2016 ANTEP Needs from Bangladesh

No.	Question	Entry Column
1	Content of training/education that you need	Radioactive waste characterization, management and disposal
2	Background of above need (Why do you need above-mentioned training/education?)	As a research reactor, other nuclear instruments and nuclear medicine handling country, Bangladesh deals with radioactive waste. It is essential to train-up manpower to give a comprehensive overview of different aspects involved in the stepwise implementation of radioactive waste characterization, management and disposal. It will even vital in a near future as a NPP embarking country for handling radioactive waste in a safe, secure and effective way. The training course should focus on international best practices and regulations, national and international state-of-the-art, different R&D activities related to radioactive waste characterization, management and disposal and hands-on practical exercises related to safety and performance assessments.
3	Field	[A. Radioactive Waste Management] B-1. RI Application B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety E-2. Radiation Safety F. Policy/ Planning/ Administration G. Others
4	Level	[Advanced] Medium Basic
5	Type	[Go to abroad] Invite foreign expert
6	Priority	[High] Medium Low
7	Preferable method and duration	Lecture, Practice, Facility Visit, etc. 4 weeks
8	Type of a trainee	Researchers
9	Any comment	

2016 ANTEP Needs from Bangladesh

No.	Question	Entry Column
1	Content of training/education that you need	Management of spent fuel
2	Background of above need (Why do you need above-mentioned training/education?)	Spent fuel is a matter of concern in all nuclear countries. Some countries have already identified final disposal as a sustainable final solution in their national waste management strategy. In case of Bangladesh, the spent fuel for future power plants will take back by the vendor in Russian Federation. However, the spent fuel for research reactor has to handle ourselves. Thus it is essential to trained up people to learn how to handle and store the spent fuel for interim storage for decaying short-lived radionuclides including some actinides. The training on management of spent fuel will provide awareness and a transfer of knowledge on the safety related to each step of management including storage.
3	Field	[A. Radioactive Waste Management] B-1. RI Application B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety E-2. Radiation Safety F. Policy/ Planning/ Administration G. Others
4	Level	[Advanced] Medium Basic
5	Type	[Go to abroad] Invite foreign expert
6	Priority	[High] Medium Low
7	Preferable method and duration	Lecture, Practice, Facility Visit, etc. 4 weeks
8	Type of a trainee	Researchers and Reactor operators
9	Any comment	

2016 ANTEP Needs from Bangladesh

No.	Question	Entry Column
1	Content of training/education that you need	Treatment of Radioactive Waste
2	Background of above need (Why do you need above-mentioned training/education?)	For the implementation of systematic management phase it is necessary to have comprehensive knowledge regarding conditioning of Low and Intermediate level liquid and solid wastes generated from radiation and nuclear facilities in the country.
3	Field	[A. Radioactive Waste Management] B-1. RI Application B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety E-2. Radiation Safety F. Policy/ Planning/ Administration G. Others
4	Level	Advanced Medium [Basic]
5	Type	Go to abroad [Invite foreign expert]
6	Priority	[High] Medium Low
7	Preferable method and duration	Lecture, Demonstration, Practice and Facility Visit etc. Duration: 2 weeks
8	Type of a trainee	Involved in Radioactive Waste Management Activities
9	Any comment	The Government will be benefited in implementing activities related to safe secure management of Radioactive Sources.

2016 ANTEP Needs from Bangladesh

No.	Question	Entry Column
1	Content of training/education that you need	Training on Determination of Nitrogen fixation efficiency in the legume root nodule by Radioisotope (^{15}N)
2	Background of above need (Why do you need above-mentioned training/education?)	Assessment of nitrogen fixation is very important part in the Symbiotic nitrogen fixation as carried out by rhizobial micro-biota or Biofertilizer (e.g., *Rhizobium* spp, *Bradirhizobium* spp) in the leguminous root nodule. Though Kjeldal method can be used to determine the total nitrogen of part of legume plant including nodules, nuclear method using ^{15}N isotope is very specific to trace and determine the level of nitrogen fixed from rhizosphere or air. But this facility is not available in our laboratory. Therefore, training on this subject will certainly be helpful to the research on Biofertlizers.
3	Field	A. Radioactive Waste Management [B-1. RI Application] B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety E-2. Radiation Safety F. Policy/ Planning/ Administration G. Others
4	Level	[Advanced] Medium Basic
5	Type	[Go to abroad] Invite foreign expert
6	Priorit	[High] Medium Low
7	Preferable method and duration	Method: Lecture, Practical Experiment, Facility Visit etc. Duration: May be two (2) months
8	Type of a trainee	Bio-fertilizer Researcher
9	Any comment	Under the Bio-fertilizer project of FNCA

2016 ANTEP Needs from Bangladesh

No.	Question	Entry Column
1	Content of training/education that you need	Training on PET-CT imaging
2	Background of above need (Why do you need above-mentioned training/education?)	Each year about 200,000 people develop cancer and150,000 die of the disease in Bangladesh. We have only one public PET-CT machine started this year (Jan, 2016) at National Institute of Nuclear Medicine and Allied Sciences, under BAEC and two private centers. Trained physicians and technical persons are in urgent need to serve the increasing number of cancer patients by PET-CT imaging in Bangladesh
3	Field	A. Radioactive Waste Management B-1. RI Application B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety E-2. Radiation Safety F. Policy/ Planning/ Administration G. Others ©
4	Level	Advanced Medium Basic
5	Type	Go to abroad Invite foreign expert
6	Priority	High Medium Low
7	Preferable method and duration	Practical training at PET-CT center Duration –Two months
8	Type of a trainee	Nuclear Medicine Physicians, Technical officer, Technician.
9	Any comment	Participants will learn by practical experiences and attend few demonstrative classes.

2016 ANTEP Needs from Bangladesh

No.	Question	Entry Column
1	Content of training/education that you need	Beam Line Development for Neutron Imaging Facility
2	Background of above need (Why do you need above-mentioned training/education?)	The Neutron Imaging facility in Bangladesh is in developing condition and it has a lot of hope in various field of application. The basis and mandatory fields are needed to be understood clearly before any prior modification.
3	Field	A. Radioactive Waste Management B-1. RI Application [B-2. Radiation Application] C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety E-2. Radiation Safety F. Policy/ Planning/ Administration G. Others
4	Level	[Advanced] Medium Basic
5	Type	[Go to abroad] Invite foreign expert
6	Priority	[High] Medium Low
7	Preferable method and duration	➢ Workshop based training. ➢ Lectures with material explanation including neutron database. ➢ 2 Weeks
8	Type of a trainee	Researchers related to neutron imaging research & application
9	Any comment	

2016 ANTEP Needs from Bangladesh

No.	Question	Entry Column
1	Content of training/education that you need	Establishment of Neutron Tomography Facility in BAEC
2	Background of above need (Why do you need above-mentioned training/education?)	The digital neutron radiography setup is already present in BAEC but not in working condition. To overcome the problem and to establish tomography facility it is very much needed an expert service.
3	Field	A. Radioactive Waste Management B-1. RI Application [B-2.] Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety E-2. Radiation Safety F. Policy/ Planning/ Administration G. Others
4	Level	[Advanced] Medium Basic
5	Type	Go to abroad [Invite foreign expert]
6	Priority	[High] Medium Low
7	Preferable method and duration	➢ Lecture, demonstration, practice, etc. ➢ 2 Weeks
8	Type of a trainee	Researchers related to neutron imaging research and application
9	Any comment	

2016 ANTEP Needs from Bangladesh

No.	Question	Entry Column
1	Content of training/education that you need	Neutron beam application in structural characterization of advanced materials
2	Background of above need (Why do you need above-mentioned training/education?)	To acquire adequate knowledge about neutron diffraction techniques and data analysis methods for different types of materials.
3	Field	A. Radioactive Waste Management B-1. RI Application B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety E-2. Radiation Safety F. Policy/ Planning/ Administration G. Others
4	Level	Advanced Medium Basic
5	Type	Go to abroad Invite foreign expert
6	Priority	High Medium Low
7	Preferable method and duration	➢ Structural characterization of materials using neutron diffraction technique. ➢ At least one month
8	Type of a trainee	Researchers in the field of Neutron Scattering at BAEC
9	Any comment	This training is very essential to utilize our existing efficiently.

2016 ANTEP Needs from Bangladesh

No.	Question	Entry Column
1	Content of training/education that you need	Basic research reactor experiments
2	Background of above need (Why do you need above-mentioned training/education?)	Bangladesh uses a 3MW TRIGA Mark-II research reactor. It is a tremendous tool to develop human resources for nuclear power plants. However, to develop manpower on NPP using this reactor, training is required for theoretical orientation and practical exercises on the following topics of the reactor: neutron detection, neutron flux and distribution measurement at RRs, reactor kinetics & dynamics (including study of delay neutrons), critical experiment, calibration of control rods, determination of excess reactivity, reactivity measurement methods, demonstration of prompt criticality, measurement of reactivity coefficients, etc.
3	Field	A. Radioactive Waste Management B-1. RI Application B-2. Radiation Application [C. Plant/Reactor] D. Nuclear Fuel/Material E-1. Nuclear Safety E-2. Radiation Safety F. Policy/ Planning/ Administration G. Others
4	Level	Advanced [Medium] Basic
5	Type	[Go to abroad] Invite foreign expert
6	Priority	[High] Medium Low
7	Preferable method and duration	Lecture, Practice, Facility Visit, etc. 4 Weeks
8	Type of a trainee	Researchers and Reactor operators
9	Any comment	

2016 ANTEP Needs from Bangladesh

No.	Question	Entry Column
1	Content of training/education that you need	Ageing management of Research reactor
2	Background of above need (Why do you need above-mentioned training/education?)	Ageing management and in-service inspection are issues of significant concern, particularly for a facility like the BAEC TRIGA research reactor (3 MW TRIGA Mark-II), which has been in operation for about thirty years. As it is the only facility in Bangladesh, the intention is to continue its operation at least for next 20 years. Thus, to extend the operation life of the reactor and its associated systems an intensive ageing management program need to be introduced. For successful implementation of ageing management program in BAEC TRIGA reactor, it is essential to develop human resources in this field through the training.
3	Field	A. Radioactive Waste Management B-1. RI Application B-2. Radiation Application [C. Plant/Reactor] D. Nuclear Fuel/Material E-1. Nuclear Safety E-2. Radiation Safety F. Policy/ Planning/ Administration G. Others
4	Level	[Advanced] Medium Basic
5	Type	[Go to abroad] Invite foreign expert
6	Priority	[High] Medium Low
7	Preferable method and duration	Lecture, Practice, Facility Visit, etc. 2 weeks
8	Type of a trainee	Researchers and Reactor operators
9	Any comment	

2016 ANTEP Needs from Bangladesh

No.	Question	Entry Column
1	Content of training/education that you need	In-service Inspection of the Research Reactor
2	Background of above need (Why do you need above-mentioned training/education?)	Training on Vibration analysis of rotating machineries of reactor cooling systems and ultrasonic testing equipment for inspection of reactor tank thickness and flow.
3	Field	A. Radioactive Waste Management B-1. RI Application B-2. Radiation Application [C. Plant/Reactor] D. Nuclear Fuel/Material E-1. Nuclear Safety E-2. Radiation Safety F. Policy/ Planning/ Administration G. Others
4	Level	[Advanced] /Medium /Basic
5	Type	[Go to abroad] Invite foreign expert
6	Priority	[High] Medium Low
7	Preferable method and duration	Lecture, Practice, Facility Visit, etc. Duration: 3 months
8	Type of a trainee	Researchers with engineering background.
9	Any comment	

2016 ANTEP Needs from Bangladesh

No.	Question	Entry Column
1	Content of training/education that you need	Neutronics Analysis of VVER-1200 Nuclear Reactor using DRAGON-DONJON code
2	Background of above need (Why do you need above-mentioned training/education?)	Bangladesh is on the way to establish the VVER type nuclear power plants. Thus it is essential to acquire knowledge on neutronics data for safety assessment of VVER-1200 NPP and also in core fuel management analysis
3	Field	A. Radioactive Waste Management B-1. RI Application B-2. Radiation Application [C. Plant/Reactor] D. Nuclear Fuel/Material E-1. Nuclear Safety E-2. Radiation Safety F. Policy/ Planning/ Administration G. Others
4	Level	[Advanced] Medium Basic
5	Type	Go to abroad [Invite foreign expert]
6	Priority	[High] Medium Low
7	Preferable method and duration	Installation of Computer code, Lecture, Practice, VVER exercise, etc. Duration: 2 months
8	Type of a trainee	Researchers who have experience on neutronics analysis of Research Reactor or NPP
9	Any comment	

2016 ANTEP Needs from Bangladesh

No.	Question	Entry Column
1	Content of training/education that you need	Nuclear or Radiological Emergency Preparedness & Response.
2	Background of above need (Why do you need above-mentioned training/education?)	Bangladesh has been using ionizing radiation increasingly in the fields of Agriculture, Medicine, Industry, Education and Research for peaceful purposes for socio-economic development of the country. BAEC is operating one 3 MW TRIGA, nuclear medicine centers, gamma-irradiation facilities, radioisotope production facilities Medical and industrial sector also use high activity radiation sources for radiotherapy and radiography. Government of Bangladesh is establishing 2400 MW nuclear power plant at Rooppur. It is anticipated that radiation hazards may happen during the installation, operation, decommissioning process of nuclear facilities in case of any incident or accident may be severe causing national or trans-boundary impacts of nuclear or radiological emergency. So that it is essential To acquire knowledge on various aspects of emergency preparedness and response: • Understanding of IAEA Guidelines and International Nuclear Event Scale (INES) • Appreciation of preparedness and response function. • Local emergency preparedness and response team organization. • Generic Intervention Levels. Generic Action Levels. • Emergency Worker Guidelines/Guidance. Operational Intervention Levels. • Urgent Protective Action. • Emergency Management & Decision making techniques. • Technical preparedness and response.
3	Field	A. Radioactive Waste Management B-1. RI Application

2016 ANTEP Needs from Bangladesh

No.	Question	Entry Column
		B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material [E-1. Nuclear Safety] [E-2. Radiation Safety] F. Policy/ Planning/ Administration G. Others
4	Level	[Advanced] Medium Basic
5	Type	[Go to abroad] Invite foreign expert
6	Priority	[High] Medium Low
7	Preferable method and duration	Lecture Class, Practical Class, Dummy drill, exercise, demonstration, hands on practice. Duration : two months.
8	Type of a trainee	Scientists of Bangladesh Atomic Energy Commission
9	Any comment	

2016 ANTEP Needs from Bangladesh

No.	Question	Entry Column
1	Content of training/education that you need	Environmental radioactivity measurement by In-Situ Method
2	Background of above need (Why do you need above-mentioned training/education?)	The natural terrestrial gamma radiation dose rate is an important contribution to the average dose rate received by the world's population. Various surveys of outdoors terrestrial gamma radiation have been performed in advanced countries, but relatively few have been conducted in developing countries. In-situ terrestrial gamma radiation measurement is a rapid technique for large area radioactivity measurement (both natural & artificial) comparing to the laboratory method.
3	Field (Please circle your answer) *Multiple answers allowed	A. Radioactive Waste Management B-1. RI Application B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety E-2. Radiation Safety F. Policy/ Planning/ Administration G. Others
4	Level	Advanced Medium Basic
5	Type	Go to abroad Invite foreign expert
6	Priority	High Medium Low
7	Preferable method and duration	Method: Radioactivity measurement by Portable HPGe & NaI(Tl) detectors, preferably at near to the nuclear facilities Duration: Two(02) months
8	Type of a trainee	BAEC Scientist/Equivalent who has been assigned for measurement of radioactivity by National Act and Rules.
9	Any comment	

2016 ANTEP Needs from Bangladesh

No.	Question	Entry Column
1	Content of training/education that you need	Radiation protection of Occupational worker from Internal exposure.
2	Background of above need (Why do you need above-mentioned training/education?)	As per the new international safety standards, it is necessary to evaluate occupational and public exposure for ionizing radiation. Infrastructure for individual monitoring is currently inadequate and needs to be further strengthened. This is also very important for Bangladesh in light of the planned nuclear power programmes. Bangladesh has about 400 personnel working with unsealed sources in hospitals and institutions, mining and milling of radioactive minerals (mineral sands industry), radioisotope production, and research reactor environment that could potentially lead to internal exposure. The purpose of this training is to enhance radiation protection of Occupational workers from radiation exposure through improved internal monitoring capacity. To bring internal monitoring service to an operational level; requires expert & skilled manpower.
3	Field	A. Radioactive Waste Management B-1. RI Application B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety [E-2. Radiation Safety] F. Policy/ Planning/ Administration G. Others
4	Level	[Advanced] Medium Basic
5	Type	[Go to abroad] [Invite foreign expert]
6	Priority	[High] Medium Low
7	Preferable method and duration	Method: Lecture, Practical etc. Duration: one month Invite foreign expert: one week
8	Type of a trainee	Scientists of Bangladesh Atomic Energy Commission (BAEC)
9	Any comment	

2016 ANTEP Needs from Bangladesh

No.	Question	Entry Column
1	Content of training/education that you need	Quality Management system for Individual monitoring service
2	Background of above need (Why do you need above-mentioned training/education?)	From July 2000, Health physics division, BAEC has started providing external individual Monitoring service to radiation workers by using basic TL dosimeter as a central monitoring unit in order to keep exposure of occupational workers with in acceptable limit as per requirement of NSRC Rule-1997. The purpose of ths training to aquire knowledge on quality management system for providing quality-based individual monitoring services and capacity buil up for accreditation of individual monitoring lab.
3	Field	A. Radioactive Waste Management B-1. RI Application B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety E-2. Radiation Safety F. Policy/ Planning/ Administration G. Others
4	Level	Advanced Medium Basic
5	Type	Go to abroad Invite foreign expert
6	Priority	High Medium Low
7	Preferable method and duration	Method: Lecture, Practice, Facility Visit, etc. Duration: One month
8	Type of a trainee	Scientists of Bangladesh Atomic Energy Commission
9	Any comment	

2016 ANTEP Needs from Bangladesh

No.	Question	Entry Column
1	Content of training/education that you need	National nuclear infrastructure development
2	Background of above need (Why do you need above-mentioned training/education?)	An appropriate infrastructure is essential for the safe, reliable and peaceful use of nuclear power. The IAEA Milestones in the development of a national infrastructure for nuclear power describes the detailed infrastructure needed to support the safe, reliable and peaceful use of nuclear power. It identified 19 separate infrastructure issues to be addressed by a Member State considering the introduction of nuclear power as part of its national energy strategy. Sequential development through the three phases for each of 19 infrastructure issues, ranging from a government's national position on nuclear power to the procurement of items and services for the first nuclear power plant. As a NPP embarking country, human resource development is essential to address the milestone issues. Thus it is essential to learn other experienced country's status and sharing their knowledge and experiences on national nuclear infrastructure development.
3	Field	A. Radioactive Waste Management B-1. RI Application B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety E-2. Radiation Safety [F. Policy/ Planning/ Administration] G. Others
4	Level	[Advanced] Medium Basic
5	Type	[Go to abroad] Invite foreign expert
6	Priority	[High] Medium Low
7	Preferable method and duration	Method: Lecture, Practice, Facility Visit, etc. Duration: 2 Weeks
8	Type of a trainee	Researchers/administrators/university professors who deals with nuclear energy and nuclear technology
9	Any comment	

2016 ANTEP Needs from Bangladesh

No.	Question	Entry Column
1	Content of training/education that you need	Neutron beam applications (Neutron activation analysis)
2	Background of above need (Why do you need above-mentioned training/education?)	Research reactor based Neutron Activation Analysis (NAA) has a great potentiality to apply in various fields like heath, environment, industry, geology & mining, agriculture, education, etc. Environmental pollution control and monitoring, especially air pollution monitoring is a typical example of application of NAA. Air pollution monitoring concerns the determination of the incidence, elemental composition, and size of aerosol particles (PM2.5, PM10) in the ambient or indoor air, or studying the above parameters in combustion aerosols, which are the main source of air pollution in many countries. In Bangladesh the NAA does not apply yet to analyze aerosols due to lack of experience. Thus it is essential to get training to acquire knowledge and experience to collect and analyze aerosols particles in the air using NAA technique.
3	Field	A. Radioactive Waste Management B-1. RI Application [B-2. Radiation Application] C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety E-2. Radiation Safety F. Policy/ Planning/ Administration G. Others
4	Level	Advanced [Medium] Basic
5	Type	[Go to abroad] Invite foreign expert
6	Priority	[High] Medium Low
7	Preferable method and duration	Method: Lecture, practical, facility visit etc. Duration: 2 Weeks
8	Type of a trainee	Researchers who deal with Neutron Activation Analysis
9	Any comment	

2016 ANTEP Needs from China (CAEA)

No.	Question	Entry Column
1	Content of training/education that you need	Nuclear power technology; NPP's design and research
2	Background of above need (Why do you need above-mentioned training/education?)	There is a big shortage of experienced talent in China.
3	Field	A. Radioactive Waste Management B-1. RI Application B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety E-2. Radiation Safety F. Policy/ Planning/ Administration G. Others
4	Level	Advanced Medium Basic
5	Type	Go to abroad Invite foreign expert
6	Priority	High Medium Low
7	Preferable method and duration	3-6months
8	Type of a trainee	Engineer
9	Any comment	

2016 ANTEP Needs from China (CNEA)

No.	Question	Entry Column
1	Content of training/education that you need	Energy/Nuclear strategy analysis; International cooperation experience sharing
2	Background of above need (Why do you need above-mentioned training/education?)	As I used to work in the NPP and R&D institute, I got some real experiences in the nuclear fuel plant, NPP, reprocessing plant and so on. I realize that the upper level design of the industry is very important, including the strategy planning and law&regulation. Besides, I am working in the department of international cooperation of CNEA, I would like to communicate with the senior to get more experience and methods.
3	Field	A. Radioactive Waste Management B-1. RI Application B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety E-2. Radiation Safety [F. Policy/ Planning/ Administration] [G. Others]
4	Level	[Advanced] Medium Basic
5	Type	[Go to abroad] Invite foreign expert
6	Priority	[High] Medium Low
7	Preferable method and duration	Training course or workshop would be suitable for trainees. 2-3 weeks are recommended.
8	Type of a trainee	Policymakers and Senior level managers; Experienced industry leader
9	Any comment	

2016 ANTEP Needs from China (CNEA)

No.	Question	Entry Column
1	Content of training/education that you need	I expect to receive the content include the Nuclear Safety, Peer Review, safety culture and the establishment of Experience Feedback System.
2	Background of above need (Why do you need above-mentioned training/education?)	With 8 years experience in CNEA, I'm engaged in national Peer Review and NPP experience feedback. So I hope that I can receive more information by above-mentioned training/education.
3	Field	A. Radioactive Waste Management B-1. RI Application B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material [E-1. Nuclear Safety] E-2. Radiation Safety [F. Policy/ Planning/ Administration] G. Others
4	Level	Advanced Medium [Basic]
5	Types	Go to abroad [Invite foreign expert]
6	Priority	High [Medium] Low
7	Preferable method and duration	Training or workshop 1-2 weeks
8	Type of a trainee	The administrator from the government, organization, NPP or technical support company and so on.
9	Any comment	

2016 ANTEP Needs from China (CNEA)

No.	Question	Entry Column
1	Content of training/education that you need	The improvement of infrastructure establishment for nuclear power development. The details included as: the method of legal system establishment; education of leadership; safety culture; peer review.
2	Background of above need (Why do you need above-mentioned training/education?)	I worked for China Nuclear Energy Association. The association is involved in assistance of nuclear laws establishment for government, peer review for NPP safety, training and education for industry. After Fukushima Accident the industry realizes that well establishment of laws system, health safety culture and peer review for nuclear safety are very important to keep high standard for nuclear safety. The course could enhance the mindset of excellence for people.
3	Field	A. Radioactive Waste Management B-1. RI Application B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material [E-1. Nuclear Safety] E-2. Radiation Safety [F. Policy/ Planning/ Administration] G. Others
4	Level	Advanced [Medium] Basic
5	Type	[Go to abroad] Invite foreign expert
6	Priority	[High] Medium Low
7	Preferable method and duration	Training course or workshop would be suitable for trainees. 2-3 weeks are recommended.
8	Type of a trainee	The administrative people from government, organization, utility, NPP or technical support company are potential trainees.
9	Any comment	

2016 ANTEP Needs from China (CNEA)

No.	Question	Entry Column
1	Content of training/education that you need	Nuclear Power Plant safety evaluation and peer review theoretical approach.
2	Background of above need (Why do you need above-mentioned training/education?)	I have been worked in a nuclear power plant fora few years and now I am working for China Nuclear Energy Association. 1. In my country, more and more mew nuclear power plant are building and we think that we should improve our safety evaluation method and ensure the nuclear power plant in good operation. 2. We need to learn more advanced management method and supervise methodology from other countries. After Fukushima nuclear accident, Japan strengthen the nuclear safety regulation. I think it is effective and prompt, I wish to learn new management method and safety evaluation theoretical approach from Japanese peers.
3	Field	A. Radioactive Waste Management B-1. RI Application B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety E-2. Radiation Safety F. Policy/ Planning/ Administration G. Others
4	Level	Advanced Medium Basic
5	Type	Go to abroad Invite foreign expert
6	Priority	High Medium Low
7	Preferable method and duration	3weeks of theoretical course; 4 weeks of engineering practice.
8	Type of a trainee	Officers who takes charge of nuclear policy or evaluation method. Researcher in universities or institutes.
9	Any comment	

2016 ANTEP Needs from China (CNEA)

No.	Question	Entry Column
1	Content of training/education that you need	Countermove of nuclear accident
2	Background of above need (Why do you need above-mentioned training/education?)	I have been worked in a nuclear power plant fora few years and now I am working for China Nuclear Energy Association. We are lake of methods and experience on the field of nuclear emergency response and it became a big risk for our developing nuclear industry. We need to learn more active method for facing nuclear accident and accident management method, include the organization set up for the accident, The accident risk analysis, The accident related laws and regulations, accident simulation. I wish to learn above theories and methods from Japanese peers and exchange good ideas and views.
3	Field	A. Radioactive Waste Management B-1. RI Application B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material [E-1. Nuclear Safety] E-2. Radiation Safety [F. Policy/ Planning/ Administration] G. Others
4	Level	[Advanced] Medium Basic
5	Type	[Go to abroad] Invite foreign expert
6	Priority	[High] Medium Low
7	Preferable method and duration	6 weeks of theoretical course; 4 weeks of on-site practice.
8	Type of a trainee	Officers who takes charge of nuclear policy, Researcher in universities or institutes.
9	Any comment	

2016 ANTEP Needs from China (CNEA)

No.	Question	Entry Column
1	Content of training/education that you need	Nuclear public education/office procedure of FNCA.
2	Background of above need (Why do you need above-mentioned training/education?)	In our country, citizens do not know much about nuclear power, especially safety problem. An opportunity, where we would be able to learn the strategy, experience and solutions of other country would be highly appreciated.
3	Field	[A. Radioactive Waste Management] B-1. RI Application B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety E-2. Radiation Safety [F. Policy/ Planning/ Administration] G. Others
4	Level	Advanced [Medium] Basic
5	Type	[Go to abroad] Invite foreign expert
6	Priority	High [Medium] Low
7	Preferable method and duration	1. PPT show. 2. Discuss and communication. 3. Duration may be half a month.
8	Type of a trainee	Officers who takes charge of nuclear policy Researchers in universities or institutes
9	Any comment	

2016 ANTEP Needs from Kazakhstan

No.	Question	Entry Column
1	Content of training/education that you need	Radioactive waste treatment technology
2	Background of above need (Why do you need above-mentioned training/education?)	The problem of radiation waste management is very important for Kazakhstan since there were a few nuclear test sites on the country's territory and one breeding power reactor (BN-350) which is on stage of decommission now. Therefore Kazakhstan needs advanced experience in the field of radioactive waste treatment and other aspects of the problem
3	Field	[A.] Radioactive Waste Management B-1. RI Application B-2. Radiation Application C. Plant/Reactor [D]. Nuclear Fuel/Material [E-1]. Nuclear Safety [E-2]. Radiation Safety F. Policy/ Planning/ Administration G. Others
4	Level	[Advanced] Medium Basic
5	Type	[Go to abroad] Invite foreign expert
6	Priority	High [Medium] Low
7	Preferable method and duration	Lectures, practical works, experiments, facility visits 3-6 months
8	Type of a trainee	Researchers/engineers in universities and institutes
9	Any comment	

2016 ANTEP Needs from Kazakhstan

No.	Question	Entry Column
1	Content of training/education that you need	Radiation technologies application for agriculture and their promoting
2	Background of above need (Why do you need above-mentioned training/education?)	Kazakhstan has very few specialists in the field of radiation technologies for agriculture application. Kazakhstan needs to study international experience in the field of radiation technologies application for agriculture (as biofertilizers, super water absorbents, etc.) and their promoting
3	Field	A. Radioactive Waste Management [B-1]. RI Application B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety E-2. Radiation Safety F. Policy/ Planning/ Administration G. Others
4	Level	Advanced [Medium] Basic
5	Type	[Go to abroad] Invite foreign expert
6	Priority	High [Medium] Low
7	Preferable method and duration	Lectures, practical works 3-6 months
8	Type of a trainee	Researchers in universities and institutes, technicians/engineers of commercial enterprises
9	Any comment	

2016 ANTEP Needs from Kazakhstan

No.	Question	Entry Column
1	Content of training/education that you need	Reactor material science and nuclear fuel cycle
2	Background of above need (Why do you need above-mentioned training/education?)	Kazakhstan possesses rich uranium and metallic ore resources. Kazakhstan is planning diversification of raw economy to the economy based on metallurgy of advanced processing. Therefore we need specialists in the field of reactor material science and nuclear fuel cycle.
3	Field	A. Radioactive Waste Management B-1. RI Application B-2. Radiation Application C. Plant/Reactor [D]. Nuclear Fuel/Material E-1. Nuclear Safety E-2. Radiation Safety F. Policy/ Planning/ Administration G. Others
4	Level	[Advanced] Medium Basic
5	Type	[Go to abroad] Invite foreign expert
6	Priority	[High] Medium Low
7	Preferable method and duration	Lectures, practical works 3-6 months
8	Type of a trainee	Researchers in universities and institutes
9	Any comment	

2016 ANTEP Needs from Kazakhstan

No.	Question	Entry Column
1	Content of training/education that you need	Nuclear and radiation safety
2	Background of above need (Why do you need above-mentioned training/education?)	Nuclear and radiation safety is one of the most important issues nowadays. The degree of people trust and positive attitude to the nuclear power development strongly depend on the degree of its safety and reliability. To provide sufficiently high level degree of safety we need skilled specialists who had seized advanced experience in this field
3	Field	A. Radioactive Waste Management B-1. RI Application B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material [E-1]. Nuclear Safety [E-2]. Radiation Safety F. Policy/ Planning/ Administration G. Others
4	Level	[Advanced] Medium Basic
5	Type	[Go to abroad] Invite foreign expert
6	Priority	[High] Medium Low
7	Preferable method and duration	Lectures, practical works 3-6 months
8	Type of a trainee	Researchers in universities and institutes
9	Any comment	

2016 ANTEP Needs from Kazakhstan

No.	Question	Entry Column
1	Content of training/education that you need	Planning, social policy and management in the field of nuclear power production development and nuclear technologies promotion
2	Background of above need (Why do you need above-mentioned training/education?)	Kazakhstan during recent years is announcing the determination to construct nuclear power plant. The process appeared to be protracted due to poor planning and management. The same problem with transferring of nuclear technologies into broad application. Specialists with good abilities in the field of planning, social policy and management in the field of nuclear power production development and nuclear technologies promotion are highly demanded in our country. We have no much experience in training specialists on sufficiently high level. We would like to get acquainted with such experience of other countries which are success in this field.
3	Field	A. Radioactive Waste Management B-1. RI Application B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety E-2. Radiation Safety [F.] Policy/ Planning/ Administration G. Others
4	Level	Advanced [Medium] Basic
5	Type	Go to abroad [Invite foreign expert]
6	Priority	High [Medium] Low
7	Preferable method and duration	2-4 weeks, seminar
8	Type of a trainee	governmental officers, administrative workers
9	Any comment	

2016 ANTEP Needs from Kazakhstan

No.	Question	Entry Column
1	Content of training/education that you need	Thermal-hydraulic
2	Background of above need (Why do you need above-mentioned training/education?)	Activities to reduce fuel enrichment of research reactors in the Republic of Kazakhstan are conducted as part of development and implementation of practical measures for decreasing use of nuclear materials and technologies in civilian sector. In the process of designing new cores with reduced enrichment a large number of calculations (including thermal-hydraulic) to justify the efficiency and safety of our research reactors are required.
3	Field	A. Radioactive Waste Management B-1. RI Application B-2. Radiation Application [C]. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety E-2. Radiation Safety F. Policy/ Planning/ Administration G. Others
4	Level	[Advanced] Medium Basic
5	Type	[Go to abroad] Invite foreign expert
6	Priority	[High] Medium Low
7	Preferable method and duration	Lectures, practical works 3-6 months
8	Type of a trainee	Researchers/Engineers in universities and institutes
9	Any comment	

2016 ANTEP Needs from Kazakhstan

No.	Question	Entry Column
1	Content of training/education that you need	The mechanisms of tritium redistribution in the environment
2	Background of above need (Why do you need above-mentioned training/education?)	Tritium is a major component of the radioactive liquid effluents and gaseous emissions of the most objects of nuclear industry. Tritium can be formed in high concentrations due to different emergencies. To make the forecast of radioactive pollution assessments of such facilities, the study of tritium redistribution mechanisms in environmental is a very important task.
3	Field	[A]. Radioactive Waste Management B-1. RI Application B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety [E-2]. Radiation Safety F. Policy/ Planning/ Administration G. Others
4	Level	[Advanced] Medium Basic
5	Type	[Go to abroad] Invite foreign expert
6	Priority	[High] Medium Low
7	Preferable method and duration	Lectures, practical works 3-6 months
8	Type of a trainee	Researchers/Engineers in universities and institutes
9	Any comment	

2016 ANTEP Needs from Kazakhstan

No.	Question	Entry Column
1	Content of training/education that you need	Methods of monitoring the state of groundwater and surface water in the area of excess radiation hazard
2	Background of above need (Why do you need above-mentioned training/education?)	Currently, one of the main channels of distribution of radionuclides in the environment is radioactively contaminated water, which can have a significant impact on large areas. One of the methods to control condition of the water is the method of isotope hydrogeology, based on a study of the stable isotopes ratio in the water.
3	Field	[A]. Radioactive Waste Management B-1. RI Application B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety [E-2]. Radiation Safety F. Policy/ Planning/ Administration G. Others
4	Level	[Advanced] Medium Basic
5	Type	[Go to abroad] Invite foreign expert
6	Priority	[High] Medium Low
7	Preferable method and duration	Lectures, practical works 3-6 months
8	Type of a trainee	Researchers/Engineers in universities and institutes
9	Any comment	

2016 ANTEP Needs from Malaysia

No.	Question	Entry Column
1	Content of training/education that you need	Nuclear Public Information and Public Awareness (PIPA)
2	Background of above need (Why do you need above-mentioned training/education?)	Malaysia is considering embarking on nuclear power programme for the future electricity generation. Therefore, there is a need to develop a national programme for PIPA, so that interaction between the nuclear industry and the public will be in favor for the government decision. Thus, Malaysia would like to learn strategies, experiences and methods demonstrated in other countries such as Japan, French, etc.
3	Field	A. Radioactive Waste Management B. Radiation/RI Application C. Reactor D. Fuel/Material E. Nuclear/Radiation Safety F. Policy/ Planning/ Administration G. Others
4	Level	Advanced Medium Basic
5	Type	Go to abroad Invite foreign expert
6	Priority	High Medium Low
7	Preferable method and duration	Seminar/Expert talk/lecture on the experience. Fellowship program. Join research in public information and public awareness. Join a tour to public information facilities. Duration 1 to 3 months
8	Background of a trainee	Officer who takes charge in policy planning, lecturers, public relation officer
9	Any comment	None

2016 ANTEP Needs from Malaysia

No.	Question	Entry Column
1	Content of training/education that you need	Nuclear Risk management / communication
2	Background of above need (Why do you need above-mentioned training/education?)	Managing risk is an important task for nuclear organization. Malaysia would like to strengthen the strategy and approach in dealing with risk communication. This can be obtain / learn from other countries who has develop nuclear energy earlier than us. Malaysia would like to learn method of identifying risks, managing threats, organizing, and prioritization disseminating information to the public and decision makers and so on. This program can be learning from the advanced nuclear power countries.
3	Field	A. Radioactive Waste Management B. Radiation/RI Application C. Reactor D. Fuel/Material E. Nuclear/Radiation Safety F. [Policy/ Planning/ Administration] G. Others
4	Level	Advanced [Medium] Basic
5	Type	[Go to abroad] [Invite foreign expert]
6	Priority	[High] Medium Low
7	Preferable method and duration	On-the-job training or fellowship program. Join a tour to risk management center/facilities. Duration 1 to 3 months
8	Background of a trainee	Officer who takes charge in risk management, project manager, top management and nuclear communicator.
9	Any comment	None

2016 ANTEP Needs from Malaysia

No.	Question	Entry Column
1	Content of training/education that you need	Training Name : Nuclear Leadership and Management Sub Content Module : Topic 1 : Nuclear Economic, Project Structuring and Financing Topic 2 : Nuclear Fuel Cycle Topic 3 : Procurement & Supply Chain Management Topic 4: Crisis Management and Communication during Emergency
2	Background of above need (Why do you need above-mentioned training/education?)	Leadership and management are important to drive the organization in a right track and perspective to ensure targeted output is achieved. This can be meaning possible by an effective management system and the understanding of the nuclear business. As such, it needs to integrate all elements of management to optimize all the resources to promote a strong safety culture, recognizing the interactions between individualism expertise, technology and facilities and stake holders.
3	Field	A. Radioactive Waste Management B-1. RI Application B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety E-2. Radiation Safety F. Policy/ Planning/ Administration G. Others
4	Level	Advanced Medium Basic
5	Type	Go to abroad Invite foreign expert
6	Priority	High Medium Low
7	Preferable method and duration	Methodology – Lecture, Presentation, Discussion, Case Study Duration – 1 or 2 hours for each topics/module
8	Type of a trainee	Officer and executive attached or working with nuclear industry for non-power and power application
9	Any comment	This course aims to assist junior and middle manager in the nuclear industry and educational establishment to understand key issues in leadership, management and governance in order to be effective promoter and player in nuclear industries.

2016 ANTEP Needs from Mongolia

No.	Question	Entry Column
1	Content of training/education that you need	Trainings on nuclear analytical equipment maintenances
2	Background of above need (Why do you need above-mentioned training/education?)	There are variety types of nuclear analytical equipment, including XRFs, alpha, gamma spectrometers, ICP-MSs, small irradiation equipment, radon meters and medical equipment (tele-therapy machines, SPECT/CT, SBRT, IMRT, MRI...etc.) used for various propose such us geological survey, providing diagnostic and therapeutic nuclear medicine procedures, radiotherapy, animal disease prevention, diagnosis and surveillance, vaccine production for animal disease, environmental monitoring and research and development of nuclear science in Mongolia. Proper maintenances and skilled engineers and technicians are essential for the sustainability of effective uses.
3	Field (Please circle your answer) *Multiple answers allowed	A. Radioactive Waste Management B-1 .RI Application B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety E-2. Radiation Safety F. Policy/ Planning/ Administration G. Others
4	Level (Please circle)	Advanced Medium Basic
5	Type (Please circle)	Go to abroad Invite foreign expert
6	Priority (Please circle)	High Medium Low
7	Preferable method and duration	On the job training, 1-12 month
8	Type of a trainee	- Electronic engineers who works with nuclear analytical equipment - Technicians and operators
9	Any comment	3 trainees for XRF spectrometers, gamma spectrometers; 2 trainees for nuclear medicine and diagnosing equipment (SPECT, PET/CT, MRI, CT and other) 2 trainees for equipment used radiotherapy

2016 ANTEP Needs from Mongolia

No.	Question	Entry Column
1	Content of training/education that you need	Trainings engineers and technicians on irradiators (up to 2MeV) and electron beam machines
2	Background of above need (Why do you need above-mentioned training/education?)	Radiation technology applications have been widely used in many areas such as environment, agriculture, science and education, geology and mining, health and industry. Lack of equipment and facilities for national R&D of radiation processing, nuclear technology in Mongolia makes it difficult to develop locally. Mongolia aims to establish radiation processing laboratory through introducing the medium energy range electron beam machine (up to 2MeV). This training would be highly important on this issue.
3	Field (Please circle your answer) *Multiple answers allowed	A. Radioactive Waste Management B-1. RI Application [B-2. Radiation Application] C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety [E-2. Radiation Safety] F. Policy/ Planning/ Administration G. Others
4	Level (Please circle)	Advanced [Medium] Basic
5	Type (Please circle)	[Go to abroad] Invite foreign expert
6	Priority (Please circle)	[High] Medium Low
7	Preferable method and duration	Workshop, seminar, and medium term training Duration: 1-12 month
8	Type of a trainee	Nuclear engineers, physicist and technicians
9	Any comment	None

2016 ANTEP Needs from Mongolia

No.	Question	Entry Column
1	Content of training/education that you need	Emergency Preparedness & Response
2	Background of above need (Why do you need above-mentioned training/education?)	To acquire knowledge on various aspects of emergency preparedness and response; - IAEA Guidelines and International Nuclear Event Scale (INES) - Appreciation of preparedness and response function. - Local emergency preparedness and response team organization. - Generic Intervention and Action levels. - Emergency Worker Guidelines/Guidance. - Operational Intervention Levels. - Urgent Protective Action. - Emergency Management & Decision making techniques. - Technical preparedness and response.
3	Field (Please circle your answer) *Multiple answers allowed	A. Radioactive Waste Management B-1. RI Application B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety E-2. Radiation Safety F. Policy/ Planning/ Administration G. Others
4	Level (Please circle)	Advanced Medium Basic
5	Type (Please circle)	Go to abroad Invite foreign expert
6	Priority (Please circle)	High Medium Low
7	Preferable method and duration	Lecture, Practice, Facility Visits
8	Type of a trainee	Officers from relevant organizations EP & ER Team members
9	Any comment	

2016 ANTEP Needs from Mongolia

No.	Question	Entry Column
1	Content of training/education that you need	Environmental Radiation Monitoring System; The design and management of environmental radiation monitoring Program;
2	Background of above need (Why do you need above-mentioned training/education?)	Mongolia needs to obtain an operational system of environmental monitoring in the occurrence of abnormal or emergency situation. Thus, we aim to learn how to estimate exposures for general public and the tendencies of accumulation of radioactive materials in the environment.
3	Field (Please circle your answer) *Multiple answers allowed	A. Radioactive Waste Management B-1. RI Application B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety [E-2. Radiation Safety] [F. Policy/ Planning/ Administration] G. Others
4	Level (Please circle)	Advanced [Medium] Basic
5	Type (Please circle)	[Go to abroad] Invite foreign expert
6	Priority (Please circle)	[High] Medium Low
7	Preferable method and duration	- Short-term training (1~3 weeks) - Medium-term training (1-2 months)
8	Type of a trainee	Inspectors, officers and technicians from NEC and General Agency for Specialized Inspection.
9	Any comment	

2016 ANTEP Needs from Mongolia

No.	Question	Entry Column
1	Content of training/education that you need	Nonproliferation and safeguards
2	Background of above need (Why do you need above-mentioned training/education?)	To acquire knowledge and skill on nonproliferation and safeguards.
3	Field (Please circle your answer) *Multiple answers allowed	A. Radioactive Waste Management B-1. RI Application B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety E-2. Radiation Safety F. Policy/ Planning/ Administration G. Others
4	Level (Please circle)	Advanced Medium Basic
5	Type (Please circle)	Go to abroad Invite foreign expert
6	Priority (Please circle)	High Medium Low
7	Preferable method and duration	Workshop, Training (2~3 weeks)
8	Type of a trainee	Officers and Inspectors Decision makers, Policy makers
9	Any comment	

2016 ANTEP Needs from Mongolia

No.	Question	Entry Column
1	Content of training/education that you need	Nuclear Public Information and Public Awareness (PIPA)
2	Background of above need (Why do you need above-mentioned training/education?)	In Mongolia, many people have negative impression about nuclear. We are trying to establish the credibility of nuclear energy and radiation applications for seeking for more effective ways to communicate with the public. Thus, we would like learn best practices of strategies, methods and experiences in order to conduct nuclear public information activities in a structured matter. There is a need to develop a national PIPA Program.
3	Field (Please circle your answer) *Multiple answers allowed	A. Radioactive Waste Management B-1. RI Application B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety E-2. Radiation Safety F. Policy/ Planning/ Administration G. Others
4	Level (Please circle)	Advanced Medium Basic
5	Type (Please circle)	Go to abroad Invite foreign expert
6	Priority (Please circle)	High Medium Low
7	Preferable method and duration	- Lecture and Presentation (1-4 weeks) - Seminars and Workshops (1-4 weeks) - Trainings (2 weeks)
8	Type of a trainee	Officers, public administrators and educators from relevant organization.
9	Any comment	

2016 ANTEP Needs from Mongolia

No.	Question	Entry Column
1	Content of training/education that you need	Policy and planning related Nuclear science and Technology (S&T)
2	Background of above need (Why do you need above-mentioned training/education?)	To manage and coordinate cooperation with foreign and national institutions in different field of Nuclear S&T such as industry, healthcare, food and agriculture, environment and geology.
3	Field (Please circle your answer) *Multiple answers allowed	A. Radioactive Waste Management B-1. RI Application B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety E-2. Radiation Safety [F. Policy/ Planning/ Administration] G. Others
4	Level (Please circle)	Advanced [Medium] Basic
5	Type (Please circle)	[Go to abroad] [Invite foreign expert]
6	Priority (Please circle)	High [Medium] Low
7	Preferable method and duration	Classroom lectures and seminars (1~4 weeks)
8	Type of a trainee	Officers who is in charge of Nuclear Policy/Planning
9	Any comment	

2016 ANTEP Needs from Mongolia

No.	Question	Entry Column
1	Content of training/education that you need	Human Resource Development and Capacity Building
2	Background of above need (Why do you need above-mentioned training/education?)	Since 1962 Mongolia has been pursuing nuclear science and technology and set up own Human Resource framework in non-power field. After the introduction of the State Policy on the Exploitation of radioactive minerals and peaceful uses of nuclear technology in 2009, Mongolia has been expanding its activities in uranium exploration and peaceful uses of nuclear energy. Thus the human resource development has been the priority to sustain the country's ambitious plan.
3	Field (Please circle your answer) *Multiple answers allowed	A. Radioactive Waste Management B-1. RI Application B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety E-2. Radiation Safety F. Policy/ Planning/ Administration G. Others
4	Level (Please circle)	Advanced Medium Basic
5	Type (Please circle)	Go to abroad Invite foreign expert
6	Priority (Please circle)	High Medium Low
7	Preferable method and duration	Classroom lectures, practices, on-job training
8	Type of a trainee	Young professionals, students, teachers, researchers and authorities
9	Any comment	

2016 ANTEP Needs from Mongolia

No.	Question	Entry Column
1	Content of training/education that you need	Nuclear and radiation safety culture Characteristics of culture
2	Background of above need (Why do you need above-mentioned training/education?)	To acquire a knowledge for developing and promoting safety culture over competing goals to ensure the protection of workers, public as well as the environment.
3	Field (Please circle your answer) *Multiple answers allowed	A. Radioactive Waste Management B-1. RI Application B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety E-2. Radiation Safety F. Policy/ Planning/ Administration G. Others
4	Level (Please circle)	Advanced Medium Basic
5	Type (Please circle)	Go to abroad Invite foreign expert
6	Priority (Please circle)	High Medium Low
7	Preferable method and duration	Seminar and meeting (1~2 weeks)
8	Type of a trainee	Professionals, officers, teachers
9	Any comment	

2016 ANTEP Needs from Thailand (TINT)

No.	Question	Entry Column
1	Content of training/education that you need	Radiation Application in Industries
2	Background of above need (Why do you need above-mentioned training/education?)	Thailand Institute of Nuclear Technology (TINT) has provided services in radiation application for industries since establishment (2006). The services composed of gamma scanning, neutron backscattering and non-destructive testing techniques. Since the fast moving and rapidly change of technologies, we are trying to study the advance technology regarding to the radiation application in order to develop and upgrade the inspection techniques. The expected advanced technologies, such as Non-Destructive Evaluation (NDE) Methods, does not only important in the industries field, but also be able to apply in the civil engineering fields. Therefore, we are seeking for training in advanced NDE technologies to support the expanding of infrastructures constructions. This education and training would be extended to utilization of the technology in the future if NPPs will be constructed, NDE personnel will play important role regarding to integrity and safety of design and installation in our country.
3	Field	A. Radioactive Waste Management B-1. RI Application [B-2. Radiation Application] C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety E-2. Radiation Safety F. Policy/Planning/Administration G. Other
4	Level	[Advanced] Medium Basic
5	Type	[Go to abroad] Invite foreign expert
6	Priority	[High] Medium Low

2016 ANTEP Needs from Thailand (TINT)

No.	Question	Entry Column
7	Preferable method and duration	- The expected technology would be new in market (5 years back technology) - Class room lectures plus examinations and certification are expected - Duration may be 2 months
8	Type of trainee	- The expected technology would be new in market (5 years back technology) - Class room lectures plus examinations and certification are expected - Duration may be 2 months
9	Any comment	TINT is trying to establish the certify body for NDE personnel, however, we are still lack of expertise in advance technology. These NDE personnel will play important role if the NPPs project can be launched. The important will not be confined only during construction, but also can be extended when the plants are operating as well. Highly kind consider in this field of requirement would be benefits to all member states.

2016 ANTEP Needs from Thailand (TINT)

No.	Question	Entry Column
1	Content of training/education that you need	Radioisotopes (RI) and Radipharmarceuticals (RPs)
2	Background of above need (Why do you need above-mentioned training/education?)	We produce radioisotopes (RIs) and radiopharmaceuticals (RPs) as well as conduct researches for new RIs and RPs, for diagnosis and therapy, to support nuclear medicine in the country. In the near future, we will establish a 30 MeV cyclotron facility. In this regard, we need competent staffs with more knowledge and experience to develop our nuclear medicine service. In addition to increase the competency of staffs, it would be great to help us decrease the imported RPs and eventually become self-supportive and save foreign currency for our country.
3	Field	A. Radioactive Waste Management [B-1. RI Application] B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety E-2. Radiation Safety F. Policy/Planning/Administration G. Other
4	Level	Advanced [Medium] Basic
5	Type	Go to abroad Invite foreign expert
6	Priority	[High] Medium Low
7	Preferable method and duration	✓ On the job training that related to production and QC of radioisotopes (RIs), radiopharmaceuticals (RPs) ✓ On the job training that related to Analysis/Test/Measurement ✓ Duration may be three month.
8	Type of a trainee	Officers who take charge of production and QC of radioisotopes (RIs) and radipharmarceuticals (RPs)
9	Any comment	

2016 ANTEP Needs from Thailand (TINT)

No.	Question	Entry Column
1	Content of training/education that you need	**Radiation Protection Program** - Work planning in radiation control area - Radiation work permit - Dose mapping - Radiation protection organization **Radiation monitoring** - Radiation monitoring instrument and management in nuclear power plant - Radiation monitoring instrument and management for personal **Action in Emergency situation in power plant** - Emergency response and preparedness in every level of emergency
2	Background of above need (Why do you need above-mentioned training/education?)	We now in early stage of nuclear power plant project. We need to learn about radiation protection program in nuclear power plant so that we can establish our own radiation protection program for upcoming project.
3	Field	A. Radioactive Waste Management B-1. RI Application B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety [E-2. Radiation Safety] F. Policy/ Planning/ Administration G. Others
4	Level	[Advanced] Medium Basic
5	Type	[Go to abroad] Invite foreign expert
6	Priority	High Medium [Low]
7	Preferable method and duration	2 weeks OJT
8	Type of a trainee	– Master degree in Nuclear Technology or Science – -Officers who have knowledge of radiation protection and monitoring
9	Any comment	

2016 ANTEP Needs from Thailand (TINT)

No.	Question	Entry Column
1	Content of training/education that you need	**Environmental Radiation Monitoring** - The design and management of environmental radiation monitoring program for NPP (pre-operation stage, operation stage, emergency stage) **Dispersion model** - to predict radionuclide discharged from NPP to people and environment (Pathways of exposure that should be considered of monitoring in case of normal operation and accident
2	Background of above need (Why do you need above-mentioned training/education?)	1. To set up environmental radiation monitoring for NPP 2. To make the operation system of environmental monitoring in the occurrence of abnormal or emergency 3. To learn how to estimate exposures for general public 4. To estimate the tendencies of accumulation of radioactive materials in the environment
3	Field	A. Radioactive Waste Management B-1. RI Application B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety E-2. Radiation Safety F. Policy/ Planning/ Administration G. Others
4	Level	Advanced Medium Basic
5	Type	Go to abroad Invite foreign expert
6	Priority	High Medium Low
7	Preferable method and duration	2 weeks OJT
8	Type of a trainee	- Master degree in Nuclear Technology or Science - Officers who have knowledge of radiation protection and monitoring
9	Any comment	

2016 ANTEP Needs from Thailand (TINT)

No.	Question	Entry Column
1	Content of training/education that you need	1. Severe accident Countermeasure requirements 2. Evaluation of the Effectiveness of Countermeasures against Severe Accident
2	Background of above need (Why do you need above-mentioned training/education?)	To analyze the countermeasures against severe accident of the reactor types that are suitable for Thailand.
3	Field	A. Radioactive Waste Management B-1. RI Application B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material [E-1. Nuclear Safety] E-2. Radiation Safety F. Policy/ Planning/ Administration G. Others
4	Level	Advanced [Medium] Basic
5	Type	[Go to abroad] Invite foreign expert
6	Priority	High [Medium] Low
7	Preferable method and duration	2 weeks training
8	Type of a trainee	Nuclear engineer
9	Any comment	

2016 ANTEP Needs from Thailand (TINT)

No.	Question	Entry Column
1	Content of training/education that you need	Proton Therapy
2	Background of above need (Why do you need above-mentioned training/education?)	Proton therapy has been proven as a more precise less harmful and more cost-effective treatment, especially for young patients. There is a compelling case for establishing a proton therapy facility in Bangkok, under the leadership of Siriraj hospital. Recently, Proton therapy funding and infrastructure plan has been confirmed and endorsed by our hospital board administrative meeting in early this month. With this specialized technique, the special training for the medical personnel is necessary because of the purpose, treatment process and safety management are different from our routine radiation treatment. Japan is the known leading country for Proton therapy. The University of Tsukuba is the first facility in Japan to conduct research in this field, in particular internationally pioneering the use of Proton therapy by the respiratory-gated radiotherapy, which is now highly recognized and considered as a worldwide standard. Therefore, this should be ideal place for us to train for knowledge, practical process and outstanding research for our Proton facility.
3	Field	A. Radioactive Waste Management B-1. RI Application [B-2. Radiation Application] C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety E-2. Radiation Safety F. Policy/ Planning/ Administration G. Others
4	Level	[Advanced] Medium Basic
5	Type	[Go to abroad] Invite foreign expert
6	Priority	[High] Medium Low
7	Preferable method and duration	Medical Physicist – 6 months training in proton facilities. Radiation Oncologist and Radiation Technologist – 1 to 3 months visit in proton facilities.

2016 ANTEP Needs from Thailand (TINT)

No.	Question	Entry Column
8	Type of a trainee	Radiation Oncologist Medical Physicist Radiation Technologist
9	Any comment	

2016 ANTEP Needs from Thailand (TINT)

No.	Question	Entry Column
1	Content of training/education that you need	-Analysis by nuclear techniques such as isotope ratio mass spectrometry and application of isotope dilution mass spectrometry for food and environment samples.
2	Background of above need (Why do you need above-mentioned training/education?)	Isotope ratio mass spectrometry is a popular technique used for geographical origin and adulteration of sample. Isotope dilution mass spectrometry is primary method to confirm the accuracy of the method for food and environmental analyses.
3	Field	A. Radioactive Waste Management [B-1. RI Application] B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety E-2. Radiation Safety F. Policy/ Planning/ Administration G. Others
4	Level	Advanced Medium [Basic]
5	Type	[Go to abroad] Invite foreign expert
6	Priority	[High] Medium Low
7	Preferable method and duration	Classroom lecture and experiment. Duration may be 3-6 months.
8	Type of a trainee	Researchers in institute.
9	Any comment	

2016 ANTEP Needs from Thailand (TINT)

No.	Question	Entry Column
1	Content of training/education that you need	Development on Radioactive Waste Disposal Technology
2	Background of above need (Why do you need above-mentioned training/education?)	To develop RWM staff to be professional in career
3	Field	[A. Radioactive Waste Management] B-1. RI Application B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety E-2. Radiation Safety F. Policy/ Planning/ Administration G. Others
4	Level	Advanced [Medium] Basic
5	Type	[Go to abroad] Invite foreign expert
6	Priority	[High] Medium Low
7	Preferable method and duration	on the job Training
8	Type of a trainee	B,Sc.,Experience in RWM more than 2 yrs.
9	Any comment	

2016 ANTEP Needs from Thailand (OAP)

No.	Question	Entry Column
1	Content of training/education that you need	Radiation Risk Communication
2	Background of above need (Why do you need above-mentioned training/education?)	To communicate with public regarding to Nuclear/radiological emergency.
3	Field	A. Radioactive Waste Management B-1. RI Application B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety [E-2. Radiation Safety] F. Policy/ Planning/ Administration G. Others
4	Level	Advanced Medium [Basic]
5	Type	Go to abroad [Invite foreign expert]
6	Priority	High [Medium] Low
7	Preferable method and duration	Classroom lecture on the experiences of risk communication
8	Type of a trainee	-Emergency team -Public Relation Officer
9	Any comment	

2016 ANTEP Needs from Thailand (OAP)

No.	Question	Entry Column
1	Content of training/education that you need	Radiological Emergency Response
2	Background of above need (Why do you need above-mentioned training/education?)	Our teams do not understand their duty and responsibility during emergency situation especially the supporting team and the environmental awareness team.
3	Field	A. Radioactive Waste Management B-1. RI Application B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety [E-2. Radiation Safety] F. Policy/ Planning/ Administration G. Others
4	Level	Advanced Medium [Basic]
5	Type	[Go to abroad] Invite foreign expert
6	Priority	High [Medium] Low
7	Preferable method and duration	
8	Type of a trainee	Officer who takes charge in emergency team list
9	Any comment	Observation and training in Emergency drill.

2016 ANTEP Needs from Thailand (OAP)

No.	Question	Entry Column
1	Content of training/education that you need	Security Assessment
2	Background of above need (Why do you need above-mentioned training/education?)	Following the Nuclear Security Summit 2016, Thailand is currently reviewing its regulatory procedure for the security of radioactive sources and nuclear materials; however, has insufficient experience on security assessments. OAP, as Thailand's regulatory body of radioactive and nuclear materials uses, therefore, has necessity of competency building for its officers on security inspections of facilities and border-security assessments. In addition, it would be useful to learn the examples of security controls and strategies from experience countries so that Thailand may apply to construct a propose regulation model and improve the overall security standard in the country.
3	Field	A. Radioactive Waste Management B-1. RI Application B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety [E-2. Radiation Safety] [F. Policy/ Planning/ Administration] G. Others
4	Level	Advanced [Medium] Basic
5	Type	[Go to abroad] [Invite foreign expert]
6	Priority	[High] Medium Low
7	Preferable method and duration	-Fellowship and on the job training (Duration 1-3 Months) -Workshop in Thailand by foreign experts
8	Type of a trainee	-Inspector -Frontline/Border/Customs officers
9	Any comment	

2016 ANTEP Needs from Thailand (OAP)

No.	Question	Entry Column
1	Content of training/education that you need	1. Nuclear & Radiation Safety 2. Nuclear Public Information
2	Background of above need (Why do you need above-mentioned training/education?)	As in many countries, Thai people have still negative impression about nuclear. It is OAP responsibility to promote and create trust and credibility of Nuclear energy and radiation utilization. Leaning other countries' strategies, processes, and experiences will help us to conduct our mission properly and more effectively.
3	Field	A. Radioactive Waste Management B-1. RI Application B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety E-2. Radiation Safety F. Policy/ Planning/ Administration G. Others
4	Level	Advanced Medium Basic
5	Type	Go to abroad Invite foreign expert
6	Priority	High Medium Low
7	Preferable method and duration	1. Table Top/classroom lecture 2. On the job Training 3. 1-2 months
8	Type of a trainee	1. Officers who are responsible for nuclear & radiation Safety Regulation 2. Officers who are responsible for PR.
9	Any comment	

2016 ANTEP Needs from Thailand (OAP)

No.	Question	Entry Column
1	Content of training/education that you need	Leadership and Management for Executive
2	Background of above need (Why do you need above-mentioned training/education?)	To enhance top management level to be awareness of safety culture and integrate management for safety.
3	Field	A. Radioactive Waste Management B-1. RI Application B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material [E-1. Nuclear Safety] [E-2. Radiation Safety] [F. Policy/ Planning/ Administration] [G. Others]
4	Level	Advanced [Medium] Basic
5	Type	Go to abroad [Invite foreign expert]
6	Priority	[High] Medium Low
7	Preferable method and duration	1-2 days
8	Type of a trainee	Top management level
9	Any comment	

2016 ANTEP Needs from Thailand (OAP)

No.	Question	Entry Column
1	Content of training/education that you need	Dynamic Seismic Analysis
2	Background of above need (Why do you need above-mentioned training/education?)	OAP, as the solo NRB, will have to avail herself with competent personal and resources capable of ensuring smooth transition of each phase of the NPP Project. Structural aspects is one of the Deterministic Safety Analysis for NPP.
3	Field	A. Radioactive Waste Management B-1. RI Application B-2. Radiation Application [C. Plant/Reactor] D. Nuclear Fuel/Material E-1. Nuclear Safety E-2. Radiation Safety F. Policy/ Planning/ Administration G. Others
4	Level	Advanced Medium [Basic]
5	Type	Go to abroad [Invite foreign expert]
6	Priority	High [Medium] Low
7	Preferable method and duration	Workshop using computer code 2 weeks
8	Type of a trainee	Engineer, Scientist
9	Any comment	

2016 ANTEP Needs from Thailand (OAP)

No.	Question	Entry Column
1	Content of training/education that you need	Communication strategy and plan on nuclear energy and radiation in regular and emergency situation
2	Background of above need (Why do you need above-mentioned training/education?)	The new draft of Nuclear Energy Act of Thailand are recently passed. Office of Atoms for Peace (OAP) as a regulatory body is aware of the importance of planning the communication plan on nuclear energy and radiation to public both in regular and emergency situation and Japan is a country that have directly experiences in both situation.
3	Field	A. Radioactive Waste Management B-1. RI Application B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety E-2. Radiation Safety F. Policy/ Planning/ Administration G. Others
4	Level	Advanced Medium Basic
5	Type	Go to abroad Invite foreign expert
6	Priority	High Medium Low
7	Preferable method and duration	Method -Lecturing -Seminar -Fellowship program -On the job training -Technical visit -Experience exchange Period -1-2 months
8	Type of a trainee	-OAP's staffs who have the authority in related policy planning/public relation/training field
9	Any comment	

2016 ANTEP Needs from Thailand (OAP)

No.	Question	Entry Column
1	Content of training/education that you need	Nuclear science and technology communication
2	Background of above need (Why do you need above-mentioned training/education?)	Thailand is one of countries that have adopt the use of nuclear technology in various application such as medically, agricultural, industrial and research applications. Recognizing this enormous potential in many applications, the Office of Atoms for Peace (OAP) as a regulatory body carries out a variety of activities to disseminate and promote youth, entrepreneurs and public awareness of the atomic energy in Thailand. To gain more trust on nuclear and radiological safety and regulation from public, OAP aims to work with scientists and let them be a lecturers for all target group. But most of the scientists have no experiences or cannot communicate to the public suitably, some used to with the academic talk and academic vocabularies that quite difficult to people to understand. To gain more knowledge on how to communicate about nuclear science and technology in an easy way to scientists will help us on dissemination all relevant knowledge around the country much easier and quicker.
3	Field	A. Radioactive Waste Management B-1. RI Application B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety E-2. Radiation Safety F. Policy/ Planning/ Administration G. Others
4	Level	Advanced Medium Basic
5	Type	Go to abroad Invite foreign expert
6	Priority	High Medium Low
7	Preferable method and duration	Method -Lecturing -Seminar -Fellowship program

2016 ANTEP Needs from Thailand (OAP)

No.	Question	Entry Column
		-On the job training -Technical visit -Experience exchange Period -1-2 months
8	Type of a trainee	-OAP's staffs who have the authority in related policy planning/public relation/training field -OAP's Scientists
9	Any comment	

2016 ANTEP Needs from Thailand (OAP)

No.	Question	Entry Column
1	Content of training/education that you need	Media design for nuclear science and technology dissemination and public relation
2	Background of above need (Why do you need above-mentioned training/education?)	Thailand is one of countries that have adopted the use of nuclear technology in various application such as medically, agricultural, industrial and research applications. Recognizing this enormous potential in may applications, the Office of Atoms for Peace (OAP) as a regulatory body try to carries out variety of publications and medias to disseminate and promote your, entrepreneurs and public awareness of the atomic energy in Thailand. We needs to learn how to design the media and the media usage to reach and gain more interested of public.
3	Field	A. Radioactive Waste Management B-1. RI Application B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety E-2. Radiation Safety F. Policy/ Planning/ Administration G. Others
4	Level	Advanced Medium Basic
5	Type	Go to abroad Invite foreign expert
6	Priority	High Medium Low
7	Preferable method and duration	Method -Lecturing -Seminar -Fellowship program -On the job training -Technical visit -Experience exchange Period -1-2 months
8	Type of a trainee	OAP's staffs who have the authority in related public relation/training/IT field
9	Any comment	

2016 ANTEP Needs from Thailand (OAP)

No.	Question	Entry Column
1	Content of training/education that you need	Knowledge management (KM) for regulatory body organization
2	Background of above need (Why do you need above-mentioned training/education?)	Office of Atoms for Peace (OAP), as a regulatory body of Thailand, is aware and recognize of the importance of studying and initiating knowledge management in the organization. But there are shot information and mostly are about KM in nuclear facilities not for regulatory body. So we need to gain more knowledge about how to implement, develop and manage the knowledge in regulatory body because all knowledge both tacit and explicit are very important and valuable information for organization and other staffs at the present time and future.
3	Field	A. Radioactive Waste Management B-1. RI Application B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety E-2. Radiation Safety F. Policy/ Planning/ Administration G. Others
4	Level	Advanced Medium Basic
5	Type	Go to abroad Invite foreign expert
6	Priority	High Medium Low
7	Preferable method and duration	Method -Lecturing -Seminar -Fellowship program -On the job training -Technical visit -Experience exchange Period -1-2 months
8	Type of a trainee	-OAP's staffs who have the authority in related public relation/training/HR/IT field
9	Any comment	

2016 ANTEP Needs from Thailand (OAP)

No.	Question	Entry Column
1	Content of training/education that you need	Training development and management
2	Background of above need (Why do you need above-mentioned training/education?)	Office of Atoms for Peace (OAP) is implementing and developing its own nuclear and radiological knowledge and regulation training center. So we need to gain more knowledge about the relevant information and experiences exchange on training management and development.
3	Field (Please circle your answer) (oval) *Multiple answers allowed	A. Radioactive Waste Management B-1. RI Application B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety E-2. Radiation Safety F. Policy/ Planning/ Administration G. Others
4	Level	Advanced Medium Basic
5	Type	Go to abroad Invite foreign expert
6	Priority	High Medium Low
7	Preferable method and duration	Method -Lecturing -Seminar -Fellowship program -On the job training -Technical visit -Experience exchange Period -2-3 months
8	Type of a trainee	OAP's staffs who have the authority in related training field, Bachelor degree
9	Any comment	

2016 ANTEP Needs from Thailand (OAP)

No.	Question	Entry Column
1	Content of training/education that you need	Development and management of HRD
2	Background of above need (Why do you need above-mentioned training/education?)	The new draft of Nuclear Energy Act of Thailand is recently passed. Office of Atoms for Peace (OAP) as a regulatory body is aware of the importance of human resources development and management inside the organization. To gain more knowledge on the topic will help us to strengthen our organization capability on nuclear and radiological regulation.
3	Field	A. Radioactive Waste Management B-1. RI Application B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety E-2. Radiation Safety F. Policy/ Planning/ Administration G. Others
4	Level	Advanced Medium Basic
5	Type	Go to abroad Invite foreign expert
6	Priority (Please circle)	High Medium Low
7	Preferable method and duration	Method -Lecturing -Seminar -Fellowship program -On the job training -Technical visit -Experience exchange Period -1-2 months
8	Type of a trainee	OAP's staffs who have the authority in related policy planning/public relation/HR/training field
9	Any comment	

2016 ANTEP Needs from Thailand (OAP)

No.	Question	Entry Column
1	Content of training/education that you need	Role of Radiation safety
2	Background of above need (Why do you need above-mentioned training/education?)	Emergency Preparedness Response (EPR) Center jus has been established at Office of Atoms for Peace (OAP, Thailand) for 6 months. The main duty of this Center is to response to Nuclear & Radiation emergency. Response team's staffs are coming from different sections so background knowledge of them has to be given and fulfilled. Therefore response team's staffs have be trained in EPR intensively to understand all of the procedures that are really needed to use in the field.
3	Field	A. Radioactive Waste Management B-1. RI Application B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety [E-2. Radiation Safety] F. Policy/ Planning/ Administration G. Others
4	Level	Advanced [Medium] Basic
5	Type	[Go to abroad] Invite foreign expert
6	Priority	[High] Medium Low
7	Preferable method and duration	-Classroom lecture, workshop and site visit facilities -Duration may be 2 weeks
8	Type of a trainee	Officers and Grand staffs who takes charge of Radiation safety facility
9	Any comment	

2016 ANTEP Needs from Vietnam

No.	Question	Entry Column
1	Content of training/education that you need	Follow up Training Course: **Nuclear and Radiological Emergency Preparedness**
2	Background of above need (Why do you need above-mentioned training/education?)	We are continuing to support transfer of nuclear-related knowledge, skills and experience to young members working in nuclear energy and related fields.
3	Field	A. Radioactive Waste Management B-1. RI Application B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety [E-2. Radiation Safety] [F. Policy/ Planning/ Administration] G. Others
4	Level	Advanced Medium [Basic]
5	Type	Go to abroad Invite foreign expert
6	Priority	[High] Medium Low
7	Preferable method and duration	- Theory and Practice in 2 weeks
8	Type of a trainee	The cadres of VINATOM, VARANS and Department of Science and Technology of Local Provinces
9	Any comment	It was submitted to Steering Committee Meeting between VINATOM - JAEA

2016 ANTEP Needs from Vietnam

No.	Question	Entry Column
1	Content of training/education that you need	Follow up Training Course: **Environmental Radioactivity Monitoring (ERM)**
2	Background of above need (Why do you need above-mentioned training/education?)	We are continuing to provide skills and experience to young members working at nationwide different organizations
3	Field	A. Radioactive Waste Management B-1. RI Application B-2. Radiation Application C. Plant/Reactor D. Nuclear Fuel/Material E-1. Nuclear Safety E-2. Radiation Safety F. Policy/ Planning/ Administration G. Others
4	Level	Advanced Medium Basic
5	Type	Go to abroad Invite foreign expert
6	Priority	High Medium Low
7	Preferable method and duration	- Theory and Practice in 2 weeks.
8	Type of a trainee	Staffs working in ERM or related filed from VINATOM, VARANS, VAEA and Department of Science and Technology, Public Health Institute …
9	Any comment	It was submitted to Steering Committee Meeting between VINATOM - JAEA

2016 ANTEP Needs from Vietnam

No.	Question	Entry Column
1	Content of training/education that you need	Follow up Training Course: **Reactor Engineering**
2	Background of above need (Why do you need above-mentioned training/education?)	To provide skills and experience that they can continue their studies in priority research teams.
3	Field	A. Radioactive Waste Management B-1. RI Application B-2. Radiation Application [C. Plant/Reactor] D. Nuclear Fuel/Material [E-1. Nuclear Safety] E-2. Radiation Safety F. Policy/ Planning/ Administration G. Others
4	Level	Advanced [Medium] Basic
5	Type	Go to abroad [Invite foreign expert]
6	Priority	[High] Medium Low
7	Preferable method and duration	On job training in 2 weeks
8	Type of a trainee	The cadres of VINATOM, Universities
9	Any comment	It was submitted to Steering Committee Meeting between VINATOM - JAEA