

Evaluation of FY2017 Operating Results for  
Japan Science and Technology Agency

August 2018

Minister of Education, Culture, Sports, Science and Technology

FY Evaluation/Overview of the Evaluation

1. Items related to the evaluation		
Agency	Japan Science and Technology Agency	
FY for evaluation	FY evaluation	FY2017
	Mid to long-term objective period	FY2017-2021 (4th term)

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, Shuichi Sakamoto
Evaluation and Inspection dept	Science and Technology Policy Bureau	Dept. and person in charge	Planning and Evaluation Division, Keiji Inoue

3. Items regarding implementation of the evaluation
<p>May 21, 2018: Japan Science and Technology Agency Sub-Committee (hereinafter referred to as “JST Sub-Committee”) members conducted a survey of KAWASAKI INSITUTE OF INDUSTRIAL PROMOTION Innovation Center of NanoMedicine (iCONM) (a project for developing an international science innovation center by industry-university collaborations using local resources, etc.).</p> <p>June 13, 2018: JST Sub-Committee members conducted a survey of the National Museum of Emerging Science and Innovation.</p> <p>June 29, 2018: A JST Sub-Committee (12th) was held, where a hearing was held regarding the results of self-evaluation by JST board members (president, executive directors and auditors) and the staff.</p> <p>July 9, 2018: A JST Sub-Committee (13th) was held, where, in light of the results of self-evaluation as explained by JST at the 12th Sub-Committee, necessary counsel was obtained from Sub-Committee members on the draft of evaluation by the competent minister.</p> <p>July 23, 2018: A JST Sub-Committee (14th) was held, where, in light of the results of self-evaluation as explained by JST at the 12th Sub-Committee, necessary counsel was obtained from Sub-Committee members on the draft of evaluation by the competent minister.</p> <p>August 22, 2018: National Research and Development Agency Council of the Ministry of Education, Culture, Sports, Science and Technology (12th) (planned)</p>

4. Important items and others relating to the evaluation
FY2017 is the first year of the 4th Mid to Long-Term Objective and Plan.

1. Overall rating							
Rating* (S, A, B, C, D)	A	(Reference) Overall rating in the past fiscal years in this mid to long-term objective period					
			FY2017	FY2018	FY2019	FY2020	FY2021
		Improvement of business quality	A				
		Improvement of efficiency in business operations					
Improvement of financial conditions							
Reasons for rating	As shown in the overall evaluation of the agency as a whole, the creation of considerable achievements and anticipated creation of achievements in the future and so on were recognized as a result of comprehensive consideration based on circumstances surrounding the agency's business achievements, efforts and so on through its activities and with the national research and development agency's mid to long-term objectives taken into account.						

2. Evaluation of the whole agency
<ul style="list-style-type: none"> <li>○ Japan Science and Technology Agency (JST) implements its business operations according to three pillars for administrative and business operations concerning R&amp;D, that is, “formulating visionary R&amp;D strategies for co-creation of the future with society,” “creating knowledge and transforming it into economic and social value” and “promoting dialogue with society and cultivating human resources” as a core institution of the Science and Technology Basic Plan. The rating is “A” because progress and achievements exceeded initial targets in all of the above guiding philosophies, in particular, the following achievements are recognized as considerable:.</li> <li>○ With regard to the formulating visionary R&amp;D strategies for co-creation of the future with society, CRDS contributed to providing implementation policies for “innovative computing” by participating in discussions of the “innovative physical space core technology,” which is the target area of PRISM of the Cabinet Office set up for FY2018, from the investigative phase, in addition to setting of strategic targets of MEXT for FY2018, “Promotion of computing technology for supporting Society 5.0.” Proposals of CRDS were clearly mentioned in the “Physical space digital data processing platform” R&amp;D project (draft) (announced in June 2018) in SIP of the Cabinet Office. Furthermore, only LCS from Japan participated in T20 (Think20 or G20 Think Tank Summit) for producing policy briefs in the science and technology section, and the results of its social scenario study were reflected in policy briefs.</li> <li>○ With regard to the creating knowledge and transforming it into economic and social value, the launch of a project for the creative business for future society has received extensive attention from various organizations in the industry, academia and government sectors for its challenges such as the employment of good management practices from other systems and introduction of new management methods. Also noteworthy are the aggressive improvement of management with new efforts according to international trends such as the employment of the lead agency arrangement with the UK, and accomplishment of SDGs, and efforts relating to the development of young human resources such as COI20.0. Research achievement include the successful synthesis of carbon nanobelt, and the development of carbon fiber composite materials for the first time in Japan as the seismic reinforcement materials subject to JIS standardization, and as a result, contributed to the employment of doctoral students in OPERA, pump-priming effects of SUCCESS (8.5 times), and income of about 1.6 billion yen from patent licensing.</li> <li>○ With regard to the promotion of dialogs and joint efforts with society for the future co-creation, the world's first action agenda for science museums in the world, Tokyo Protocol, was established for the first time in the world mainly by the National Museum of Emerging Science and Innovation in consideration of the importance of roles taken by science museums to accomplish SDGs. The agenda was announced all over the world. JST helped drive global momentum on the contribution to SDGs by deploying worldwide activities based on the guidelines prescribed in Tokyo Protocol, including the special exhibitions regarding SDGs, designation of the World Science Museum Day in cooperation with UNESCO, and implementation of citizen involvement scientific experiments concerning SDGs simultaneously in the world. JST also made cross-organizational efforts to bring about discussions and system development for creating future society by reflecting its activities in the discussions at the STI for SDGs task team which addressed the contribution of science, technology and innovation to SDGs, and enhancing its capability to provide dialogue with and integrate opinions from society.</li> <li>○ In terms of organizational management of the agency, operations relating to efforts according to the mid to the long-term plan were steadily managed by enhancing service models on the science and technology document information delivery service.</li> </ul>

3. Issues to be solved and /or improved for each subject

- With regard to the plans and proposals for R&D strategies, closer cooperation with relating administrative agencies is required.
- With regard to creative business for future society, continuous efforts are expected to improve theme and subject examination processes and select high-risk, high-impact themes based on economic and social situations and R&D trends in Japan and abroad. Also desired is flexible budget allocation according to the progress of research and changes in social needs to produce optimum R&D portfolios. A strict examination system continuously involving external experts must be established, particularly for stage gate examination.
- With regard to the Regional Industry-Academia Value Program (VP), efforts are expected to link cutting-edge themes in the functional verification phase of A-STEP to the next phase of A-STEP or other industry-academia cooperation programs, as part of R&D support activities, and at the same time, maximize research achievements by reinforcing collaboration with local coordinators of relevant programs and communities.
- With regard to the advanced measurement analysis technology/equipment development program, it is desired to support other projects and programs so that outstanding subjects in this program can be continuously addressed after the end of this program and considerable achievements produced. Insights obtained in this program are expected to be utilized in the Creative Business for Future Society Project (search acceleration type “common base” region).
- With regard to the Center of Innovation (COI) Program, it is necessary to make indexes of interim evaluation satisfactory for analyzing advantages and disadvantages of activities in individual centers, and diffusing outcomes of the program to the universities which host the center to construct an innovation platform.
- With regard to the Innovation Hub Construction Support Project, management for constructing a sustainable system is required to allow innovation hubs to continuously operate autonomously after this project is completed.
- With regard to the Super Science Highschool (SSH) Support Project, operations need to be verified and improved by MEXT in collaboration with related agencies, based on conclusions made at the “Eminent Persons Forum for the Future Direction, etc. of SSH Support Project” set up by MEXT. Strategic efforts are important to expand the base of cutting-edge science and mathematics education.

4. Other items

Major opinions of National Research and Development Agency Committee	<ul style="list-style-type: none"> <li>○ Closer mutual collaboration centering on the “Hamaguchi Plan,” which explains expectations to science and visualization of social issues to solve, is required when each center plans strategy. It is also important to verify design and operation levels of JST projects by comparing those with other nations.</li> <li>○ JST is recommended to let the public know its way of contributing to the innovation of industrial structure and accomplishment of Society5.0 and SDGs.</li> </ul>
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

FY Evaluation / Summary Table for Rating by Item

Mid to long-term objectives (Mid to long-term plan)	FY evaluation					Itemized evaluation document No.	Remarks
	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021		
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. Formulating visionary R&D strategies for co-creation of the future with society	A					I-1	
2. Creating knowledge and transforming it into economic and social value	A					I-2	
3. Promoting dialogue with society and cultivating human resources	A					I-3	

Mid to long-term objectives (Mid to long-term plan)	FY evaluation					Itemized evaluation document No.	Remarks
	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021		
II. Measures to be taken for achieving the objectives concerning the efficiency of the administration of the operations							
	B					II	
III. Measures to be taken for accomplishing objectives to improve financial conditions							
	B					III	
IV. Other matters concerning the administration of the operations specified by ordinance of the competent ministry							
	B					IV	

\* The evaluation is based on “Standards concerning the evaluation of independent administrative agencies under the jurisdiction of the Ministry of Education, Culture, Sports, Science and Technology” (determined by the Minister of Education, Culture, Sports, Science and Technology on June 30, 2015). Details are as follows:

[Administrative and projects related to research and development (I)]  
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.  
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.  
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 “maximizing the achievements 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, 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 operations” are anticipated.  
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 operations” are required.

[Other than administrative work and projects regarding research and development (After II)]  
S: Based on 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)  
A: Based on 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).  
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).  
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).  
D: Performance falls below the intended objectives in the medium-term plan, requiring drastic improvement of business including its abolishment (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 make an order for improving business operation or taking other necessary measures).