



Human Resources Policy of Japan Atomic Energy Agency
—For activity in the world as a professional of Nuclear Energy—

August 1st, 2017
National Institute
Japan Atomic Energy Agency

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Chapter 1 For formulation of Human Recourses Policy

1 Introduction

Japan Atomic Energy Agency (hereinafter JAEA) has been positioned as National Institute by Act on General Rules for Incorporated Administrative Agency¹ since April, 2015. JAEA provides maximization of R&D and efficient job performance as major purposes not only in the General Rules for Incorporated Administrative Agency but also Mid-and Long-Term Plan².

In order to achieve this purpose, JAEA formulated “Plan related to comprehensive personnel which includes ideal image of employees to be pursued, employment and policy of promotion” (Human Resources Policy). And we operate by arranging the right man in the right place, and reconsider each human resource policy to bring out maximum ability of employees.

¹Abstraction from Act on General Rules for Incorporated Administrative Agency (Paragrahp3, article2,) *Translated by Personnel Department, JAEA

“National Research and Development Agency” is a corporation constituted in individual acts as an independent administrative institution which aims to acquire maximum R&D outcomes of R&D which contribute to healthy development of national economy or to other public welfare through raising the level of scientific technology in Japan, by conducting, as its major operations, from among the public-sector affairs, those related to scientific technology examination, research or development (hereinafter R&D) which needs to be executed from the mid-and-long-term view point as well as on the initiative of the agency to a certain extent in light of the characteristic of such affairs, based on a plan for achievement of purpose related to business management which determined Mid-and-Long-Term plan by government.

²Abstraction from Mid-and-Long-Term Plan (from fiscal year 2015 to 2021)

*Translated by Personnel Department, JAEA

V. Important matter regarding other business managements

4. Plan related to personnel

For maximization of R&D outcomes and effective business performance, we formulate plan related to integrated personnel which includes policy such as ideal image of employees to be pursued, recruitment and development, and we strategically work with paying attention to points, especially those mentioned bellow.

As for researcher, we prepare environment which enables fluid research environment, and acquisition of excellent researchers domestic and overseas. Also, we expand personnel exchange with universities and research agencies and contribute to development of nuclear energy personnel not only within JAEA but also in Japan. We aim to produce personnel who can play a role internationally, and expand research chance in overseas universities and research agencies and dispatch JAEA’s personnel to international organizations.

We conduct cross-organizational and resilient personal arrangement according to progress of R&D or situation of business in each organization. In addition, for improvement of R&D ability and organization management ability which are needed for organization management, we conduct personnel arrangement based on the right man in the right place with considering career path which assure personnel fluidity.

For development of management ability of organization and acquisition of knowledge and skills needed for work, we expand training systems including personnel exchange with industry. Also, we work on intergenerational technology transfer by effective utilization of reemployment system.

With a view to positive acquisition and utilization of female employees, we positively work on gender equality, and continuously strive for expansion of work-life balance.

We make clear responsibility and work on improvement of motivation and capacity by strict evaluation of executive and employees’ ability and performance by proper utilization of personnel evaluation system, and reflection of such evaluation results to each of their treatment.

2 Background and purpose of Human Resources Policy

JAEA formulated “Policy of personnel utilization” (refer to Reference 1) based on the paragraph 1, article 24 of “the Act regarding Efficient Promotion of R&D and Enhancement of R&D Ability by Promotion of Reform of R&D System” (R&D Enhancement Act) in October 2010. Based on this policy, we plan efficient and effective promotion of various R&D by implementing measures such as utilization of various human resources such as young researchers, female researchers, and foreign researchers, cooperation with industries or universities and personnel exchange.

“Human resource management implementation plan” was formulated In June2, 2011(refer to Reference 2). In the plan, with the major purpose to develop human resources who can exert leadership, we divided components of human resource management into 3 phases which are “acquisition”, “development”, “utilization” of human resources and have been working on each policy in the phases.

In addition, third period of Mid-and-Long-Term plan has started in April, 2015. By playing the central role in producing innovative science and technology in the field of nuclear energy through our own R&D as well as through active cooperation with the universities and industry, and applying them in the society, we are working to contribute to maximization of R&D in field of nuclear science technology of whole Japan.

On the other hand, some parts of JAEA’ s project was moved to “Quantum and Radiological Science and Technology” in April, 2016. Also, “Basic policy for decommissioning of ‘Manju’ ” was decided in June 2017. Now, it’ s a turning point for JAEA’ s operation.

In such a situation, JAEA is facing issues bellow. In order to address these issues appropriately, we formulated Human Resources Policy and ideal image of employees to be pursued, and career path policy. And leaders of each section/base, Management Sector, and Common Mission Sector formulate promotion plan according to each sectors case, and sequentially we follow or make a course correction by yearly promotion interview. By doing so, we motivate employees and work on improvement of their resources and abilities. And we contribute to acquisition of excellent human resources and systematic human resource development by trying to improve work environment which meets society’ s needs flexibly.

① Issues related to development of young employees

Ability to find issues, think, act, and resolve is needed for each employee in order to make use of limited human resources and to carry out business efficiently and effectively. These abilities are gained through many experiences and getting over difficulties, and it can’ t be in a day.

We prepare policy which work on career-building and improvement of motivation of young employees and we need to develop them systematically who can act autonomously and independently.

② Issues related to improvement of technological strength/professional expert for

promotion of nuclear business safety

In order to create R&D outcome of JAEA, and carry out safely and reliably the tasks which are essential in its operation such as that for ensuring safety of nuclear facilities and meeting the requirements of new regulation standards and that for back-end projects such as decommissioning, each employee has to develop resources of technological strength or professional expert.

In technical area such as nuclear power R&D and security management of nuclear facilities, we need to produce human resource who leads business.

③ Issues related to improvement of work and labor environment

It is the major premise that labor environment is developed for employees to exert their potential. We also need more effort to prevent over time working and improvement of work environment.

We pay attention that good or bad of labor environment has big influence on society's evaluation of corporation and recruitment activity. We need to reconsider working way drastically and to maintain and improve work-life balance.

④ Issues related to promotion of diversity

We contribute to more utilization of female employees from view to promote female activity. And we need to promote diversity in order to positive promotion of JAEA's internationalization, for example, assignment of foreigners.

We need to create environment and policy so that various people can work with feeling relieved.

⑤ Issues related to optimization of personnel and age compositions

We have to revise personnel and age compositions because the number of employees younger than 40 years old is getting smaller. It's because decreasing number of students, control of hiring employees according to reduction of labor cost based on reformation of whole reduction of labor cost (from 2006 to 2011) and personnel cut (about 500 employees cut) after integration of corporations which followed decision of 1st Mid-term target in October 2010.

We need to supply lacking age range by Mid-career employing, for example.

Chapter 2 Human Resources Policy

1 Main points of Human Resources Policy

In order to resolve facing tasks mentioned above and to maximize R&D outcome as national institute, we put up main points of Human Resources Policy, and based on them, we contribute to development of each employee's qualification and to reinforcement of organizational base by working out human resource policy related to planned development and resilient utilization of human resources.

【Main points】

- 1 Development of professionals in a well-planned manner and promotion of the generational transfer of knowledge and skills
- 2 Acquisition and development of human resources with technological capabilities and expertise
- 3 Maintenance and improvement of work-life balance
- 4 Promotion of diversity
- 5 Optimization of personnel and age composition

2 Ideal Image of employees to be pursued

~ Specialist group of nuclear trusted by society~

By showing ideal image of employees to be pursued which is shared among all employees, we encourage them to voluntarily commit themselves to their tasks. We, as an organization, take the responsibility of promoting their growth and strive to maximize the motivation and capabilities of every employee.

【Ideal image of employees to be pursued】

- ◇ Persons who understand management philosophy and can implement it in a steadfast and voluntary manner
- ◇ Persons who play an active role in the international community while demonstrating originality and an innovative mindset in their respective areas of specialty
- ◇ Persons who understand their respective roles within their organizational structure and demonstrate a high level of expertise while collaborating with others

【Explanation】 ※Reference 3

- ✓ Persons who can act on their own initiatives and implement items that should

- be implemented, with deep understanding on JAEA's management philosophy (mission, slogan, basic policy, behavior standard) and M V S (Mission, Vision, Strategy) etc.. (※) as well as clear vision of future, fully recognizing the items to be implemented for the realization of such future vision
- ✓ Persons engaged in basic research, applied research, or technological development, who, while cooperating with various research agencies, can create world-class research outcome in their professional fields and can act in a global arena with deep expertise, wide range of view, and international way of thinking
 - ✓ Persons who, while respecting rules and governance, always strive for self-improvement and display strong competence and capability of their expertise for fulfilling their own missions/roles, as well as having capability to certainly achieve the goals of the organization they belong to by leading and following up team members through communication so as to maintain the teamwork

3 Career Path Policy

We contribute to career awareness of employees by clarifying JAEA's career path policy. With this, leaders of each section/base, Management Sector, and Common Mission Sector formulate promotion plan according to each sectors case, and sequentially follow up and make a course correction by yearly promotion interview. By doing so, we contribute to various career development※ according to each employee's skills or adaptability, and we work on improvement of each employee's ability which leads to improvement of whole performance of JAEA.

※Includes changes of the sort of occupation

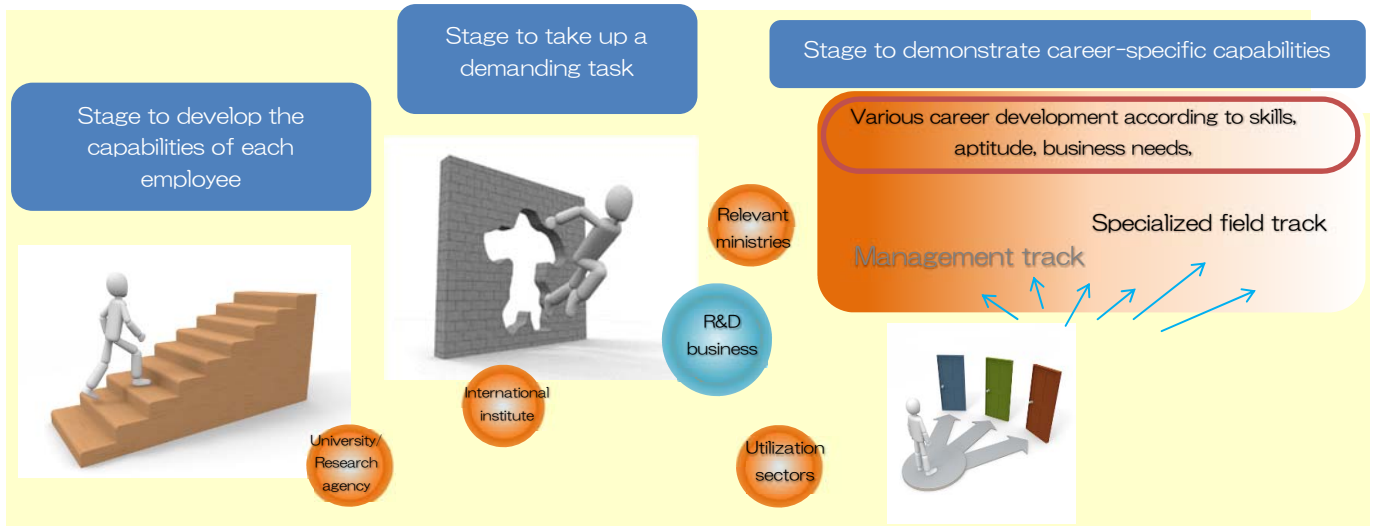
Research position career
 – Conduct original and innovative R&D and carve out a future of nuclear energy–

As for employees in research position career, in order to foster employees who have high specialty, a certain period of time after the employment is focused on the accumulation of expertise by engaging exclusively in research in specific areas.

With regard to the mid-level and higher employees (Scientist-Senior Scientist), target is set for developing expertise in R&D tasks. Also, for contributing to future management of the organization, opportunities are provided for experiencing tasks in integrating sector in JAEA (Office of Strategy and International affairs, R&D Program Management Department, Radioactive Waste Management Department, Safety and Nuclear Security Administration Department, and Planning and Co-ordination Office of each sector) and secondment to relevant ministries/local government, international organizations etc. according to his/her aptitude, thereby developing human resources having a broad vision and expertise.

In terms of the employees at the Senior Scientist/Research Engineer level and higher, two possibilities are provided, that is, the "Management Track" for those who will be engaged in the tasks concerning planning, management, etc. based on the expertise developed through their previous research activities, and the "Specialized

Field Track” for those who will continue to produce world-level research results. We utilize existing Science system and Principal Scientist or Senior Scientist system. However, as for positioning of Principal Scientist, we consider system revision for encouraging exertion of ability in R&D activities and teaching young researchers.



An example of career model (Research positions)						
Positions	Scientist		Senior Scientist		Principal Scientist	Senior Principal Researcher
Age (Generations)	20s		30s		40s	
Middle range plan of Activity principal	○Base as member of society ○Knowledge as a researcher ○Improvement of specialty	○Specialty of their own ○Collaboration with other and dissimilar fields	○Improvement of presentation ability ○Presentation at conferences	○Autonomous research activity ○Improvement of management activity and management of whole research activity ○Teaching for young researchers	○Coordination of whole research group ○Foster of researchers in group ○Creation of R&D outcome	
Operation guidance/Role	Teaching by consulting staff Teaching by research group leader		Autonomous research activity		Autonomous research activity Integration of research group	Integration of division
Personnel exchange/Transfer	In JAEA (integrating sector) Out of JAEA (ministries, research agencies)					
Education training	Training for new employees		Management level promotion training			
International experience	Conference, international meetings Transfer to overseas		Transfer to international organizations			
Papers/Conference activities	Writing a paper : ○○reports/year Conference presentation : ○○times/year External founds : ○○yen/year		Writing a paper : ○○reports/year Conference presentation : ○○times/year External founds : ○○yen/year		Writing a paper : ○○reports/year Conference presentation : ○○times/year External founds : ○○yen/year	
Outreach activities	Participation to regional association activity, contribution to school education, recruitment activities		Lecture of partner graduate school, external seminars, conference of report results, café scientific			

Engineering position career
 –Play an active role as an engineer, engaging in the latest technology development or operating cutting-edge facilities–

As for regular engineer, a certain period of time after the employment is focused on the accumulation of expertise by engaging exclusively in engineering tasks in the specific areas in order to foster employees who have high specialty.

With regard to the mid-level and higher employee (employee around the level of Chief), target is set for developing expertise in tasks such as technology development and operation management of research facilities. Also, for contributing to future management of the organization, opportunities are provided for experiencing

tasks in integrating sector in JAEA (Office of Strategy and International affairs, R&D Program Management Department, Radioactive Waste Management Department, Safety and Nuclear Security Administration Department, and Planning and Co-ordination Office of each sector) and secondment to relevant ministries/local government, international organizations etc. according to his/her aptitude, thereby developing human resources having a broad vision and expertise.

In terms of the employee at the Assistant Manager level and higher, two possibilities are provided, that is, the “Management Track” for those who will be engaged in the tasks concerning planning, management, etc. based on the expertise developed through their previous research activities, and the “Specialized Field Track” for those who will contribute to JAEA by mastering the technology in their areas of expertise or that concerning special facilities and equipment. In addition to making use of the current engineering employee system, introduction of the senior engineering employee system is considered aiming to clarification of career-building in the “Specialized Field Track” .

Also, people who have expertise or ability which is essential for JAEA, such as Supervisor of Reactor Technics, Electrical Chief Engineer, Quality Management System(QMS), and Internal Auditor are to be engaged in duties requiring expertise as “expert core personnel” . (They could be employed after retirement.)



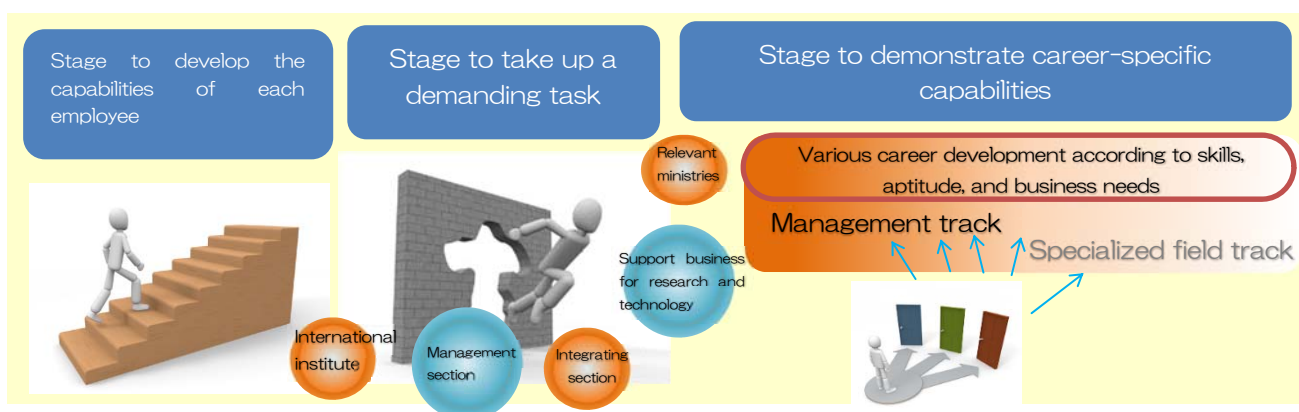
An example of career model (Engineering positions)						
Positions	General employee(engineer)		Around Chief(Engineer)	Around Assistant Manager(Engineer)	Around General Manager	Around Deputy Director
Age (Generations)	20s		30s		40s	
Middle range plan of Activity principal	<ul style="list-style-type: none"> OBase as member of society OAcquisition of basic technic 	<ul style="list-style-type: none"> OExperience of various business OUnderstanding JAEA whole business OPlaying a core role in belonging sector 	<ul style="list-style-type: none"> OCore personnel in belonging sector OCooperation with other sectors OAssistance of Management-level employees/teaching to subordinates 	<ul style="list-style-type: none"> OConscious of future career OManagement of whole belonging sector OAssistance of General Managers 	<ul style="list-style-type: none"> OResponsible person at section ORisk management/ Setting of organizational objectives in their section OAssistance of each sections business 	
Operation guidance/Role	Teaching by consulting staff Teaching by supervisor/senior employees	Teaching subordinates as a senior staff		Autonomous job performance Teaching of subordinates	Management of section	Assistance of Director
Personnel exchange/Transfer	In JAEA (integrating sector) Out of JAEA (ministries)					
Education training	Training for new employees	Training for mid-career employees	Training for Chief level	Training for Around Assistant Manager level	Training for General Manager level Evaluator training	
Outside lectures	Education course for Supervisor of radiation protection (class 1st)	Education course for Supervisor of Reactor Technics Education course for Chief Engineer of Nuclear Fuel				
International experience		Transfer to overseas		Transfer to international organizations		
Qualifications	Supervisor of radiation protection (class 1st)	Supervisor of Reactor Technics Chief Engineer of Nuclear Fuel Consultant engineer				
Outreach activities	Participation to regional association activity, contribution to school education, recruitment activities			Lecture of partner graduate school, conference of report results, explanatory meetings for radiation		

Administrative position career

—Contribute to the smooth business execution of JAEA and serve as a bridge between specialists and society—

From regular employees to around Chief, the cycle of transfer is generally in 2 ~3 years for the certain period of time after employment. By letting them experience various administrative business (job rotation) such as support business for research and technology, and, management sectors, we judge their future direction according to their evaluation of aptitude. We work on fostering personnel not only generalist but also personnel who excels in specialized field such as legal, labor and personnel, financial, and contract.

In terms of the employee at the Assist Manager level and higher, two possibilities are provided, that is, the “Management Track” for those who will be engaged in the tasks concerning planning, management, etc. based on the abilities and wide knowledge on work developed through their previous administrative work, and the “Specialized Field Track” for those who will contribute to JAEA as employee who have expertise in specialized fields (legal, labor and personnel, financial, contract, international affairs, and public relation etc.)



An example of career model (Administrative positions)						
Positions	General employee		Around Chief	Around Assistant Manager	Around General Manager	Around Deputy Director
Age (Generations)	20s		30s		40s	
Middle range plan of Activity principal	<ul style="list-style-type: none"> ○Base as member of society ○Acquisition of basic knowledge 		<ul style="list-style-type: none"> ○Experience of various business ○Understanding JAEA whole business ○Playing a core role in belonging sector 	<ul style="list-style-type: none"> ○Core personnel in belonging sector ○Cooperation with other sectors ○Assistance of Management-level employees/teaching to subordinates 	<ul style="list-style-type: none"> ○Conscious of future career ○Management of whole belonging sector ○Assistance of General Managers 	<ul style="list-style-type: none"> ○Responsible person at section ○Risk management/ Setting of organizational objectives in their section ○Assistance of each sections business
Operation guidance/Role	Teaching by consulting staff Teaching by supervisor/senior employees		Teaching subordinates as a senior employees		Autonomous job performance Teaching of subordinates	Management of section Assistance of Director
Personnel exchange/Transfer	Regular Job rotation in 2~3years		In JAEA(Integrating sections) Out of JAEA(ministries)		Regular rotation by considering specialty	
Education training	Training for new employees	Language business training	Training for mid-career employees	Training for Chief level	Training for Around Assistant Manager level	Training for General Manager level Evaluator training
Outside lectures	Basic nuclear energy course		Training at the Ministry of Finance			
International experience			Transfer to international organizations			
Qualifications	Health supervisor (class 1st) Social security consultant Bookkeeping etc.					
Outreach activities	Participation to regional association activity, contribution to school education					

Chapter 3 Principal Human Resources Management Measures based on Human Resources Policy: Future development

1 Development of professionals in a well-planned manner and promotion of the generation transfer of knowledge and skills

In addition to existing measures such as “overseas nuclear study program system”, “nuclear study/basic training for research position system”, and “instructors and consulting staff system”, we work on fortification of measures mentioned below.

1 (1) Career path setting by each employee

We set up each employee’s future career path, and work on fostering young employees by planned education and training, for example. Also, we work on view expansion/development of ability of employees by letting them experience integrating sectors or relevant central government(transfer).

1 (2) Supporting acquisition of a doctoral degree

We support acquaintance of a doctoral degree after employment.

1 (3) Encouragement of the acquisition of governmental-sanctioned qualifications

As for qualification needed for work, we encourage attendance to relevant lectures and promote positive acquisition. Especially, essential qualifications for JAEA (such as Supervisor of Reactor Technics, Chief Engineer of Fuel, Electrical Chief Engineer, and Consulting Engineer), we urge positive acquisition.

1 (4) Foster of International personnel (Expansion of overseas nuclear study program)

By expanding overseas nuclear study program and transferring to overseas research agencies, we bring up young employees who have international view. In addition, we work on fostering world class employees with grovel view by expansion of practical business language training which aims at acquisition of practical skills such as presentation and disassociation in foreign language.

1 (5) Proactive utilization of exceptional personnel promotion

For excellent employees, regardless of age, educational background, and year of experience, we positively select them for high post and offer them place where they can exert their potentials.

1 (6) Introduction of personnel exchange program in JAEA

We foster personnel who can play an active role in various fields by introducing a new personnel exchange program^{*1} that will widen the scope of the specialty of employees by experience of different business in different sectors in JAEA for a certain period of time.

1 (7) Utilization of retirees

As for know-how which retiree's temporarily reemploys own, specific measures will be taken to transform tacit knowledge (knowledge held by an individual and is not kept in written or another way to share with other people) to explicit knowledge (knowledge in written or another form that allows sharing with other people), so that such know-how can be actively used for fostering young employees. Also, we consider utilization of retirees for business which needs expertise/ability.

2 Acquisition and development of human resources with technological capabilities and expertise

In addition to existing measures such as "Personnel systems for researchers and engineers", "Various award programs", and "Leader training/Management training", we fortify measures mentioned below.

2 (1) Utilization of cross-appointment system

We prepare environment where excellent personnel can play an active role in several agencies by introducing cross-appointment system^{*2} with universities and research agencies. By this, we work on personnel development and activation of JAEA.

2 (2) Promotion of acquisition of external human resources

We activate R&D activities in each sector and maximize R&D outcome of JAEA by positive employment of external researchers and engineers with high specialty.

2 (3) Expansion of tenure-track system

We positively assign excellent researchers who will be expected to play an active role in many fields by utilizing job matching system which enables to employment of excellent researchers in other sectors on tenure-track system.

2 (4) Development of executives

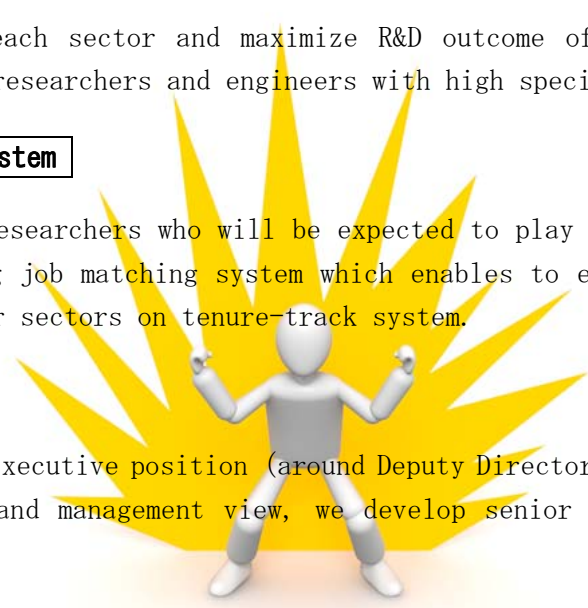
By training for candidate for an executive position (around Deputy Director) to gain view of overlooking whole JAEA and management view, we develop senior executive employees.

2 (5) Expansion of measures for development of legal chief

As for employees assigned to the duties designated in laws such as Supervisor of Reactor Technics, Chief Engineer of Fuel, we encourage acquisition of qualification by review of treatment according to duty.

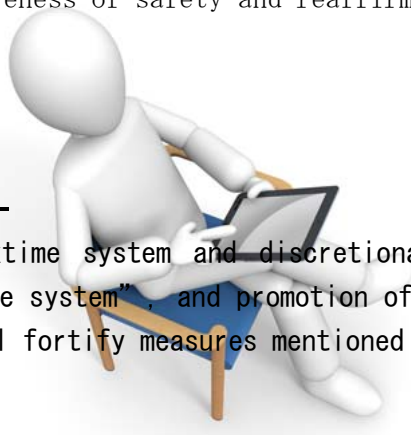
2 (6) Establishment of Senior Engineer

For development of technical incentive, "Senior Engineer" is established as superior post. And we clarify career of Specialized field track of engineer.



2 (7) Promotion of fostering safety culture

In order to complete security of our facilities and quality assurance, we carry out activities which urges every employee's awareness of safety and reaffirmation the role and security.



3 Maintenance and improvement of work-life-balance

In addition to existing measures such as “Flexitime system and discretionary labor system”, “Child care leave and nursing care leave system”, and promotion of “Summer holidays and morning-oriented work style”, we will fortify measures mentioned below.

3 (1) Implementation of work style reform

We try to improve office environment which is easy to work for every one by measures such as modification of long work hours and improvement of labor productivity.

3 (2) Utilization of Spouse accompaniment leave system

We contribute to employee's work-life-balance by utilization of Spouse accompaniment leave system which enables employees to take holiday according to spouse's transfer abroad.

3 (3) Utilization of return-work system

We utilize return-work system which enable employees who left job with inevitable personal reason to return to work, and contribute to employees' work-life-balance and acquisition of human resources of immediate use and activation of JAEA.

3 (4) Consideration of Stay-home work system

We consider introducing Stay-home work system with paying attention to information security and management of working hours.

3 (5) Promotion of acquisition of Child care leave

In order to make it possible to cope with both work and child care for men and women, and enable all employees to exert abilities adequately, we promote more understanding for child care leave/ holiday system in office. Also, we create atmosphere which male employees can easily join child care.



4 Promotion of diversity

In addition to existing measures such as “Mentor system” , “Proactive recruitment of foreign national and female researchers” , and “Various activities related to gender equality” , we will fortify measures mentioned below.

4 (1) Development of female employees to assume managerial positions

By positively assignment excellent female employees to managerial position, we take in various ideas and views. Then, we contribute to activation of JAEA and well-balanced business management in whole JAEA, and show role model for young female employees.

4 (2) Employment of female candidate-executive(including transfer)

By positively employ (accept) female candidate-executive, we contribute to expansion of involvement/promotion of activity of female based on the basic plan of gender equality.

4 (3) Creation of a limited job (type/work) location personnel system

We will respond to the needs of work sites (especially technical sites) for employment limiting type of work and place of work and thereby contribute to ensuring continuity of the JAEA’ s operation by diversified employee.

5 Optimization of personnel and age compositions

In addition to existing measures such as “Promotion of fluidization of personnel in JAEA” , we will fortify measures mentioned below.

5 (1) Promotion of Mid-career employing

In order to reinforce less generation class in each section, we employ flexible mid-career employing and contribute to optimization of personnel composition.

5 (2) Expansion of school recommendation system

In addition to existing high school recommendation system (recommendation from high school), we ask universities and technical colleges to recommendation. By construction friendly relationship with universities and technical colleges, we constantly acquire excellent students.

5 (3) Expansion of recruiter system

We additionally expand target university of recruiter system, and we early grasp students who are interested in JAEA. Then, by following up them accordingly, we ensure acquisition of excellent students.



5 (4) Improvement of internship system

We hold internship and get rid of students' anxious for employment and deepen their understanding of JAEA by real experience of work place and facilities of JAEA.

5 (5) Consideration of fall period employment

These days, some universities are introducing fall period graduation. In order to correspond to this, we consider fall period employment of new graduate.

5 (6) Consideration of inter-organizational transfer based on analyzed result of each sectors personnel composition

We contribute to optimization of personnel composition and promote flexible and fluid inter-organizational transfer which reinforce shortage part each other in order to reform personnel composition gap in each organization. Also, as for Safety/Department of Radiation Protection, and Facilities Construction and Utilities and Maintenance Section, we take planned personal distribution beyond the respective sites, centering Safety and Nuclear Security Administration Department, Construction department, etc.

5 (7) Enforcement of in-house employee recruitment system in JAEA

Through an in-house employee recruitment system in JAEA^{*3}, we contribute to fluid personnel assignment and optimum personal distribution by assignment to different department according to the needs of organization or request of employees. Also, through opportunity announcement for retiree's temporary reemployed, we actively utilize temporary employees' ability, and contribute to improvement of agency's ability.

※1 Personnel exchange program in JAEA

A system to widen specialization by experiencing various type of work for a certain period of time in other departments in JAEA

※2 Cross-appointment system

A system that allows acceptance of researchers etc. of universities etc. to JAEA and dispatch of the JAEA employees to the universities etc., enabling them to be engaged in R&D in accordance with the roles in each of the organizations under the employment agreement with the two organizations.

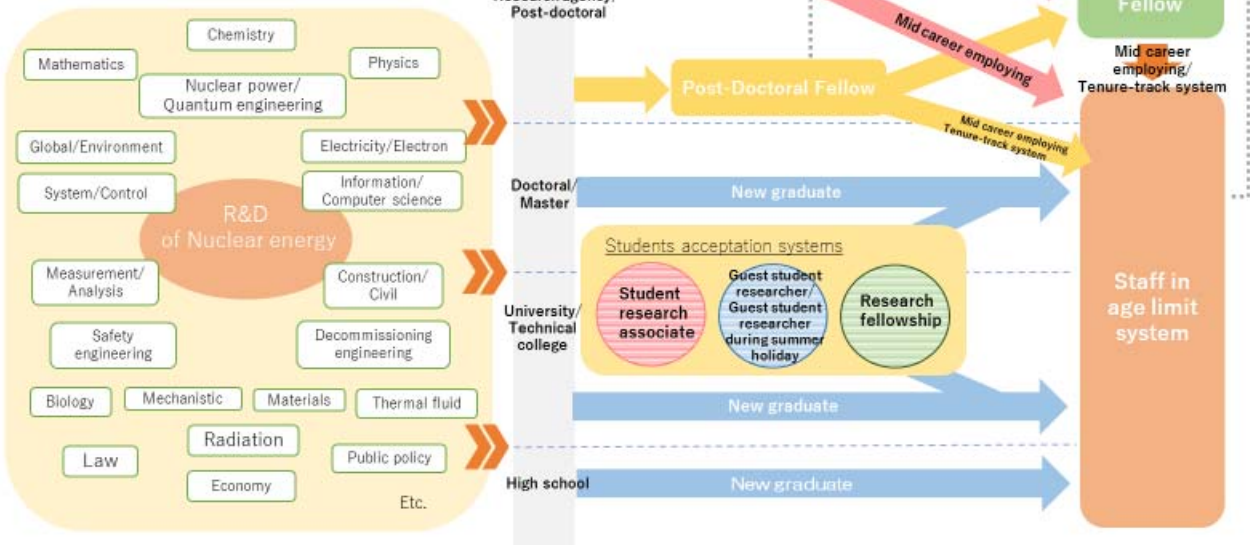
※3 In-house employee recruitment system in JAEA

A system which enables each organization to advertise for needed posts, and suitable employees to be assigned to the post beyond the organization they belonged originally, and thereby contribute to fluidization of personnel and optimization of organization



Staff employment path

JAEA has many fields to exert various specialization.



Human resources development=Effective OJT × Appropriate Off-JT × Willingness for self-development

	OJT	Off-JT				
Management-level employees		Senior management level training Training for persons newly promoted to an assistant manager level Training for reinforcing team skills	Practical management training Evaluator training Basic management training Leader training	Application course Basic course	Sabbatical leave system Overseas nuclear study program Nuclear Professional School, The University of Tokyo Seminar on the drafting methodology of research papers Basic training for research positions	※ 1 Practical business language training Training at the Board of Audit of Japan Training at the Ministry of Finance Nuclear energy education course
General employees		System of instructors Follow-up training Training for new employees	Understanding one's position and role Rank-based training		Nuclear energy-related training (technical training)	
	Guidance on carrying out duties, by rank, job category and R&D area		Acquisition of management skills		Improving R&D and related capabilities	Improving administrative and related capabilities

※ 1 Dispatch to international organizations and overseas research institutes and participation in academic conference and external seminars

※ 2 Ethical training for engineers and training on environmental activities, etc./compliance training and risk management training, etc.

Reference 1

Policy related to human resource utilization based on R&D Enhancement Act

October 25th, 2010
Incorporated Administrative Agency
Japan Atomic Energy Agency

Incorporated administrative agency, Japan Atomic Energy Agency (hereinafter JAEA) is the only comprehensive R&D agency in Japan in unclear field. Our mission is to, based on the premise of peaceful use, security, and trust by society, conduct nuclear R&D aiming at stable energy securement in Japan, resolution of global environmental problem, creation of new scientific technology and industry comprehensively, systematically and effectively, and spread outcomes, thereby contributing to welfare of human society and improvement of level of national life.

In order to accomplish this mission, for effective promotion of various R&D, we appoint various human resources such as young researchers, female researchers, and foreign national researchers. By creation of fluid and competitive environment, we activate R&D activities, and we further develop cooperation with industries and universities. Also, by promotion of personnel exchange, we promote resilient R&D which meets changing situation inside and outside Japan, and we try to enforce total power related to nuclear technology in Japan.

As for detailed policy related to personnel utilization to accomplish this, we determine as follows based on basis which is provided by Prime Minister in the paragraph 1, article 24 of the law regarding efficient promotion of R&D and enforcement of R&D ability by promotion of reform of R&D system (R&D Enhancement Act).

1 Items related to ability utilization of young researchers in promotion of R&D

(1) Proportion improvement of young, female, and foreign national researchers in JAEA

As of March 31st, 2010, among researchers etc. in JAEA, the percentage of young employee (under 37 years old) is 27%, female is 3%, foreign national is 1%. With this in mind, we determine goals as follows.

- ① As for young researcher etc., we strive for acquisition of excellent researchers by positive utilization of Post-Doctoral Fellow system and Senior Post -Doctoral Fellow system. By 2014, we try to raise percentage of researchers in whole JAEA to around 30%.
- ② As for female researcher, we promote recruitment activities by female employees in JAEA, holding briefings of recruitment targeted to female students, and visit to women' s college which has science and technology faculty. By 2014, we try to raise percentage of researchers in whole JAEA to around 5%.
- ③ As for foreign national researcher, by positively utilizing research fellow system for participation of foreign national researcher in JAEA' s R&D, and by working on positive acquisition by strengthening cooperation with foreign R&D organizations, by 2014, we try to raise percentage of researcher in whole JAEA to around 2%.

(2) Expansion of chance for activity and independence of young researchers

- ① As supporting measures for Post-Doctoral, we arrange Post-Doctoral Fellow system and Senior Post-Doctoral system for young researchers who have doctoral degree. And we continue positive acceptance of young researchers from the point of view

of expansion of activity chance.

- ② As for researchers under Post-Doctoral Fellow system and Senior Post-Doctoral system, through participation in cooperative activity with domestic and foreign universities, research organizations, and companies, we promote grasping R&D tendency and transmitting of our own outcomes of R&D.
- ③ For research position employee, Senior Post-Doctoral Fellow, and Post-Doctoral Fellow, we have introduced Flextime system which enables them to research flexibly and autonomously, and we try positively utilize these systems.
- ④ For Senior Post-Doctoral Fellow, and Post-Doctoral Fellow, to the ones who make significant research achievement and who have qualification as employee, we provide tenure-track system which opens the door to employment as retirement system employee by examination and we strive for positive utilization of this system.

(3) Utilization of ability of female researchers

- ① From the point of view of work environment improvement which enables female researches to work with ease, we have already introduced flextime system, discretionary labor system, leave system during child care, backup staff system, Maternity leave after/before childbirth related to Senior Post-Doctoral employees and system of extend contract related to child care leave, provide regional information related to child care and nursing, and have founded consultation hotline. We continue positively and appropriately these efforts.
- ② From the point of view of supporting career development of female researches, we provide Mentor system and strive to positive utilization of this continuously. In addition, we hold workshops and forums for utilization and improvement of female employees' ability.
- ③ The committee of promotion of gender equality which was set up from the point of view of positive promotion of gender equality conducts examination of measures and checks progress of the situation. Also, we keep striving to promote understanding as for needs and importance of work-life-balance and gender equality through stratified personnel course and lecture of gender equality.

(4) Utilization of ability of foreign national researches

- ① We positively utilize Research Fellow system for the participation of foreign national researchers in JAEA' s R&D. We set target of public advertisement of employment of regular employees, Post-Doctoral Fellow and Senior Post-Doctoral Fellow not only domestically but also abroad. We strive to positively acquire excellent foreign national researchers by strengthening cooperation with universities and research organizations domestic and overseas.
- ② We prepare consultation hotline for foreign national researchers, and promote Japanese class for them.
- ③ In accordance with the situation of the utilization of foreign national researchers, we appropriately operate accommodations and welfare facilities, and improve work environment for them.

2 Items related to acquisition of prominent researchers

(1) Items concerning efforts for acquisition of prominent researchers

From the viewpoint of acquisition of prominent researchers, we treat them with flexible and adequate level of remuneration according to their ability and career. As for term limit system employees, we strive to prepare environment which allows them to be concentrated on R&D by employment contract with several years of employment period.

(2) Treatment according to ability and results, fair evaluation, and measures to positively recompense the effort

- ① As for researcher under Post-Doctoral Fellow system and Senior Post-Doctoral Fellow system, we carry out judgement of research results in cooperation with university professors, intellectuals inside/outside of JAEA every fiscal year. We continually aim to further improve the performance of researcher through the judgement and to reflect the results to proper treatment.
- ② As for employees, based on personnel evaluation system already prepared, we try to reflect appropriate evaluation of results and performance to treatment.
- ③ We have prepared award system such as R&D achievement award, inventive ideas distinguished service award, and working quality improvement award. We keep celebrate employees who make significant achievements and excellent outcomes.

(3) Preparation of environment which enables excellent researchers to dedicate themselves to research under international and competitive environment

- ① From the point of view of preparing environment which enables excellent researches to dedicate themselves to research, we have developed system to employ people who sport researchers and we try to positively utilize this system.
- ② According to research situation, we aim for flexible and resilient allocation of budget. Also, we try to improve each training of administrative employees for enforcement of business management function which supports R&D activity at the fields.

3 Items related to promotion of personnel exchange regarding R&D

(1) Items related to wide range of utilization of term limit system such as improvement of implemental method and expansion of application range of the system

We have prepared employment system of term limited employees such as Post-Doctoral Fellow, Senior Post-Doctoral Fellow and Research Fellow. By employment of researchers based on these systems, we try to activate research activity by creation of competitive and fluid environment, and also, try to effectively promote research by flexibility and mobility which the system owns. Continually, we try to positively utilize these systems.

(2) Environmental improvement for raising liquidity of personnel between industry-university-government

- ① In case of working for organizations outside JAEA according to requirement of such organizations, we admit side business with permission of JAEA. In addition, aiming at ability improvement of researchers, utilization of research outcome, and activate of research activity, we have prepared systems for improvement of personnel liquidity such as studying domestic/overseas universities and research organizations. We continually try to positively utilize these systems.
- ② From the viewpoint of cooperation with universities, we have made all-around cooperation agreement with universities and promote personnel cooperation. We keep trying to expand research cooperation and encourage effective participation of universities in JAEA's research, and promote development and liquidity of personnel.

(3) Environmental improvement for heightening liquidity of personnel

- ① We strive to improvement of attractive acceptance system such as pay level in accordance with ability and career.
- ② From the viewpoint of improvement of personnel liquidity and researcher's

motivation, in order to dissolve disadvantage of retirement money by short term of tenure in one organization which hinders employees' change of occupation within other research agencies and universities, we strive to prepare systems to sum up several periods of tenure which is a base for calculation of retirement money between other organizations, on the premise that the national government will make such a system.

- ③ In JAEA, for promotion of various R&D from basic ones to project ones in the field of nuclear energy, we try to strengthen JAEA's R&D capability by reinforcement of cooperation of basic and project R&D researches by interchange between them.

4 Other important items related to personnel utilization in reinforcement of basis for promotion of R&D

- ① For project type of long term R&D, it is essential to hand down skills and knowledge owned by senior researchers to young researchers surely and unerringly in addition to acquisition of young researchers. We promote more effective utilization of senior researchers.
- ② We are expected to develop personnel in the field of nuclear energy domestically and overseas, and we prepare needed facilities and system. By improvement of fluidization of researchers including seniors in JAEA, we promote deliberate personnel development of lecturers for nuclear personnel development.
- ③ By utilizing cooperation graduate university system, we positively accept graduate students. And we contribute to effective personnel development by utilization of nuclear facilities of JAEA.

Reference 2

Overview of “Personnel Management Action Plan” 【Generals】

June 30, 2011

1. Introduction

Under 2nd phase of Mid-Term plan, we face difficult situation as for technology succession because of decreasing of employees while reinforcement of R&D and technology development abilities are needed. So, we need to reinforce management of personnel and knowledge. As for human resource management, we consider policy regarding acquisition, development and utilization of personnel, and carry out the policy systematically.

2. Points to be considered for formulation of plans

- (1) Requirement of 2nd phase of Mid-Term plans.
- (2) Prerequisite for consideration of “human resource management” (recognition of situation surrounding JAEA)
 - ①Decreasing trend of budget and the number of employees
 - ②Change of age composition of employees(rising of average age)
 - ③Restraint of salary(requisition of reduction of Laspeyres Index)
- (3) Adjustment with “Policy related to human resource utilization based on Strengthening method of R&D”

3. 3 phases of “Human Resource management”

- (1) Acquisition of personnel (2) Development of personnel (3) Utilization of personnel

4. Consideration of extracting problems and the measures

(1) Recognition of problem

Under 1st phase of Mid-Term plan, while we accomplished goal to reduce employees, the number of organization increased. In addition, severe reduction of budget has kept, but selection and concentration of business haven't proceeded.

During the 2nd phase of Mid-Term plan also, it is supposed that budget and the number of employee are reduced continually, and rising motivation of employees cannot be expected.

(2) Progress in analysis of present situation and outline of plan

In the 1st quarter in fiscal year 2010, we carried out hearing investigation mainly in the large base and section as preliminary research. We solicited opinions as for exiting problems of personnel in sectors. And we exchanged opinions regarding existing personnel systems (type of occupation/level, personnel evaluation, salary, promotion, Scientist/Engineer, personnel development, retirement systems).

We analyzed the causes based on the hearing, we extract items to effectively operate human resource management.

(3) Outline and exhaustive survey of plan

We categorized problems based on priority, importance, and difficulty of accomplishment and considered possible measures(outline), effectiveness and schedule. Keywords of

outline plan of “Human Resource Management Action Plan” (hereinafter “Action plan”) is as follows.

- ①Improvement of individual’ s ability and fostering of excellent managers
- ②Improvement of organization and personnel vitality
- ③Reinforcement of R&D ability

We organized outline, disseminated it to all employees on December 1st, 2010, carried out hearing from all bases and sectors from mid of December to beginning of February, and compiled final draft in March.

5. Way of proceeding of human resource management action plan

The purpose of the plan is to “guarantee continuous competitive advantages of organization from human dimension” . For JAEA, it is “reinforcement of R&D ability” .

Human management is, in the short run, to make personnel contribute to accomplishment of management strategy and for it, to evaluate and treat personnel. In the mid-and-long run, for “continuous competitive advantages” , it is to acquire, develop effectively, and utilize adequately excellent personnel.

As for action plan, for achieving a certain outcome within 2nd Mid-Term period plan, we carry out PDCA cycle with minding action schedule for each plan.

Also, we continuously carry out hearing and collect opinions widely. At that time, if good practice of establishment of personnel development policy in sectors and deliberate application by PDCA cycle are found, we introduce them to all employees and consider and use them as cross organizational measures.

6. Closing

(1) Aim of “Human Resource Management Action Plan”

As for 2nd phase Mid-Term plan which JAEA has established, we insist on importance and necessity of personnel management. Especially, we set “development of excellent manager” as urgent matter, and we assume shortage of personnel who can take the leadership in and outside JAEA as problem.

An important point to accomplish organization goal is “empathy” (sense connected with organization). Only after clear presentation of mid-and-long term form of organization, one’ s station and future statues can be seen. People around will have the same feeling, thought and a sense of “empathy” , and one can act autonomously.

In other words, to “think by oneself and translate into action what one thinks good” based on “empathy” is a form of a matured member of an organization. Those who have the capacity are excellent managers. One who doesn’ t think and act autonomously on daily task can’ t be a manager. Such attitudes as just waiting instruction and completely depending on manuals make organization stagnated.

In action plan, we try various measures. We mainly aim at development of manager who can exert leadership, and would like to create system to construct spiral that such manager develops subordinate who can act autonomously.

(2) For activation of whole organization

The aim of the human resource management in JAEA is, through aptly arranging various personalities and abilities of “people” , resources that have emotion and of which efficiency is not stable, to take measures for improving efficiency of work and create systems and cultures that enable them to exert ability continuously.

In the following “Darticulars” , we wrote down currently thinkable new measurers with a big goal of “activation of whole organization” . However, these are not whole aspect of this action plan. We continually find C&R and needs and set forth new measures including reconsideration of exiting personal system.

In other words, as for business which personnel department takes charge of such as personnel transfer, personnel evaluation, salary structure, grade, award, and training, we would like to promote personnel policy according to this action plan’ s idea.

Overview of “Human Resource Management Action Plan ” 【Details】

Items	Activities	Results
1.Acquisition of human resources		
Integration of recruitment theme and introduction of system to employ all at once	For acquisition of excellent human resources, fluidization of human resources, uniting ex-organizations, we aim at integration of recruitment theme and introduction of test method that is not related to recruitment theme.	Completed
Expansion of recruitment adjustment limitation	We expand recruitment limitation (recruitment adjustment limitation) by discretion of personnel department for independence and offering activity chance for young researchers, (tenure), acquisition of female and foreign national researchers, acquisition of excellent researchers (professional employees), personnel fluidization in JAEA (business education for new employees), strategic personnel arrangement with flexibility and speedy.	Completed
Expansion of recruitment information through WEB	As for information related to recruitment of existing internet medium (HP, recruitment site, etc.), in order to make them more attractive for student, we renew them on a timely basis and expand contents. In addition, we positively utilize new employees as information transmission source.	Completed
Introduction of WEB recruitment examination	As for recruitment examination, we introduce WEB recruitment examination which is convenient to students, and for JAEA, contributes to efficiency of work and enables advancement of selection schedule.	Completed
Introduction of professional employee system	For changing situation of nuclear development, in case we suddenly need specialists in the field of newly launched projects which is not included in the first plan in JAEA, we newly establish employment system of specialists who are already working in universities and corporations domestic and overseers without through public advertisement.	Completed
Promotion of diversity (female and foreign national)	As for diversification (acquisition, development and utilization of human resources such as female, foreign national, young researchers, and specialists in other fields), we rearrange integrating business strategy.	Completed

2. Development of human resources		
Establishment of chair system	We invite world class famous researchers and engineers who are playing a leadership role domestically and overseas as people in charge of counselling, edification, and education of JAEA employee mainly at GL class.	Partly completed
Expansion of business education for new researcher and engineer	As for new college and master graduate employees, we arrange them to basic sectors for gaining basic knowledge, expertise, and technical business training for 1~3years before positioning them to their intended post aiming for the activation of basic sector and education for new employees at the same time.	Completed
Setting of transfer cycle of administrative position	As for administrative position employees, especially from the time of the employment to the age of 37 years old, through transfer in the cycle of 2~3 years basically, we decide direction of their career by evaluation of aptitude manifested through experience of various business.	Completed
Introduction of leader training	Targeting supervisor class, we select candidate of future leader from the class, and let them join training for education leaders.	Completed
Expansion of management training	For education of excellent managers, we improve management training aiming at enhancing business management ability (ability of management).	Completed
Introduction of language and practical business training	We carry out training in order to train linguistic ability such as English which is needed in business regardless of the job category.	Completed
Foundation of sabbatical system	As for employees who have worked over 6 years after promotion to Principal Scientist, we introduce sabbatical leave system up to 1 year aiming at self-development for strengthening the expertise, activities such as practical application of R&D outcomes with a company, and other creative activities.	Completed
Introduction of special award system	In order to enhance more incentive by positively rewarding effort of excellent researchers, we introduce special award system for winners of excellent prize outside of JAEA	Partly completed
Introduction of promotion which skips several ranks system	Aiming for appropriate evaluation and treatment, we introduce a system to enable selection and promotion of those who have shown excellent performance or made substantial contribution to the organization from the	Completed

/recovery system	employees who have not reached the standard age in the promotion review and a system to allow employees to catch up on the promotion they missed due to sickness etc. by achieving an excellent performance after return to work.	
3.Utilization of human resources		
Promotion of personnel fluidization in JAEA	We find personnel who can succeed in other sections, and rearrange them to the right place.	Completed
Foundation of Supreme engineer	For promotion of incentive for engineering position, we newly establish “Supreme engineer” as senior version of engineer.	Under consideration
Approach for motivation	Under difficult situation of maintenance and improvement of employees’ motivation, in order to heighten their morale and make office lively, we acquire know-how for improvement of motivation and practice it.	Completed

Reference 3

Management policy of JAEA

(1) Mission of JAEA

Mission	Explanation
“Break new ground for the future of nuclear energy, and contribute to welfare of human society”	On the basic premise of ensuring safety, we will conduct R&D in the field of nuclear energy in a systematic, comprehensive and efficient manner, aiming to secure stable energy supplies, solve global environmental issues and create new science technology and industry, widely disseminating our R&D achievement, and thus contribute to the improvement of welfare of human society and rise in the national living standards.

(2) Slogan of JAEA

Slogan	Explanation
“High aspirations”	High aspiration which “aims to best in the world” in each field
“Rich ideas”	Rich ideas which enable to create R&D outcomes full of creativity and meet society’s request and national entrustment
“Strong will”	Storing will to tenaciously accomplish goals with feeling of responsibility

(3) Basic policy of JAEA

Basic policy	Explanation
Completeness of safety	On the basic premise of business management, ensure our facilities safety and quality assurance
R&D full of creativity	As integrating R&D organization of nuclear energy, achieve results of R&D outcomes full of creativity according to establishment purpose, and contribute to national society by popularization of outcomes and creation of industry
Serious consideration of field	In order to reconcile achievement of R&D outcomes and completeness of safety, management viewpoint/base are arranged in the respective R&D fields, and arrangement/development of personnel that focus on the R&D fields are conducted.
Efficient business management	Aim at concentration of management resource and selection of own projects, and promote efficient operation as independent administrative agency
Trust by society	To gain trust by Japanese people and society as essential premise for job performing. For this, to promote integration with the local community and information disclosure (transparency of management), give back to the society R&D achievement, observe law and regulation, and establish a good relationship with stakeholders.

(4) Activity base of JAEA

Purpose	Expression of activity criterion to be observed by organizations and employees and executive directors to perform duties
Basic way of thinking	<ul style="list-style-type: none"> • A part of basic management principal of JAEA • Detailed activity standards based on “Basic policy” • Written from the point of view such as giving back to the public R&D achievement, safety first, integration with the local community, observation of law, CSR(Corporate Social Responsibility), transparency of management and information disclosure, obligation to keep secrets, efficient and proper operation, respect for rights and personality

(5) MVS(Mission/Vision/Strategy) of JAEA

MVS of organization	Expression of activity criterion to be observed by organizations and employees and executive directors of JAEA to perform duties
Mission of organization (mission)	☆Break new ground for the future of nuclear energy, and contribute to welfare of human society
Vision of organization (vision)	<p>☆Play a role as R&D organization for nuclear energy in Japan</p> <ul style="list-style-type: none"> • An organization which promotes R&D which contributes to safety of nuclear energy • An organization which can effectively utilize limited management resource(person, goods and money) • An organization which contributes to international use of nuclear energy <p>☆Lead R&D of nuclear energy with high organization IQ</p> <ul style="list-style-type: none"> • An organization with high IQ which put maximum priority on safety, thinks and acts independently constantly, and keeps reformation
Strategy of organization (strategy)	<p>☆Sharing of sense of values (ex. formulation of JAEA value)</p> <p>☆Reinforcement of governance, safety integration, internal control operation (ex. top down/bottom up/middle up & down)</p> <p>☆ Promotion of IT introduction, concentration and streamlining of operation (ex. reallocation of resource, gates management, improvement activity)</p> <p>☆Management reform and defined implementation of action plan (ex. goals/measures/KPI/PDCA cycle)</p>