

Country	End-users (% or numbers)	Projects initiated by end-users	Do you want to increase the number of end-users?	Strategies to increase usage	Issues	Main NAA activities	Who can approve a new project?	What are your strategic directions for NAA?
Australia	university 55% internal 20% commercial 25%	90%	yes	Identify industry organisations that we can influence and develop networks. Consider offering NAA as a sub-consultancy service to commercial analytical companies. Develop and advertise case studies to end-user groups.	Our small NAA staff means that our engagement with end-user groups must be highly focused to maximise the chance of success.	Archaeology and cultural heritage; Mining and geoscience; Materials science; Method development; Metrology and certification of reference materials.	The NAA Group leader approves projects.	Build on our existing networks to increase the awareness and demand for NAA by end-users. Find end-users who will have a regular and continuing need for NAA. Increase the amount of automation. Expand our capabilities to include radiochemical NAA
Bangladesh	university 70% internal 20% hospitals 5% commercial 5%	10%	yes	Arrange national seminar; Website; Present results at conferences, workshops, etc	It is often not possible to meet commitments made to end-users due to the unreliable availability of the reactor.	Elemental analysis in different sample matrices and nuclear data measurements. Strong academic collaboration with universities and supervision of postgraduate research students.	The NAA Group leader can propose a project which then needs to be approved by the Chairman of the Bangladesh Atomic Energy Commission.	To upgrade and extend the analytical facilities of the NAA laboratory; To increase end-users; To develop links with appropriate end-users; To strengthen academic collaboration to increase the number of nuclear professionals; Increase the reliability of analysis through regular participation in Intercomparison exercises/PT test; To get maximum benefit from existing projects; To be involved in planning for nuclear power plants.
China	geodating 15 archaeology 15 air pollution 10 food safety 2 basic research	10%	yes	After our NAA facilities are established in the new CARR reactor the materials and environmental group will be increased, especially using INAA	We need to promote the advantages of NAA for multielements to end-users and increase opportunities for cooperation.	NAA irradiation facilities, national NAA meeting, routing and projects.	End-user and government, financial supporter.	Establishment of the NAA automation facilities for irradiation and measurement and PGAA, then increase the routing capability, further enhance research and applications of PGAA on site.
Indonesia	government agencies 60% internal 20% universities 10% commercial 8% individual client 2%	40%	yes, universities and government agencies	Organize NAA seminar and workshop. Print a leaflet about the advantages of NAA technique and its use. Introduce NAA techniques through participation in scientific meetings and publication of papers in journals/proceedings. Invite the end-users to NAA working group coordination meetings to find out their programs and offer the NAA technique within the framework of joint research.	For private end-users (commercial companies) sometimes we have difficulties associated with the time it takes for NAA because they usually expect results quickly. Cooperative projects with government agencies need to be planned far ahead, because the projects must be included in the 5-year strategic planning program of the agency.	Environmental research, food safety analysis, materials research and general analysis service.	Head of Center of Science and Technology for Advanced Materials-National Nuclear Energy Agency (BATAN)	Geochemical mapping in Banten Province. Contaminant analysis in environment samples.
Japan								
Kazakhstan	government agencies 80% commercial 20%	20%	yes, but opportunities are limited by the number of staff	The strategy is to include NAA analytical techniques into the field of accreditation of the laboratory. We concentrate our efforts on commercial groups.	Our engagement with NAA end-users in Kazakhstan is still insufficient.	Elemental analysis of soil, bottom sediments, water suspended solids and dissolved elements for environmental researchers. Development of new NAA analytical techniques for geological exploration.	Top management of the Institute of Nuclear Physics.	Elemental analysis of rare-earth and noble metals for the needs of geological exploration.
Korea	internal 40% university 50% commercial 10%	40%	yes	For universities and institutes, I have tried to make some projects with them. For commercial companies, I have made efforts to advertise the advantages of NAA.		Development of NAA techniques; Applications in the environment, human health, reference materials etc.	Mainly by government, usually through project planning	Convergence technology and Economic impacts
Malaysia	university 10 internal 10 commercial 7	80%	Not really, unless there is a project decided by top management which is a national priority. We do not have the capacity to deal with more end-users.	We have to be prepared for anything needed by government policy, especially related to our nuclear power program and radiation safety in the country. We will increase our counting facilities from time to time according to demand and to replace aging facilities.	We have a problem dealing with universities because they ask for low rates. We can charge the maximum rate for commercial users but must reduce the rate for research communities.	Commercial services, research and training (postgraduate research, undergraduate technical training, internal courses)	Normally research projects that involve NAA are decided at the group or division level.	Current strategic directions are to support the nuclear power program and issues related to radioactive waste from mineral processing industries. These mainly relate to environmental monitoring and the generation of baseline data and environmental databases.
Mongolia	university 50% Nuclear Energy Agency 20% Inst. of Physics & Tech. 20% commercial 10%	30%	yes	Concentrate on mining companies, imported food products, environment. Advertise capabilities of NAA to mining companies.		Determination of Au, Cu, Ag, As, U, rare earth elements in geological and mineral samples. NAA method development.	Ministry of Education & Science Mongolian Foundation for Science & Tech Nuclear Energy Agency	To control imported food products To study toxic heavy elements in the environment and air pollution To analyse copper and coal minerals for export
Thailand	commercial 50% university 40% internal 10%	60%	No, we do not want to increase because we have a limit of NAA staff		We do not have any issues because we have clear communication with NAA end-users.	Elemental analysis of mine, ore and industrial sludge. Toxic and essential element monitoring in food and environment samples. Investigation of archaeological samples.	Researcher and head of R&D division.	There is no specific strategy for NAA, it conforms with the TINT strategy to support the development of the country using nuclear technology.
Vietnam	government agencies 30% Geoscience institute 30% universities 20% internal 20%	30%	Yes, but this would need an increase in the number of staff	To improve NAA procedures for obtaining more stable and accurate results. To enlarge the range of applications of NAA. Concentrate efforts on end-user groups in geological fields and mining exploitation.	The engagement with NAA end-users in our country is not so close. Most end-users prefer to use chemical analysis laboratories (such as AAS, ICP-MS, etc), which can do an analysis in a short time while NAA requires a long time.	Applied research and training.	We propose a working plan for a new project, Leaders of the Nuclear Research Institute (NRI) and VAEI make the decision under consultation with the Science Council.	Method development and application of k0-PGNAA, ENAA, CNA, etc. Enlarge the range of NAA applications in fields such as geochemical mapping, provenance research in archaeology, etc. Train people for the new research reactor project in Vietnam.