

Evaluation of FY2016 Operating Results for Japan Science and Technology Agency

August 2017

Minister of Education, Culture, Sports, Science and Technology

Contents

FY Evaluation Overview of the Evaluation

FY Evaluation Overall Rating

FY Evaluation Ratings Summary Table by Each Item

FY Evaluation Rating record

I Measures to be taken for achieving the objectives concerning the improvement of the service to the nation and the quality of the operations

1. Strengthening research and development strategic planning function for producing science and technology innovation

① Proposal for research, analysis, and research and development strategy for producing science and technology innovation

(Center for Research and Development Strategy Program)

(China Research and Communication Center Program)

② Research, and analysis and proposal for realizing carbon society, and proposal for society scenario and strategy for achieving a low-carbon society

2. Producing science and technology innovation

(1) Promotion of producing science and technology innovation

① Promotion of strategic research and development

② Expanding research and development achievements by industry-academia collaboration

③ Support for reconstruction and reformation from the Great East Japan Earthquake

④ Promotion of international science and technology cooperation research

⑤ Building of an innovation hub centered on research and development agencies

⑥ Utilization support for intellectual property

⑦ Promotion of innovative technology research development

(2) Formation of science and technology foundation for producing science and technology innovation

① Construction of knowledge infrastructure

② Construction of personnel infrastructure supporting science and technology innovation

a. Training of human resources leading the next-generation of science and technology

b. Training of human resources related to science and technology innovation

c. Construction of international personnel exchanges foundation

d. Fostering program managers

e. Promotion of fair research activities

③ Construction of communication infrastructure

(Center for Science Communication)

(National Museum of Emerging Science and Innovation (Miraikan))

3. Other required program for government affairs/business operations

① Promotion of projects accepted by related administrative agencies (other than SIP)

② Promotion of projects accepted by related administrative agencies (SIP)

II Measures to be taken for achieving the objectives concerning the efficiency of the administration of the operations

1. Formation and operation of organization

2. Streamlining and efficiency of operations

3. Improvement of financial conditions

III Budget / income and expenditure plan, and funding plan

IV. Limit amount of short-term borrowing

IV.2 If the agency has any unnecessary property or any property that is expected to be unnecessary property, a plan for disposal of such property

V. If the agency intends to transfer or provide as collateral any important property other than the property provided for in the preceding item, a plan therefor;

VI. Purpose of using accumulated profit

VII. Other matters concerning the administration of the operations specified by ordinance of the competent ministry

1. Items related to the evaluation		
Agency	Japan Science and Technology Agency	
FY for evaluation	FY evaluation	FY2016 (3rd term)
	Mid to long-term objective period	FY2012-2016

2. Items related to the assessor			
The Competent Minister	Minister of Education, Culture, Sports, Science and Technology		
Incorporated jurisdiction dept	Science and Technology Policy Bureau	Dept. and person in charge	Knowledge Infrastructure Policy Division, Masaharu Shiozaki
Evaluation and Inspection dept	Science and Technology Policy Bureau	Dept. and person in charge	Planning and Evaluation Division, Kenji Matsuoka

3. Items regarding implementation of the evaluation
<p>June 12, 2017: Japan Science and Technology Agency Sub-Committee (hereinafter referred to as “JST Sub-Committee”) members conducted a survey of the Faculty of Science and Engineering, Waseda University (CREST).</p> <p>June 13, 2017: JST Sub-Committee members conducted a survey of the Tokyo University of Science.</p> <p>June 26, 2017: A JST Sub-Committee (9th) was held, where a hearing was conducted about results of the self-evaluation by JST board members (President, Executive Directors and Auditors), and the staff.</p> <p>June 30, 2017: A JST Sub-Committee (10th) was held, where, in light of the results of the self-evaluation as explained by JST at the 9th Sub-Committee, necessary counsel was obtained from Sub-Committee members on the evaluation draft by the Competent Minister.</p> <p>July 11, 2017: A JST Sub-Committee (11th) was held, where, in light of the results of the self-evaluation as explained by JST at the 9th Sub-Committee, necessary advice was obtained from Sub-Committee members on the evaluation draft by Competent Minister.</p> <p>August 3, 2017: Received guidance based on the scientific knowledge from members in implementing the Competent Minister’s evaluation in relation to the National Research and Development Agency Council under the Ministry of Education, Culture, Sports, Science and Technology (10th).</p>

4. Important items and others relating to the evaluation
No special matters to note

1. Overall evaluation						
Rating*1 (S, A, B, C, D)	A	(Reference) Previous period's overall evaluation situation in the mid to long-term objective period *2				
		FY2012	FY2013	FY2014	FY2015	FY2016
		—	—	A	A	A
Reasons for rating	As shown in the overall evaluation of the agency as a whole, more progress of performance than expected in the mid to long-term plan and the FY plan is recognized.					

2. Evaluation of the whole agency	
<p>○ In FY plan, JST, as a core executing agency of the Basic Science and Technology Plan, implements projects with “promotion of innovation in science and technology” and “formation of science and technology infrastructure for advancing innovation in science and technology” as two pillars. As “promotion of innovation in science and technology,” JST establishes a network type research institute and, by defining (i) <u>implementation of basic research and (ii) unified implementation of strategic university-industry collaborative projects connecting the outcome of basic research (hereinafter referred to as “new technology”) with the needs of the industry, and by establishing a framework to develop cross-divisional strategies and strengthening strategic expansion of international research and development activities</u>, and with “formation of science and technology infrastructure for advancing science and technology innovation,” <u>JST is making efforts for fulfilling/enhancing a framework to collect/provide science and technology information, including research achievements, fostering next generation human resources, promoting interactive dialogue activities and development of the method, and conducting science and technology communication activities that provide a place for exchanges. Achievements equal to or higher than the target in all projects are seen and, in particular, since the projects listed below are recognized as progressing faster than stipulated in the initial plan, is being rated “A.”</u></p> <p>○ Regarding the business performance, <u>many remarkable achievements in research and development were achieved with social impact, which was highly evaluated both at home and abroad, including one in which healthy mice were born from mouse eggs as differentiated by iPS cells in complete in vitro culture, which was selected as one of the 10 major outcomes in the “Science” magazine.</u></p> <p>○ In addition, research achievements continue to grow for practical application utilizing internal and external frameworks of JST, and in cooperation with other institutions, for which JST is responsible in <u>providing support in each stage of their work from basic research to practical applications.</u></p> <p>○ Concerning efforts in communication activities on science and technology, JST carries out <u>activities allowing for reflections on policy, including bidirectional communication between visitors and researchers in the National Museum of Emerging Science and Innovation (Miraikan) and reporting on visitors’ voices at CSTI dialogues to be used as examining materials from FY2017, and expands the scope of science communication training programs for researchers to include the private sector and universities, thereby encouraging awareness in reform activities as an effort to improve researchers’ social literacy.</u></p> <p>○ In terms of corporate management, JST <u>formulates and promotes “Hamaguchi plan” to reform and further develop JST to an organization that can contribute to the optimization of Japan's innovation and ecosystem as a whole. Based on this plan, creative activities are being carried out with the leadership of the president, including considering and preparing for launching future society oriented projects that would promote high risk and high impact research and development.</u></p> <p>○ JST is also <u>highly evaluated externally, such that it was selected among “TOP 25 global innovators: National research institutions” in the world ranking of national research institutions (ranking fourth in the world and first in Japan), which contributed most to the development of science and technology.</u></p>	

3. Issues to be solved and /or improved for each subject	
In order to further enhance and strengthen its research business to maximize the outcomes of research and development in the future, JST needs not only to support other institutions (universities, etc.) but also to undertake independent research and development, taking advantage of its own functions as a think tank and the science/technology information base it owns.	

4. Other items	
Major opinions of National Research and Development Agency Committee	No special matters to note
Auditor’s special comments	No special matters to note

*1 S: Based on the National Research and Development Agency’s aims, businesses, mid to long-term objectives and so on, as a result of comprehensive consideration based on some circumstances regarding the agency’s business achievements, efforts and so on through its activities, especially the creation of considerable achievements, anticipated creation of special achievements in the future and so on toward “maximization of R&D achievements” under the conditions of appropriate, effective and efficient operations are recognized.

A: Based on the National Research and Development Agency’s aims, businesses, mid to long-term objectives and so on, as a result of comprehensive consideration based on some circumstances regarding the agency’s business achievements, efforts and so on through its activities, the creation of considerable achievements, anticipated creation of achievements in the future and so on toward “maximization of R&D achievements” under the conditions of appropriate, effective and efficient operations are recognized.

B: Based on the National Research and Development Agency’s aims, business, mid to long-term objectives and so on, as a result of comprehensive consideration based on some circumstances regarding the agency’s business achievement, efforts and so on through its activities, a certain degree of expectation for the creation of achievement and creation of achievement in the future toward “maximization of R&D achievements” were recognized, and steady business operations have been also recognized.

C: Based on the National Research and Development Agency’s aims, businesses, mid to long-term objectives and so on, as a result of comprehensive consideration based on some circumstances regarding the agency’s business achievements, efforts and so on through its activities, the creation of achievements, further drastic efforts and improvements toward “maximization of R&D achievements” or “the appropriate, effective and efficient operations” are anticipated.

D: Based on the National Research and Development Agency’s aims, businesses, mid to long-term objectives and so on, as a result of comprehensive consideration based on some circumstances regarding the agency’s business achievements, efforts and so on through its activities, special efforts and improvements including a fundamental drastic review, toward “maximization of R&D achievements” or “the appropriate, effective and efficient operations” are required.

Mid to long-term objectives (Mid to long-term plan)	FY Ratings					No. of document each item	Remarks
	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016		
I. Measures to be taken for achieving the objectives concerning the improvement of the service to the nation and the quality of the operations							
1. Strengthening research and development strategic planning function for producing science and technology innovation	/	/	/	/	/	/	/
① Proposal for research, analysis, and research and development strategy for producing science and technology innovation (Center for Research and Development Strategy Program)	A	A	A	A	A	1.①	
① Proposal for research, analysis, and research and development strategy for producing science and technology innovation (China Research and Communication Center Program)			B	A	B	1.①	
② Research, and analysis and proposal for realizing carbon society, and proposal for society scenario and strategy for achieving a low-carbon society	A	A	B	B	B	1.②	
2. Producing science and technology innovation	/	/	/	/	/	/	/
(1) Promotion of producing science and technology innovation	/	/	/	/	/	/	/
① Promotion of strategic research and development	S	S	A	A	A	2.(1)①	
② Expanding research and development achievements by industry-academia collaboration	A	A	A	A	A	2.(1)②	
③ Support for reconstruction and reformation from the Great East Japan Earthquake	A	A	S	A	/	2.(1)③	
④ Promotion of international science and technology cooperation research	S	S	A	A	A	2.(1)④	
⑤ Building of an innovation hub centered on research and development agencies	/	/	/	B	B	2.(1)⑤	

Mid to long-term objectives (Mid to long-term plan)	FY Ratings					No. of document each item	Remarks
	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016		
II. Measures to be taken for achieving the objectives concerning the efficiency of the administration of the operations							
1. Formation and operation of organization	A	A	B	B	B	II-1	
2. Streamlining and efficiency of operations	A	A	B	B	B	II-2	
3. Improvement of financial conditions	A	A	B	B	B	II-3	
III. Budget / income and expenditure plan, and funding plan							
	A	A	B	B	B	III	
IV. Limit amount of short-term borrowing							
	/	/	/	/	/	IV	
IV.2 If the agency has any unnecessary property or any property that is expected to be unnecessary property, a plan for disposal of such property							
	A	A	B	B	B	IV.2	
V. If the agency intends to transfer or provide as collateral any important property other than the property provided for in the preceding item, a plan therefor;							
	/	/	/	/	/	V	

⑥ Utilization support for intellectual property	A	A	B	B	B	2.(1)⑥	
⑦ Promotion of innovative technology research development	/	A	B	B	B	2.(1)⑦	
(2) Formation of science and technology foundation for producing science and technology innovation	/	/	/	/	/	/	/
① Construction of knowledge infrastructure	S	A	B	B	B	2.(2)①	
② Construction of personnel infrastructure supporting science technology innovation	/	/	/	/	/	2.(2)②	/
a. Training of human resources leading the next-generation of science and technology	A	A	A	B	B	2.(2)②	
b. Training of human resources related to science and technology innovation			B	B	B	2.(2)②	
c. Construction of international personnel exchanges foundation			B	B	A	2.(2)②	
c. Building the base of personnel exchange with foreign countries (among which, management of accommodations for foreigners is also included)			C	C	B	2.(2)②	
c. Building the base of personnel exchange with foreign countries (among which, the Japan-Asia Youth Exchange Program in Science is also included)	/	/	A	A	A	2.(2)②	
d. Fostering program managers	/	/	/	B	B	2.(2)②	
e. Promotion of fair research activities	/	/	/	B	B	2.(2)②	
③ Construction of communication infrastructure	/	/	/	/	/	2.(2)③	/
③ Construction of communication infrastructure (Center for Science Communication)	A	A	B	B	B	2.(2)③	
③ Construction of communication infrastructure (National Museum of Emerging Science and Innovation)			S	A	A	2.(2)③	

VI. Purpose of using accumulated profit							
	/	/	/	/	B	VI	
VII. Other matters concerning the administration of the operations specified by ordinance of the competent ministry							
Plans for equipment and facilities	A	A	B	B	B	VII	
Plans for personne							
Debt burden over the mid to long-term objective period							
Use of a reserve fund							

(Miraikan))							
3.Other required program for government affairs/business operations							
(1) Promotion of projects accepted by related administrative agencies	A	A	B	B	B	3.(1)	
(2) Implementation of Cross-ministerial Strategic Innovation Promotion Program (SIP)			B	B	B	3.(2)	

* Evaluations up to FY 2013 were made based on “the basic guideline regarding business results evaluation for Incorporated Administrative Agency under MEXT’s jurisdiction” (The Evaluation Committee for Incorporated Administrative Agency under MEXT’s jurisdiction on March 22, 2002).

Also, the evaluations after FY2014 are made based on “criteria relating to the evaluation for Incorporative Administrative Agency under MEXT’s jurisdiction” (decided by the Minister of MEXT in June 30, 2015). The details are as follows.

Ratings up to FY2013	Ratings after FY2014
<p>S: Outstanding achievements are fulfilled (Without providing a cross-cutting objective standard for the agency in advance, S is rated according to the characteristics of the agency's business operations.).</p> <p>A: Achievements are in line with the medium-term plan, or beyond, or are steadily being implemented toward a medium-term objective, or beyond (achievement rate for a medium-term plan should be over 100% in a given FY.).</p> <p>B: In some ways the plan is not being implemented in line with medium-term plan, however, a medium-term objective may be achieved by means of ideas and efforts (achievement rate for the medium-term plan should be 70% to 100%).</p> <p>C: The implementation of the plan is behind the medium-term objective, therefore, improvement of business is necessary in order to realize the achievement of the medium-term objective (achievement rate for the medium-term plan in a given FY is less than 70%).</p> <p>F: The Evaluation Committee needs to warn an agency concerning the improvement of its business management and others (Without providing an objective standard in advance, F is rated as a result of judgement that a warning concerning business improvement is necessary.).</p>	<p>[Administrative and projects related to research and development (I)]</p> <p>S: Based on the National Research and Development Agency’s aims, businesses, mid to long-term objectives and so on, and as a result of comprehensive consideration based on some circumstances regarding the agency’s business achievements, efforts and so on through its activities, especially the creation of considerable achievements, anticipated creation of special achievements in the future and so on toward “maximization of R&D achievements” under the conditions of appropriate, effective, and efficient operations are recognized.</p> <p>A: Based on the National Research and Development Agency’s aims, businesses, mid to long-term objectives and so on, and as a result of comprehensive consideration based on some circumstances regarding the agency’s business achievements, efforts and so on through its activities, the creation of considerable achievements, anticipated creation of achievements in the future and so on toward “maximization of R&D achievements” under the conditions of appropriate, effective, and efficient operations are recognized.</p> <p>B: Based on the National Research and Development Agency’s aims, businesses, mid to long-term objectives and so on, and as a result of comprehensive consideration based on some circumstances regarding the agency’s business achievement, efforts and so on through its activities, a certain degree of expectation for the creation of achievement and creation of achievement in the future toward “maximization of R&D achievements were recognized, and steady business operations have been also recognized.</p> <p>C: Based on the National Research and Development Agency’s aims, businesses, mid to long-term objectives and so on, and as a result of comprehensive consideration based on some circumstances regarding the agency’s business achievements, efforts and so on through its activities, the creation of achievements, further drastic efforts and improvements toward “maximization of R&D achievements” or the “appropriate,, effective, and efficient business operations” are anticipated.</p> <p>D: Based on the National Research and Development Agency’s aims, businesses, mid to long-term objectives and so on, and as a result of comprehensive consideration based on some circumstances regarding the agency's business achievements, efforts through its activities, special efforts and improvements including a fundamental drastic review, toward “maximization of R&D achievements” or the “appropriate,, effective, and efficient business operations” are required.</p> <p>[Other than administrative work and projects regarding research and development (After II)]</p> <p>S: Through the activities of a corporation, remarkable performance exceeding the intended objectives is recognized quantitatively and qualitatively in the medium-term plan (in terms of quantitative indicators, 120% or more vis-à-vis planned medium-term value (or planned FY value), and remarkable performance is also recognized qualitatively).</p> <p>A: Through the activities of a corporation, remarkable performance exceeding the intended objectives is recognized in the medium-term plan (in terms of quantitative indicators, 120% or more vis-à-vis planned medium-term value (or planned FY value).</p> <p>B: Performance exceeding the intended objectives is recognized in the medium-term plan (in terms of quantitative indicators, 100% or more but less than 120% vis-à-vis planned medium-term value (or planned FY value).</p> <p>C: Performance falls below the intended objectives in the medium-term plan, requiring improved performance (in terms of quantitative indicators, 80% or more but less than 100% vis-à-vis planned medium-term value (or planned FY value).</p> <p>D: Performance falls below the intended objectives in the medium-term plan, requiring drastic improvement of business including its abolition (in terms of quantitative indicators, less than 80% vis-à-vis planned medium-term values (or planned FY value), or it is recognized that the competent Minister is required to ask for improving business operations or taking other necessary measures).</p>