

*Submission in Support of Australia becoming a signatory to the 2017 Regional Cooperative Agreement (RCA) for Research, Development and Training Related to Nuclear Science and Technology*

The following submission is being made on the basis of 37 years of detailed knowledge of Australia's participatory role in the RCA Programme as well as firsthand experience of the overall operation of the Regional Cooperative Agreement in the Asia Pacific region over this period. From 1975 to 2011 I was employed by the Australian Nuclear Science and Technology Organisation (ANSTO) (and its previous incarnation the Australian Atomic Energy Commission) and have held the positions of Senior Principal Research Scientist and Senior Advisor, International & Regional Liaison. I have been directly involved in the RCA Programme project activities since 1980 and have been recruited by the International Atomic Energy Agency (IAEA) as an expert lecturer on RCA regional training courses for some 20 assignments and for around 100 assignments as an international expert for field missions or consultant for regional meetings/workshops. I was also appointed by the IAEA as RCA Coordinator (Director, Grade 1), based in Vienna, to administer the RCA Programme from 1990 to 1995. Since 2000 I have chaired a number of RCA Committees and Working Groups and currently I have been the Chair of the RCA Programme Advisory Committee since 2014.

There are currently 22 Government Parties to the existing 1987 Regional Cooperative Agreement (RCA) for Research, Development and Training Related to Nuclear Science and Technology, with broad geographic coverage from Pakistan in the west to Japan in the east and Mongolia in the north to New Zealand in the south. In addition, recently participation from the Pacific region has increased the areal coverage with Fiji and Palau gaining membership. Other governments in the Pacific area have expressed an interest in becoming signatories to the new agreement in the near future. The introduction of this 2017 Agreement, to enter in to force following the expiring of the current extension of the 1987 Agreement on 10 June 2017, will address and update identified concerns and bring about revisions to meet current and future needs and practices.

The current aims and objectives of the RCA Programme are set out in its Mid-term Strategies and Strategic Goals for 2018 / 2023, which are aligned with the UN Strategic Development Goals. Previous RCA Mid-term Strategies and Strategic Goals were aligned with the UN Millennium Goals. In addition, the RCA priorities and goals are aligned with those of the International Atomic Energy Agency (IAEA) Technical Cooperation Programme for the region, as set out in the regional cooperation strategy for Asia and the Pacific, and are also responsive to the identified needs and priorities of the RCA Government Parties as reported in the Meetings of RCA National Representatives.

Since becoming a party to the 1972 Regional Cooperative Agreement in 1977, Australia's participation in the RCA programme of activities has been a very useful, practical and visible means of demonstrating and showcasing to the Asia Pacific region, and beyond, the wide range of practical expertise and experience of Australian scientists, engineers, medical practitioners and other specialists in the application of non-power nuclear science and technology to address a wide range of identified regional priorities, needs and problems. This strong Australian involvement across the RCA programme has been a widespread demonstration of our high level of scientific knowledge, expertise and practice, and has been visible evidence of Australia's support of its obligations under the Nuclear Non-Proliferation Treaty while, at the same time, being further evidence to support Australia's permanent seat on the IAEA Board of Governors.

Australia's participation in the RCA projects has enabled the establishment of numerous beneficial networks and working relationships, both formal and informal, with organisations and individuals in the other RCA countries spanning such important areas as: the environment, agriculture, human health, marine science, industry and radiation safety. The Australian participation in the RCA projects draws on an extensive range of knowledge, abilities and resources that exists across the nation as well as ANSTO; for example, in the thematic sector of Human Health, staff from hospitals in Melbourne, Canberra and Adelaide and other centres, as well as staff in Sydney, have been actively participating in a range of projects. In the thematic sector of Agriculture, staff from the Queensland Department of Primary Industry, CSIRO and Universities such as: University of New South Wales, Macquarie University and University of Newcastle have been involved. In the thematic sector of Environment, CSIRO, AIMS and Universities including University of New South Wales, University of Wollongong and Sydney University have been involved. In the thematic sector of Industry, the Australian Institute of Non-destructive Testing (AINDT) and CSIRO has been actively participating. The activities in the radiation protection thematic sector have also involved ARPANSA, as well as State Government Agencies responsible for the administration of legislation related to the use of ionising radiation and radioactive substances.

This high level of broad participation across the RCA programme has enabled Australia to take on the role of leading country in the design and implementation of a wide range of RCA projects; for example since 2000, Australia has been the lead country for agricultural projects in food security, soils and land use; for environmental projects in marine science; for oncology, medical physics and nuclear medicine projects in human health; for on-line mineral analysis and industrial process control in industry; and radiation protection and emergency response projects. The wide range of participation of Australia in the RCA Programme has also broadened beyond strictly technical matters and seen it involved in numerous RCA working groups and committees that have been constituted to consult and advise on a wide range of operational and implementational issues and further demonstrates the significant influence that Australia has had on the development of the RCA and its programme.

In summary, accession to the 2017 Regional Cooperative Agreement (RCA) for Research, Development and Training Related to Nuclear Science and Technology will provide Australia with continuing participation in the activities of the RCA programme and a demonstration of the high standing of the national capabilities and capacities in nuclear science and technology to address identified regional needs and priorities. This participation also underlines Australia's ongoing commitment and support for its obligations under the Nuclear Non-proliferation Treaty and demonstrates that its high level of technical and scientific standing is commensurate with its position as a permanent member of the IAEA Board of Governors. Continued engagement through the RCA programme will continue to enrich Australia's scientific and technical contacts across the Asia Pacific region at both the organisational and individual level and to be a showcase to demonstrate Australia's high level of capabilities and capacities in new and emerging applications of nuclear science and technology.

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