

No potential partnerships are mentioned.

Overall objective

The authors describe activities, not an objective.

Objectives analysis**Role of nuclear and IAEA****Project duration****Requirement for participation**

Authors will have to provide information on other participants before a project is approved and cannot defer this until after approval.

Participating Member States

Only Indian institutions are listed.

Funding, budget**Does it conform to key requirements for preparation of RCA Project Concepts 2016/17?****Overall comments**

Overall, the document provides only quite rudimentary information, which makes it difficult to provide meaningful feedback on many of the above aspects.

Concept number

#25

Title

Clinical implementation of image-guided radiation therapy (IGRT) and adaptive radiation therapy (ART).

Names/Contact details**Gaps/problems/needs****Why regional**

No reference to RCA Medium-term Strategy

Stakeholders/partnerships**Overall objective****Objectives analysis****Role of nuclear and IAEA**

Formation of expert committees and conducting CRPs is outside the scope of RCA projects.

Project duration**Requirement for participation****Participating Member States****Funding, budget****Does it conform to key requirements for preparation of RCA Project Concepts 2016/17?****Overall comments**

Overall, the document provides only quite rudimentary information, which makes it difficult to provide meaningful feedback on many of the above aspects.

Concept number

#26

Title

Enhancing stereotactic body radiation therapy for frequent cancers in the RCA region

Names/Contact details**Gaps/problems/needs**

It would be useful to provide a diagram that shows how SBRT fits into the overall scope of previous RCA projects. Also, what are the main achievements of previous RCA project in this area?

It is unclear exactly what is planned to be done.

Why regional**Stakeholders/partnerships****Overall objective****Objectives analysis****Role of nuclear and IAEA****Project duration****Requirement for participation****Participating Member States****Funding, budget**

Three project management meeting in a three-year project would use up a disproportionate amount of financial resources for administrative aspects alone.

Does it conform to key requirements for preparation of RCA Project Concepts 2016/17?**Overall comments**