

Evaluation of FY2014 Operating Results for
Japan Aerospace Exploration Agency (JAXA)

September 2015

Prime Minister

Minister of Internal Affairs and Communications

Minister of Education, Culture, Sports, Science and Technology

Minister of Economy, Trade and Industry

1. Items related to the evaluation		
Agency	National Research and Development Corporation, Japan Aerospace Exploration Agency (JAXA)	
FY for evaluation	FY evaluation	FY2014 (3rd term)
	Medium to long-term objective period	Year 2013-2017

2. Items related to the assessor			
The Competent Minister	Prime Minister		
Incorporated jurisdiction dept.	Office of National Space Policy	Dept. and person in charge	Director for Office of National Space Policy, Makito Takami
Evaluation and Inspection dept.	Policy Evaluation Public Relations Division, Minister's Secretariat	Dept. and person in charge	Director of Policy Evaluation and Public Relations Division, Masafumi Yokota
The Competent Minister	Minister of Internal Affairs and Communications		
Incorporated jurisdiction dept.	Global ICT Strategy Bureau	Dept. and person in charge	Director of Space Communications Policy Division, Tomoo Yamauchi
Evaluation and Inspection dept.	Policy Evaluation Public Relations Division, Minister's Secretariat	Dept. and person in charge	Director of Policy Evaluation and Public Relations Division, Tokuyuki Kase
The Competent Minister	Minister of Education, Culture, Sports, Science and Technology		
Incorporated jurisdiction dept.	Research and Development Bureau	Dept. and person in charge	Director of Space Development and Utilization Division, Yoshinori Horiuchi
Evaluation and Inspection dept.	Science and Technology Policy Bureau	Dept. and person in charge	Director of Planning and Evaluation Division, Takahisa Murakami
The Competent Minister	Minister of Economy, Trade and Industry		
Incorporated jurisdiction dept.	Manufacturing Industries Bureau	Dept. and person in charge	Chief of Space Industry Office, Akira Tsunetou
Evaluation and Inspection dept.	Policy Evaluation Public Relations Division, Minister's Secretariat	Dept. and person in charge	Director of Policy Evaluation and Public Relations Division, Osamu Sudo

3. Items regarding implementation of the evaluation	
9 th July 2015	<p>Joint hearings pertaining to the business achievements of Japan Aerospace Exploration Agency (JAXA) was held by Ministry of Education, Culture, Sports, Science and Technology (MEXT) and Ministry of Economy, Trade and Industry (METI).</p> <p>Range of listening practice: I. 1, Social infrastructure for expansion of the use of space and securement of autonomy, I. 2, Pursuit the possibility of future development and utilization of space, I. 3, Aviation science and technology, I. 4, Cross-cutting issues (*METI was for I. 4 only)</p>
10 th July 2015	<p>Joint hearings pertaining to the JAXA business achievements was held by the Cabinet Office and Minister of Internal Affairs and Communications.</p> <p>Range of listening practice: I. 1, Social infrastructure for growth of space usage and autonomy, I. 2, Pursuit the possibility of future development and utilization of space, I. 3, Aviation science and technology, I. 4, Cross-cutting issues (*With exception of the matters under MEXT)</p>

13 th July 2015	Joint hearings pertaining to the business achievements of JAXA was held by Ministry of Internal Affairs and Communications and Ministry of Education, Culture, Sports, Science and Technology. Range of listening practice: II. Measures for improving business efficiency, VIII 1 Facilities and equipment related issues, VIII 2 Plans for personnel, VIII 3 Safety reliability related issues
22 nd July 2015	Hearing in the Sub-Committee of JAXA under Ministry of Economy, Trade and Industry.
24 th July 2015	Hearing in the Sub-Committee of JAXA under Ministry of Internal Affairs and Communication.
27 th July 2015	Hearing in the National Research and Development Agency Council under Ministry of Economy, Trade and Industry.
5 th August 2015	Hearing in the National Research and Development Agency Council under Ministry of Internal Affairs and Communications.
11 th August 2015	Hearing in the Sub-Committee of Japan Aerospace Exploration Agency under Cabinet Office.
21 st August 2015	Hearing in National Research and Development Agency Council under Ministry of Education, Culture, Sports, Science and Technology.

4. Important items and others relating to the evaluation	
No comments	

1. Overall evaluation							
Rating*1 (S, A, B, C, D)	A: Based on the National Research and Development Agency's aims, businesses, medium 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 research and development" under the conditions of appropriate, effective and efficient business management are recognized.	(Reference) previous period's overall evaluation situation in the medium to long-term objective period *2					
			FY2013	FY2014	FY2015	FY2016	FY2017
		Improvement of business quality	A	A			
		Efficiency of business operations	A				
Improvement of financial conditions	A						
Reasons for rating	<p>The Basic Plan on Space Policy was revised in January 2015 and JAXA is still positioned as the "core implementation agency supporting space development and utilization of government-wide technology." Under the plan of (1) Securing space security raised by this plan, (2) Promotion of space applications in the consumer field and (3) Maintenance of aerospace industry, science and technology infrastructure, the role and responsibility of JAXA directed to achieve that objective is becoming heavier than ever before. On the other hand, as an aim to ensure the maximization of R & D achievements, the transition to National Research Development Agency from Incorporated Administrative Agencies has been carried out from April, 2015 as the changes in the institutional framework surrounding the National & Development Agency responsible for research and development. At this time, in the "Sub-Committee of Japan Aerospace Exploration Agency, Cabinet Office" and "National Research and Development Agency Council" under Ministry of Education and Ministry of Economy, Trade and Industry, they advices in conformity with social knowledge, scientific knowledge, international standards, etc. based on the business results reported by the Agency are given to the report of business results FY2014 against the third medium-term objective period of the second annual projects as being submitted by Agency. As outstanding achievements in the field of the use of satellites, monitoring and observation of volcanic activity, subsidence, landslides, etc., ALOS-2 disaster prevention organizations (Advanced Land Observing Satellite-2 "ALOS-2") data are incorporated into steady operations of the government agencies, and it is becoming established as the information to determine actions for prevention that deserves special mention. Also in the field of space transportation systems, it got a track record of the world's top level, such as successful launches of the core rocket in 5 years (H-IIA/B) and the world-leading time launch rate achieved. Furthermore, remarkable performance can be observed in space science, aerospace science and technology, foreign policy that utilizes space science, space and security and human resources development fields. Though it was said generally that the Agency's self-assessment was reasonable in the councils and sub-committee, it is pointed out that it was excessively restrained in the council under Ministry of Education, Culture, Sports, Science and Technology. Judging from the characteristic of National Research and Development Agency aiming at "maximization of research and development achievements", the Agency is regarded to have done the mission of FY 2014 as well as the creation of important research in the field of office and business, and celebrated outstanding achievements for the entire agency.</p>						

2. Evaluation of the whole agency
<p>* Regarding the topics of the social infrastructure related to the expansion of space utilization and the independence of the future possibility of space development, criteria for each project's minimum success, full success and extra success are defined, and the business performance evaluations are also understandable.</p> <p>* Regarding the cross-cutting issues as well, the predetermined objects are also done steadily, and strong qualitative aspects such as contributions to foreign policy and national security policy are firmly described to also be understandable.</p> <p>* In the current evaluation, even though the objective is advanced, it is most likely to be evaluated as B (standard). Isn't it necessary to have an evaluation method considering the degree of difficulty of the objective itself? In the case that the project items are all "B" rating, it is difficult to rate other than 'B' unless otherwise they are special. In this sense to respect and improve the motivation of people involved in these fields, it is requested to study and improve the evaluation method within the Agency and reflect it in the system.</p> <p>* "S" or "A" is occasionally come across in the development fields, but evaluation of Administrative and Office areas are all "B" rating. The indirect divisions, such as back-office sections should be evaluated to give them adequate ratings, not horizontal equalitarian evaluation, considering to keep a high level of moral by clarifying what the rules and standards of evaluation method should be within the Agency.</p> <p>* Various facts listed in the rating reasons are not clear for criteria of self-evaluation. For instance, although it can be observed occasionally that it stated "exceed the fiscal plan" and "XX advanced a lot" but rated "B" is given in self-evaluation. Starting next fiscal year, definitions of "S" and "A" ratings have to be described clearly. It is desirable to consider quantitative evaluation criteria as much as possible, and in accordance with that, it is needed to devise how to determine more clearly.</p> <p>* It is a good direction to have evaluated their own results without high evaluation themselves. It is highly expected to formulate the organization culture to try forward to higher achievement.</p> <p>* The evaluation method was changed ("B" rating as standard) in the mediumdle of the medium-term plan. In this regard, it is necessary to watch and make sure not to give misunderstanding about the evaluation rating. It is necessary to explain</p>

properly at the time of announcement so that people do not get the wrong impression looking only at the rating.

- * Self-evaluation should be done to hear the opinion of the Committee of the Council for self-evaluation as well as countermeasures by mentioning and clarifying the issues and the challenges. It is requested to take effect from the time of result evaluation of FY2015.
- * It is an actual step forward beyond the traditional evaluation framework in the sector of the Agency that Professor Steve Squyres of United States Cornell University was invited as an Ad-Hoc Committee of JAXA Sub-Committee under Ministry of Education, Culture, Sports, Science and Technology and ask the evaluation of the Agency's operation results in space and science fields. On the other hand, it is expected to make further improvement and ingenuity for easy evaluation of contents of the actual report and explaining knowhow, for example, for the foreign members.
- * The Agency should strengthen efforts towards human resource development to continue contributions to industrial development and to proceed strategic research for the creation of Japan's strengths, resulting in developments in various fields to further promote cooperation and support to disseminate information and private business operators.
- * Investments in the Agency must lead to industrial development and improving people's livelihoods. And in this sense, it is necessary to make steady progress and get public support through public relations activities. It is necessary to promote public relations activities at the timing of results obtained to get the public's understanding for huge space development investments, such as for example, satellites, space parts and new medicine development, the medical field using the ISS (International Space Station).
- * It is hoped that there will be continued and expanded collaboration and cooperation between the ministries, international and national organizations as well as private companies.
- * It is necessary to make policies and evaluate them from a long-sighted viewpoint from 10 years, 20 years, 50 years and 100 years.

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

- * It is requested to continue user-driven activities, such as the continuity of data and the ease of use of multiple satellite data.
- * Regarding the development of the new core rocket 'H3', it is strongly requested to realize international competitiveness along with the realization of the world's top domestic rocket development engineers.
- * It is important to make efforts to launch H-IIA and H-IIB on schedule and further raise the success rate as much as possible.
- * It is expected to ensure success of "Akatsuki" into orbit scheduled for the end of the year and the steady operation of the Hayabusa 2. And the steady success of "ASTRO-H" is extremely important in terms of cosmology and high energy astronomy as it is directly integrated to the creation of scientific results.
- * As for participation in the ISS project, the balance of the results and the cost of 40 billion yen / year may be pointed out more in the future. It is expected to create suitable results judging from the cost. Using external parties in the evaluation of the ISS project would seem to increase objectivity in the evaluation.
- * D-NET (disaster relief aircraft information sharing network) is expected to work in a large-scale disaster, which is bound to occur again for aviation technology, but there is low awareness in society since it is rarely reported in newspapers. It is expected to increase name recognition as it get meaning only when it is familiar with the public.
- * Though it seems that strong leadership by the head is demonstrated in visible aspects such as holding a regular press meeting through public relations, strengthening of internal human resources and organizational change, it is required to make the way of its leadership clearer, making it possible to the direction how the head intents. Also. it is requested to devise methods for evaluation and self-assessment in the management aspects of the head's point of view.
- * As a part of enhancement of collecting information and survey analysis, the Agency has strived to inform the information in order to realize advanced strategic planning, creation a think tank function that can match other countries is expected, taking advantage of the wide range of contacts and expertise that the Agency has developed.
- * Cooperation with regions other than the Far East, South-East Asia and the West is beginning, but it is requested to consider accommodating different traditional cultures. As private enterprises from countries other than the United States have become responsible for important parts of space projects, it is requested to support the survival and growth of Japan's private enterprises, especially venture companies.

4. Other items

<p>Main opinions from National Research and Development Agency Council</p>	<ul style="list-style-type: none"> * Observation data of ALOS-2 and GSMaP (satellite global rainfall map) has been widely used in national and international agencies for disaster prevention and disaster reduction. This is resulted from the recognition given to skill and effectiveness both internally and externally, and for this outstanding achievement, the "S" rating is reasonable. * It is a great achievement of Japan to have a high launch success rate and on time launch rate. Performance especially in the second half of 6 months core rocket launches can be evaluated as a complete success including the management and coordination. For the space transportation system, there are new projects, development of next core rocket and advanced solid rocket in addition to the steady operation of regular launches. A lot of work at the same time is progressing in parallel. It has to proceed firmly to secure human resources, time, and budget management processes. Attention has to be paid from the design stage to make a high on-time launch rate considering the launch costs of the completion on the new core rockets at an early stage. * 322 papers including 6 papers published in Science or Nature were issued. A remarkable achievement was made in ongoing scientific satellites as 51 papers out of them have been widely cited and they have tackled difficult research and development for scientific satellites in development. From the remarkable accomplishments for the future, an 'A' rating is appropriate. * Though it was in the span of FY 2013 and FY2014, a successful mission was accomplished by ISS astronaut, Koichi Wakata as captain. It can be highly appreciated.
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	* The Agency is expected to contribute further as the achievement results are clear and role of the Agency is large in terms of scientific personnel for the field of aerospace human resource development, science and technology-oriented nation.
Auditor's special comments	No comments

- *1 S: Based on the National Research and Development Agency's aims, businesses, medium 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 research and development" under the conditions of appropriate, effective and efficient business management are recognized.
- A: Based on the National Research and Development Agency's aims, businesses, medium 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 research and development" under the conditions of appropriate, effective and efficient business management are recognized.
- B: Based on the National Research and Development Agency's aims, business, medium 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 "maximizing the achievements of research and development" were recognized, and steady business operations have been also recognized.
- C: Based on the National Research and Development Agency's aims, businesses, medium 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 research and development" or "the appropriate, effective and efficient administration of the operations" are anticipated.
- D: Based on the National Research and Development Agency's aims, businesses, medium 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 research and development" or "the appropriate, effective and efficient administration of the operations" are required.

[Other than administrative work and projects regarding research and development (After II)]

- S: Through the activities of the Agency Managed under Medium-term Objectives, considerable achievements more than the original medium-term objective from a quantitative and qualitative point of view have been recognized (in terms of quantitative index, the achievement rate against the medium-term objective is over 120% and significant achievement has been recognized from a qualitative point of view).
- A: Through the activities of the Agency Managed under Medium-term Objectives, more achievement than the original medium-term objective has been recognized (in terms of quantitative index, achievement rate against the medium-term objective is over 120%).
- B: The original medium-term objective has been achieved (in terms of quantitative index, the achievement rate against the medium-term objective is between over 100% and less than 120%).
- C: Operating performance has been less than the original medium-term objective. As a result, improvement is needed (in terms of quantitative index, the achievement rate is between over 80% and below 100%).
- D: Operating performance has been below the original medium-term objective. As a result, drastic improvement including abolition of projects is required (in terms of quantitative index, the achievement rate against the medium-term objective is below 80%, or improvement of business management and other necessary measures ordered by the competent ministry are recognized).

Medium to long-term objectives (Medium to long-term plan)	FY Ratings*					No. of document each item	Remarks
	FY2013	FY2014	FY2015	FY2016	FY2017		
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. Social infrastructure for expansion of the use of Space and securement of the autonomy	-	-	-	-	-	-	-
(1) Positioning satellite	A	B	-	-	-	I-1-1	-
(2) Remote sensing satellite	S	S	-	-	-	I-1-2	-
(3) Communications and broadcasting satellite	A	B	-	-	-	I-1-3	-
(4) Space Transportation System	S	A	-	-	-	I-1-4	-
2. Pursuit of the possibility of future development and utilization of Space	-	-	-	-	-	-	-
(1) Space science and Space exploration program	A	A	-	-	-	I-2-1	-
(2) Human space activity program system	S	B	-	-	-	I-2-2	-
(3) Space solar power research and development program	A	B	-	-	-	I-2-3	-
3 Aeronautical science and technology	-	-	-	-	-	-	-
(1) Research and Development focused on Environment and Safety	B	A	-	-	-	I-3-1	-
(2) Promotion of usage of	A	B	-	-	-	I-3-2	-

Medium to long-term objectives (Medium to long-term plan)	FY Ratings*					No. of document each item	Remarks
	FY2013	FY2014	FY2015	FY2016	FY2017		
II. Measures to be taken for achieving the objectives concerning the efficiency of the administration of the operations							
1. Enhancement of internal controls and governance	-	-	-	-	-	-	-
(1) Security of information	A	B	-	-	-	II-1-1	-
(2) Project management	A	B	-	-	-	II-1-2	-
(3) Appropriateness of contract	A	B	-	-	-	II-1-3	-
2. Flexible and efficient organization management	A	B	-	-	-	II-2	-
3. Streamlining and efficiency of operations	-	-	-	-	-	-	-
(1) Streamlining and efficiency of operational expenses	A	B	-	-	-	II-3-1	-
(2) Streamlining and efficiency of personnel expenses	A	B	-	-	-	II-3-2	-
4. Application of information technology	A	B	-	-	-	II-4	-
(1) Security of information	S	B	-	-	-	II-4-1	-
III. Budget (Including personnel expenses)/ income and expenditure plan, and funding plan	A	-	-	-	-	-	3. Evaluation done in reference to Streamlining of operations
IV. Limit amount of short-term	-	-	-	-	-	-	No

aeronautical science and technology							
4. Cross-cutting issues	-	-	-	-	-	-	-
(1) Comprehensive efforts to expand the use	A	B	-	-	-	I-4-1	-
(2) Updates to the enhancement of technology and industrial competitiveness	A	B	-	-	-	I-4-2	-
(3) Contribution to foreign and security policy and international cooperation using the space	A	A	-	-	-	I-4-3	-
(4) Promotional activities to meet Country needs infrastructure overseas.	A	B	-	-	-	I-4-4	-
(5) Enhancement of information gathering and survey analysis ability for the formulation of effective space policy planning.	A	B	-	-	-	I-4-5	-
(6) Human resource development	A	A	-	-	-	I-4-6	-
(7) Consideration for the environment with a view to sustainable development and utilization of space	A	B	-	-	-	I-4-7	-
(8) Information disclosure and public relations	A	A	-	-	-	I-4-8	-
(9) Business assessment	A	B	-	-	-	I-4-9	-
	-	-	-	-	-	-	-

borrowing								pertinent item for evaluation
V. If the agency has any Unnecessary Property or any property that is expected to be Unnecessary Property, a plan for disposal of such property	-	-	-	-	-	-	-	No pertinent item for evaluation
VI. 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;	-	-	-	-	-	-	-	No pertinent item for evaluation
VII. Purpose of using accumulated profit	-	-	-	-	-	-	-	No pertinent item for evaluation
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
VIII. Other matters concerning the administration of the operations specified by ordinance of the competent ministry								
1. Facilities and equipment related issues	A	B	-	-	-	VIII-1	-	-
2. Plans for personnel	A	B	-	-	-	VIII-2	-	-
3. Safety reliability related issues	A	B	-	-	-	VIII-3	-	-
								-
								-

* For items that are set to "high" level of importance, a "circle" shall be marked next to each comment.

For items that are set to "high" level of difficulty, each comment shall be underlined.

* 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, 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 plan for medium-term, or beyond, or are steadily being implemented toward a medium-term objective, or beyond (achievement rate for the medium-term objective 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-objectives, however, the plan may be achieved by means of ideas and efforts (achievement rate for the medium-term objective 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 objective 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, medium 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 research and development" under the conditions of appropriate, effective and efficient business management are recognized.</p> <p>A: Based on the National Research and Development Agency's aims, businesses, medium 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 research and development" under the conditions of appropriate, effective and efficient business management are recognized.</p> <p>B: Based on the National Research and Development Agency's aims, business, medium to long-term objectives and so on, as a result of taking account of the Incorporated Administrative Agency's business achievement, efforts and others, a certain degree of expectation for the creation of achievement and creation of achievement in the future toward "maximizing the achievements of research and development" were recognized, and steady business operations have been also recognized.</p> <p>C: Based on the National Research and Development Agency's aims, businesses, medium 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 research and development" are anticipated.</p> <p>D: Based on the National Research and Development Agency's aims, businesses, medium 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 research and development" are required.</p> <p>[Other than administrative work and projects regarding research and development (After II)]</p> <p>S: Through the activities of the Agency Managed under Medium-term Objectives, considerable achievements more than the original medium-term objective from a quantitative and qualitative point of view have been recognized (in terms of quantitative index, the achievement rate against the medium-term objective is over 120% and significant achievement has been recognized from a qualitative point of view).</p> <p>A: Through the activities of the Agency Managed under Medium-term Objectives, more achievement than the original medium-term objective has been recognized (in terms of quantitative index, achievement rate against the medium-term objective is over 120%).</p> <p>B: The original medium-term objective has been achieved (in terms of quantitative index, the achievement rate against the medium-term objective is between over 100% and less than 120%).</p> <p>C: Operating performance has been less than the original medium-term objective. As a result, improvement is needed (in terms of quantitative index, the achievement rate is between over 80% and below 100%).</p> <p>D: Operating performance has been below the original medium-term objective. As a result, drastic improvement including abolition of projects is required (in terms of quantitative index, the achievement rate against the medium-term objective is below 80%, or improvement of business management and other necessary measures ordered by the competent ministry are recognized).</p>