## Document 6-1

## Mid to Long-term Objectives Comparative Table of the National Institutes for Quantum and Radiological Science and Technology (Draft)

Red letters/underlined parts are the revised parts.

Mid to long-term objectives (Proposed revision)	Current mid to long-term objectives	Remarks (reason)
Table of Contents	Table of Contents	
<ul> <li>(Omitted)</li> <li>III. Matters Concerning to Maximization of the Achievements of R&amp;D and the Improvement of Quality of Any Other Operations <ol> <li>Research and development concerning quantum science and technology and concerning radiology</li> <li>(Omitted)</li> </ol> </li> <li>Popularization of achievements, explained in an easy-to-understand manner, of the research and development, and promotion of utilization of the achievements</li> <li>Promotion of research and development through international cooperation and government-industry-academia collaboration</li> <li>Functions to be assumed as a public organization <ol> <li>Function as a core institution to take measures against nuclear disasters and to perform radiation protection</li> <li>Contribution to reconstruction and revitalization of Fukushima</li> <li>Nurturing of human resources</li> <li>Promotion of utilization of facilities and equipment</li> </ol> </li> </ul>	<ul> <li>(Omitted)</li> <li>III. Matters Concerning to Maximization of the Achievements of R&amp;D and the Improvement of Quality of Any Other Operations <ol> <li>Research and development concerning quantum science and technology and concerning radiology</li> <li>(Omitted)</li> <li>Popularization of achievements, explained in an easy-to-understand manner, of the research and development, and promotion of utilization of the achievements</li> <li>Promotion of research and development through international cooperation and government-industry-academia collaboration</li> <li>Functions to be assumed as a public organization</li> <li>Function as a core institution to take measures against nuclear disasters and to perform radiation protection</li> <li>Contribution to reconstruction and revitalization of Fukushima</li> <li>Nurturing of human resources</li> <li>Promotion of utilization of facilities and equipment</li> </ol></li></ul>	Clarifying the certain group of businesses (the square bracket at left hand)
(5) Establishment and etc. of the next-generation synchrotron radiation	(4) I tomotion of utilization of facilities and equipment (Newly set)	Addition of the description
<u>facilities by the regional public-private partnership</u> (Omitted)	(Omitted)	on establishment and etc. of the next-generation synchrotron radiation facilities by the regional public-private partnership
* Businesses from III.1. (1) to (5) and from III.2 to 4. shall be a certain group of businesses.	(Newly set)	Clarifying the certain group of businesses
I . Position and Role of the Quantum Science and Technology Agency under the Policy System (Omitted)	I . Position and Role of the Quantum Science and Technology Agency under the Policy System (Omitted)	

Mid to long-term objectives (Proposed revision)	Current mid to long-term objectives	Remarks (reason)
II. Period for Mid to Long-term Objectives (Omitted)	II. Period for Mid to Long-term Objectives (Omitted)	
III. Matters Concerning to Maximization of the Achievements of R&D and	III. Matters Concerning to Maximization of the Achievements of R&D and	
the Improvement of Quality of Any Other Operations	the Improvement of Quality of Any Other Operations	
1. Research and development concerning quantum science and	1. Research and development concerning quantum science and	
technology and concerning radiology	technology and concerning radiology	
(1) Grant-in-aid research and creative R&D of quantum science	(1) Grant-in-aid research and creative R&D of quantum science	
technologies (Omitted)	technologies (Omitted)	
(2) Research and development for the innovative medical use of the	(2) Research and development for the innovative medical use of the	
radiation (Omitted)	radiation (Omitted)	
(3) Research on influence by radiation, and radiation medicine	(3) Research on influence by radiation, and radiation medicine	
(Omitted)	(Omitted)	
<ul> <li>(4) Research and development for the application of quantum beam         <ul> <li>In order to promote the creation of scientific and technological             innovation and thus to contribute to the promotion of science and             technology, academics and industry, the Agency will use not only the             facilities possessing accelerators and lasers including the ion             irradiation research facility (TIARA) and the high-intensity laser             generator (J-KAREN) but also the quantum beam facilities inside and             outside the Agency, solving essential problems in the areas of             substance and material science, life science, and industrial             application, and thus performing advanced research having a high             impact economically and socially, using quantum beams, thereby             bringing about innovation. In addition, in order to promote the             creation of the achievements in these areas, the Agency shall conduct             leading research using comprehensively the best functions of             quantum beams, developing state-of-the-art technology relating to the             generation, control and use of beams such as charged particles and             photons.         </li> <li>Furthermore, as the national entity to promote establishment and             operation of the high-brightness 3GeV class synchrotron radiation source             favorable for soft-X-rays (hereinafter "the next-generation synchrotron             radiation facility"), which is expected to be much needed both by             academic and industrial use, the Agency shall conduct R&amp;D for         </li> </ul></li></ul>	(4) Research and development for the application of quantum beam In order to promote the creation of scientific and technological innovation and thus to contribute to the promotion of science and technology, academics and industry, the Agency will use not only the facilities possessing accelerators and lasers including the ion irradiation research facility (TIARA) and the high-intensity laser generator (J-KAREN) but also the quantum beam facilities inside and outside the Agency, solving essential problems in the areas of substance and material science, life science, and industrial application, and thus performing advanced research having a high impact economically and socially, using quantum beams, thereby bringing about innovation. In addition, in order to promote the creation of the achievements in these areas, the Agency shall conduct leading research using comprehensively the best functions of quantum beams, developing state-of-the-art technology relating to the generation, control and use of beams such as charged particles and photons. (Addition)	Addition of the description on establishment and etc. of the next-generation synchrotron radiation facilities by the regional
establishment and etc. of the next-generation synchrotron radiation		public-private partnership
facilities.		

Mid to long-term objectives (Proposed revision)	Current mid to long-term objectives	Remarks (reason)
<ul> <li>(5) Research and development of nuclear fusion (Omitted</li> <li>2. Popularization of achievements, explained in an easy-to-understand manner, of the research and development, and promotion of utilization of the achievements In order to deepen citizens' understanding on the significance of research and development concerning quantum science and technology, the Agency will publish appropriate and easy-to-understand information concerning the achievements expected by the above research and</li></ul>	<ul> <li>(5) Research and development of nuclear fusion (Omitted)</li> <li>2. Popularization of achievements, explained in an easy-to-understand manner, of the research and development, and promotion of utilization of the achievements In order to deepen citizens' understanding on the significance of research and development concerning quantum science and technology, the Agency will publish appropriate and easy-to-understand information concerning the achievements expected by the above research and</li> </ul>	
development and concerning the content given back to society. <u>And the Agency shall promote practical application of the results in its</u> <u>R&amp;D, and create innovation with this. Specifically, r</u> egarding patents, the Agency will develop a guideline for the stages from application including review on marketability and feasibility at the time of domestic application, up to acquisition and possession of patent rights, promoting effective patent licensing at home and abroad. <u>In addition to that, the</u> <u>Agency shall provide investment and personnel and technical supports</u> to the parties which utilize or intend to utilize such R&D results in an <u>appropriate and timely manner.</u>	development and concerning the content given back to society Regarding patents, the Agency will develop a guideline for the stages from application including review on marketability and feasibility at the time of domestic application, up to acquisition and possession of patent rights, promoting effective patent licensing at home and abroad.	Addition of description on the works including investment
<ul> <li>3. Promotion of research and development by industry-academia-government collaboration (Omitted)</li> <li>4. Functions to be assumed as a public organization <ul> <li>(1) Function as a core institution to take measures against nuclear disasters and to perform radiation protection (Omitted)</li> <li>(2) Contribution to reconstruction and revitalization of Fukushima</li> </ul> </li> <li>(Omitted) <ul> <li>(3) Nurturing of human resources (Omitted)</li> </ul> </li> </ul>	<ul> <li>3. Promotion of research and development by industry-academia-government collaboration (Omitted)</li> <li>4. Functions to be assumed as a public organization <ul> <li>(1) Function as a core institution to take measures against nuclear disasters and to perform radiation protection (Omitted)</li> <li>(2) Contribution to reconstruction and revitalization of Fukushima</li> </ul> </li> <li>(Omitted) <ul> <li>(3) Nurturing of human resources (Omitted)</li> </ul> </li> </ul>	
<ul> <li>(4) Promotion of utilization of facilities and equipment (Omitted)</li> <li>(5) Establishment and etc. of the next-generation synchrotron radiation facilities by the regional public-private partnership As the national entity to promote establishment and operation of the next-generation synchrotron radiation facility, the Agency shall promote establishment and etc. of the next-generation synchrotron radiation</li> </ul>	(4) Promotion of utilization of facilities and equipment (Omitted) (Newly set)	Addition of the description on establishment and etc. of the next-generation synchrotron radiation facilities by the regional

Mid to long-term objectives (Proposed revision)	Current mid to long-term objectives	Remarks (reason)
facilities by the regional public-private partnership.		public-private partnership
IV. Matters concerning the efficiency of the administration of business	IV. Matters concerning the efficiency of the administration of business	
operations (Omitted)	operations (Omitted)	
1. Establishment of an efficient and effective management system	1. Establishment of an efficient and effective management system	
(Omitted)	(Omitted)	
2. Rationalization and efficiency of business operations (Omitted)	2. Rationalization and efficiency of business operations (Omitted)	
3. Appropriateness of management of personnel expenses (Omitted)	3. Appropriateness of management of personnel expenses (Omitted)	
4. Matters concerning information disclosure	4. Matters concerning information disclosure	
The Agency will perform information disclosure, based on the "Act	The Agency will perform information disclosure, based on the	
on Access to Information Held by Independent Administrative	"Act on Access to Information Held by Independent Administrative	
Agencies" <u>(Act No. 140 of 2001)</u> .	Agencies" (Act No. 140 of 2001).	Amendment of the error.
Also, it will handle personal information appropriately based on the "Act	Also, it will handle personal information appropriately based on the "Act	
on the Protection of Personal Information Held by Independent	on the Protection of Personal Information Held by Independent	
Administrative Agencies" (Act No. 59 of 2003).	Administrative Agencies" (Act No. 59 of 2003).	
V. Matters Concerning the Improvement of Financial Conditions (Skipped)	V. Matters Concerning the Improvement of Financial Conditions (Skipped)	
VI. Other Important Matters Concerning the Administration of Business	VI. Other Important Matters Concerning the Administration of Business	
Operations (Omitted)	Operations (Omitted)	