

Evaluation of FY2018 Operating Results for
Japan Agency for Marine-Earth Science and Technology

August 2019

Minister of Education, Culture, Sports, Science and Technology

1. Items related to the evaluation		
Agency	Japan Agency for Marine-Earth Science and Technology	
FY for evaluation	FY evaluation	FY2018 (3rd term)
	Mid to long-term objective period	FY2014-FY2018

2. Items related to the assessor			
The Competent Minister	Minister of Education, Culture, Sports, Science and Technology		
Incorporated jurisdiction dept.	Research and Development Bureau	Dept. and person in charge	Ocean and Earth Division, Toshihide Fukui
Evaluation and inspection dept.	Science and Technology Policy Bureau	Dept. and person in charge	Planning and Evaluation Division, Masao Yokoi

3. Items regarding implementation of evaluation
<p>In the FY2018 evaluation of business performance, etc., Sub-Committee on the Japan Agency for Marine-Earth Science and Technology (hereinafter referred to as the “Sub-Committee”) of the National Research and Development Agency Council under the Ministry of Education, Culture, Sports, Science and Technology was held three times and took the following actions:</p> <p>June 25, 2019: The Sub-Committee Meeting (17th) was called and items were tabled including how to perform evaluation of business results, and a survey was taken from the company president and executive director in charge, as well as from the sub-committee members, in regards to the self-assessment results from Japan Agency for Marine-Earth Science and Technology (hereinafter, JAMSTEC), which is a national research and development agency (overview and business administration department).</p> <p>July 5, 2019: The Sub-Committee Meeting (18th) was called and a survey was taken from the executive direction in charge as well as from the sub-committee members in regards to the self-assessment results of JAMSTEC (research group and development and operations group).</p> <p>July 30, 2019; In the Sub-Committee (19th), the competent minister received advice based on scientific knowledge from the sub-committee members regarding the minister’s evaluation document (draft).</p> <p>August 6, 2019: In the National Research and Development Agency Council (15th) under MEXT, the competent minister received advice based on scientific knowledge from the council members regarding procedures of evaluation by the minister.</p>

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

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				
		FY2014	FY2015	FY2016	FY2017	FY2018
		B	B	A	A	A
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	
<p>○ We can give good marks to JAMSTEC for their research and development in view of national and societal needs and for their regular publications to journals with high impact factor, including Nature and Science, <u>on their outstanding achievements in research, which is appreciated internationally, in all research and development fields</u> continually in fiscal 2018, which is the last year of the Term 3 Mid to Long-Term Objectives period, and for their significant results, which surpass both the targets and plan, and <u>providing obtained data and knowledge to policy decision-making processes in both Japan and abroad and advancing technology transfer to our industry</u>, as a central research agency in oceanic state Japan. The following are specific achievements.</p> <p>(1) With regard to research and development of marine resources, exploration technologies and others for sub-seafloor sulfurized orebodies using remote sensing technologies to date <u>were transferred to the private sector and applied to actual oceanic surveys to approximate new candidate sites for ore</u>. We believe that this is a significant advancement towards outcome creation under this topic, “Selection of Candidate Sites for Ore” and “Sustainable Utilization and Application of Marine Resources”.</p> <p>(2) With regard to Scientific importance of R&D on marine and global environmental changes, we can say that <u>the achievement of learning about the reduction in the Antarctic bottom water from actual data collected from a deep float and other systems</u> is significant in that they can only be learned from advanced oceanic surveying technology of JAMSTEC. Furthermore, we believe that the participation in activities of Global Carbon Project (regional carbon budget evaluations), which is anticipated to provide important knowledge to the IPCC 6th Assessment Report, which is currently being drafted, and <u>the fact that the results of calculation from JAMSTEC's model was used in the organization's report and elsewhere is a significant contribution and based on track record where JAMSTEC has always led discussions at international forums</u>.</p> <p>(3) With regard to academic significance of R&D on sea area seismogenic zones, <u>JAMSTEC published its results of an evaluation including the cause of the earthquake at the southeastern coast of Mie prefecture in 2016 and its post-seismic deformation will not develop into the M8 class Nankai trough earthquake</u>. This result is a significant achievement based on JAMSTEC's strengths, namely the multiple facilities that it owns and operates and the comprehensive works that it performs from surveying and observations to model construction and simulations. <u>We also expect that the knowledge that is obtained will be applied to study and assess ad-hoc information and such regarding earthquakes along the Nankai trough at the Japan Meteorological Agency</u>.</p> <p>(4) With regard to R&D on marine life science and engineering, <u>we believe that the development of a methodology to exhaustively detect the diversity of RNA virus and explaining the biology and diversity of viruses in the ocean are extremely significant academic achievements</u>. Specific achievements were also made towards targets including “Double-Strand RNA Virus Purification Kit” which was released to the market after a transfer of this detection methodology's technology.</p> <p>(5) With regard to the development of advanced basic technology and its application, advanced and creative basic technology development was performed from which we can expect a ripple effect of creation of outstanding achievements in research going forward, including the development of a 8K super hi-vision camera for deepsea usage and using this camera to provide deepsea high resolution image information, in addition to <u>significant strides toward the establishment of a next-generation unmanned exploration system, including the development of AUV-NEXT and validation of this at sea and the creation of an operation methodology using multiple AUV/ASV systems</u>.</p> <p>○With regard to works including dissemination of achievements in research and giving back to society, <u>JAMSTEC moved forwards innovative and unique projects which other research agencies do not conduct, including awareness-raising activities targeting the younger audience by allying with the games industry for the first time and reaching the finals of Shell Ocean Discovery XPRIZE</u>, and recorded outstanding achievements. Furthermore, JAMSTEC worked to secure funding from outside to counter its limited budget, and declared JAMSTEC's presence by participating in international conferences on marine issues and marine economy.</p> <p>○With regard to the many incidents inside the organization's management which came to the fore during the mid to long-term objectives period, <u>JAMSTEC not only worked on individual matters but worked on a fundamental reform and improvements to the organization's business operations including reviews of the organization, systems, regulations, and so forth, after performing, for instance, validation of risks common to all side of an organization and understanding the root cause that is common to these elements</u>. Going forward, while there is a need to monitor their effects and side-effects long-term, we can give good marks to JAMSTEC for their work on this topic with corporate responsibility at the senior management level to the field level, in starting work towards the mid and long-term objectives for the next term.</p>	

- On the other hand, under the President's leadership, JAMSTEC worked on a deepwater drilling riser for plate boundary faults in the Nankai trough earthquakes region, which is technically very difficult; however, for one, because the geological structure at the exploration site was more complex than anticipated, JAMSTEC was, in the end, unable to reach the plate boundary surface that they targeted. Going forward, we will conduct stringent reviews including experts outside of the organization and from each field, and conduct discussions and analyses fully on the suitability of targets that were set and investigating the cause of not hitting targets and improving on strategies.
- Furthermore, in fiscal 2018, given the fact that the reduction target of "Raise efficiency by 10 or more percentage points on the first fiscal year during the mid to long-term objectives period" was not achieved as a result of an increase in the general cost of management (including human resource cost; excluding public dues and taxes) on the prior year, we can only say that the reduction in the general cost of management including human resource cost did not go as planned. Going forward, we expect a reinforcement of executive level management in order to reduce and control expenses appropriately.

Taking these into consideration, this corporation is given an overall mark of A, as there are many significant achievements that qualify for the mark of A with regards to research and development which is a national research and development agency's main business, and because, with regards to problems in the management of this organization, this organization has set up a WG and is starting to investigate the root cause and perform a fundamental reform, and this organization has succeeded to collect core samples from deep regions of the sub-seafloor that are closest to the plate boundary, and has achieved new world records in deepsea level in its oceanic drilling work although they were unable to reach the plate boundary fault with their deepsea drilling.

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

[Item I-1 Advancement in research and development in view of national and societal needs]

- With regard to the promotion of research and development of the topic achievement type in view of national and societal needs, JAMSTEC no longer focuses on research achievements of high scientific and academic significance and instead focuses on more research and development with an exit strategy in mind, that is, their implementation in society and their contributions to administrative government bodies, and on works in view of creation of the outcomes indicated in the mid-term objectives and in the flowchart. On the other hand, while significant creative achievements in research are obtained in the individual projects, because this is a research and development domain for which there is no clear plan or strategy such as selection of research topics to evaluation of each achievement and the feedback on them in regards to a comprehensive strategy towards outcome generation, it is difficult to say for this domain whether the giving back to society of achievements and the improved efficiency in research achievements generation by cooperation with other institutions and other municipalities and ministries are satisfactory for each research topic.

With regard to “Research and development to upgrade and optimize oceanic geoinformation by a mathematical methodology” which is the mid to long-term objectives for next term, JAMSTEC plans to discover and explain the complex interconnectedness between and among marine, earth, and life, and supply value-added information that has utility for society and its citizens, by coordinating with JAMSTEC’s researchers and engineers in various fields and with concerned institution in both Japan and abroad to understand, integrate, and analyze big data. In this research and development, because devising comprehensive strategies and coordinating with research institutions in both Japan and overseas and with researchers and engineers in other research domains of JAMSTEC and from different fields will become more important than ever, we expect groundbreaking achievements to be made which could not be realized in each the individual research domains alone, by further reinforcing this coordination (See p74-75).

- Because appropriate monitoring of diverse phenomena occurring in deepsea is one very important item in the prediction of very large-scale trench-type earthquake generation, a topic going forward is the continuation of regular observations and monitoring (See p37).

[I-2 to I-5 and after II]

- We noted not only works to create achievements in research through data analyses but works to promote the supplying and utilization of information including data to outside of the organization; however, while human resource in this field is scarce, because there is significant potential, we would like JAMSTEC to continue to work on items including human resource development and retention (See p110).
- While the international presence of JAMSTEC is rising, more creativity is needed for it to attract excellent people from both Japan and abroad, and for JAMSTEC to function as a global brain center for technologies to integrate and for human resource of industry, academia, and government to come together (See p121).
- With regard to the multiple incidents in the management of this organization which were learned during this mid to long-term objectives period, the root cause was analyzed and counter-measures were considered, and, based on this, work was focused on items including fundamental reform and improvements in the business operations of this organization. Going forward, we ask that monitoring is performed long-term so that these measures are implemented and business operations of the organization are performed properly and effectively, and improvement actions will be reviewed and modified as needed and then reflected into the business operations as newer improvements (See p144).
- With regard to the failed achievement of reduction targets on the general cost of management, a decision was made to remove human resource cost from reduction targets on the general cost of management for the mid to long-term objectives for next term; however, we ask that JAMSTEC continues to work on issues including reductions in human resource cost and to review of the human resource regulations, so that salary will reach an appropriate level (See p152-153).

4. Other items

Main opinion of the National Research and Development Agency Council	[Evaluation of the whole agency in terms of maximization of R&D achievements] ○JAMSTEC continues to make significant achievements in all research domains, and its presence at meetings to devise marine and environmental policies in both Japan and abroad is rising. JAMSTEC also is moving forwards unique and innovative works that is not seen at other research institutions in Japan or overseas in the area of dissemination of achievements and so forth. Furthermore, we give good marks to finding a roadmap for JAMSTEC’s creation of open innovation, which is the first of its kind and was a big topic in said mid to long-term objectives period; and, because some outstanding and related outcomes were obtained in fiscal 2018, we can say that JAMSTEC is making considerable achievements towards “maximization of research and development achievements”. ○JAMSTEC is working proactively on research and development activities to create achievements in all research domains, including publications in the field of geoscience and in journals with a high impact factor such as Nature and Science. In the innovative mixed information science field, JAMSTEC is maximizing research achievements by developing a methodology to discover early forms of Typhoons from image analysis that incorporates AI, and is working not only on the conventional process model approaches but now on data-driven approaches. Furthermore, JAMSTEC is proactively making contributions to society in addition to academic contributions, through outreach activities to society and technology transfer to the industry. ○Outstanding achievements were produced in research, qualitatively surpassing targets, and there is a track record of considerable contributions to the industry in also areas including technology transfer. ○We can give high marks to the innovative and unique works, including collaborations with the gaming industry and challenging to win the XPRIZE, in which outstanding achievements were made. On
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	<p>the other hand, with regard to these single events, what is important is not to be satisfied by only superficial achievements of a success story but to perform due diligence on what led to the achievements and reflect the due diligence to the business operations going forward as appropriate. Furthermore, with regard to the target that was not achieved, which is reaching the plate boundary in deepsea drilling, it is appropriate to discuss and analyze fully the soundness of the targets that were set and to investigate the cause of failed achievement, and continuously work towards the achievement of difficult and challenging targets to “understand marine and earth life systems” on the condition that the necessary considerations will be made to safety and cost.</p> <p>○Because days for transporting by sea for example is decreasing in the long-term, there perhaps is a need to review how to build a sustainable system with also the Ministry of Education, Culture, Sports, Science, and Technology.</p> <p>[Management as a research institute such as the President’s leadership management]</p> <p>○In order to improvement achievements within a limited budget and limited staffs, generally, organizations hesitate to enter a field where risk is high; however, we give high marks to the efforts made by JAMSTEC under its President’s leadership to work on challenging topics, such as drilling into plate boundary faults which is technically difficult.</p> <p>○ We can give high marks to the system of preventing micromanagement by reviewing the responsibilities of officers and transferring executive authorities of a local manager.</p> <p>○We can give good marks to reviewing all operations and transferring many authorities to reduce meetings with Directors and frequency of Directors meetings as this has led to empowerment of onsite managers and increased efficiency of operations.</p> <p>○With regard to responding to the many incidents at the management level in previous years, long-term monitoring of its effects and side-effects is needed; however, we can give good marks to the work on significant reforms including a drastically modified structure that allows all to be in charge of the work and work together at the field level on reinforcement of compliance and on mid to long-term objectives, before the start of the mid to long-term objectives period for the next term.</p> <p>○With regard to the various problems in the management of this organization, we can give good marks to the work that is being done, including proactive work to prevent reoccurrence of problems and a fundamental reform of business operations at the organization that is based on root cause analysis and on extraction of issues. On the other hand, the more drastic the measure, the better its effect; however, because the probability of serious side-effects is higher, we ask JAMSTEC to monitor these effects and side-effects long-term, and review and modify plans and strategies promptly and as needed, with an eye to the pain from the increased strain and to the dissemination of strategies onsite.</p> <p>○In summary, one can say that “Proper, effective, and efficient business management” is performed in view of factors including the purposes and businesses of the corporation and the mid and long-term objectives. With regard to the rationalization and improved efficiency of businesses, because a reduction of ▲16.8% was achieved in fiscal 2018 in the first year for property cost in the general cost of management and because proper management is performed with respect to human resource cost such as staffs and salary level, JAMSTEC’s situation on business management is not inappropriate in particular when compared to other corporations. However, the fact that the main factor in not achieving the mid to long-term objectives was the fluctuations in human resource cost which could have been anticipated as a cost tells us not only that the study into a more rational and efficient plan from a long-term perspective was inadequate but that the targets which were set can be questioned as to soundness, and as such there is a need to hold serious discussions on proper mid to long-term objectives of a national research and development agency, and in particular in regards to how to operate businesses more efficiently and rationally.</p>
Auditor’s special comments	No special matters to note.

* Evaluation categories are as follows:

S: Based on the National Research and Development Agency’s aims, businesses with mid to long-term objectives due to comprehensive consideration based on some circumstances regarding the agency’s business achievements, and efforts 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 with mid to long-term objectives due to comprehensive consideration based on some circumstances regarding the agency’s business achievements, and efforts 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.

B: Based on the National Research and Development Agency’s aims, business with mid to long-term objectives due to comprehensive consideration based on some circumstances regarding the agency’s business achievement, and efforts 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 with mid to long-term objectives due to comprehensive consideration based on some circumstances regarding the agency's business achievements, and efforts through its activities, the creation of achievements, further drastic efforts and improvements toward "maximization of R&D achievements" or "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 evaluation*					Itemized evaluation document No	Remarks
	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018		
I. Maximization of R&D achievements and quality improvement of the other operations							
1.Promoting strategic/focused research development on a basis of national/social needs	-	-	-	-	-		
(1) Seabed resources R&D	B	B	A	A	A Target	I-1-(1)	
(2) Marine and global environmental change R&D	B	A	A	A	A Target	I-1-(2)	
(3) Sea area seismogenic zone R&D	B	A	A	S	A Target	I-1-(3)	
(4) Marine life science and engineering R&D	B	B	B	A	S Target	I-1-(4)	
(5)①Promotion of comprehensive offshore drilling science utilizing advanced drilling technology	B	A	A	A	A Target	I-1-(5) - ①	
(5)②Development for R&D of leading-edge fusion information science	B	A	B	A	B Target	I-1-(5) - ②	
(5)③Construction of R&D infrastructure to open up the ocean frontier	B	B	B	B	A Target	I-1-(5) - ③	
2. Building the basis of R&D	-	-	-	-	-		
(1) Ships and deep-sea research systems etc.	B	B	A	B	B	I-2	Item evaluation document will be prepared together
(2) “Earth simulator”	A	B	A	A	A		
(3) Operation of other facilities and equipment	B	B	B	B	B		
3. Provision and promotion of usage of the information related to the marine-earth science	-	-	-	-	-		
(1) Providing and promoting the use of data and samples	B	B	A	A	A	I-3	Item evaluation document

Mid to long-term objectives (Mid to long-term plan)	FY evaluation*					Itemized evaluation document No	Remarks
	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018		
II. Items concerning the efficiency of the administration of the operations							
1. Flexible and efficient system operations	-	-	-			C	B Target II-1
(1) Enhancement of internal controls and governance	B	B	B				
(2) Rational and efficient allocation of resources	B	B	B				
(3) Implementation of evaluation	B	B	B				
(4) Promotion of information security measures	B	B	B				
(5) Information disclosure and personal information protection	B	B	B				
(6) Ensuring business safety	B	B	B				
2.Streamlining and efficiency of operations	-	-	-	-	-		
(1) Streamlining and efficiency of operations	B	B	B			B	C II-2
(2) Appropriateness of salary levels	B	B	B				
(3) Review of office work business	B	B	B	B	B		
(4) Appropriateness of contract	B	B	B	B	A		
III. Items regarding improvements in financial related matters							
Budget (Including personnel expenses)/ income and expenditure plan, and funding	B	B	B	B	B	III - VI	III. Evaluated with the items regarding

							will be prepared together
(2) PR activities	B	A	A	A	A		
(3) Dissemination of achievements	B	B	C	B	B		
4. Promotion of the international cooperation and human resources development as a base of brain circulation progresses on a global scale	-	-	-	-	-		
(1) International cooperation and the project promotion	B	A	A	A	A	I-4	Item evaluation document will be prepared together
(2) Improvement of human resource development and qualities	B	B	B	B	B		
5. Innovation creation and promotion of the return of results to the society through the industry-academia cooperation	-	-	-	-	-		
(1) Research cooperation through joint research and institutional cooperation	B	B	A	A	B	I-5	Item evaluation document will be prepared together
(2) Right size and appropriate management of R&D achievements	B	B	B	C	B		
(3) Practical application and commercialization of R&D achievements	B	B	B	B	B		
(4) Promotion of research by external funds	B	B	B	B	A		

plan								improvements in financial related matters
Limit amount of short-term borrowing	-	-	-					
If the agency intends to transfer or provide as collateral any important property, a plan therefor;	-	B	-					
Purpose of using accumulated profit	-	-	-					
IV. Other items								
Plans for equipment and facilities	B	B	B	B	-	VII	Item evaluation document will be prepared together	
Plans for personnel	B	B	B	B	B			
Debt burden over the mid-term objective period	-	-	-	-	-			
Use of a reserve fund	-	-	-	-	-			

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

*2 For items that are set to “high” level of difficulty, each comment shall be underlined.

*3 For items that were selected for reinforcement shall be marked with “Target” next to each criterion.

*4 In the “Itemized Evaluation Document No” column, the itemized document no in the itemized evaluation document for fiscal 2018 shall be entered.

*5 Evaluation categories 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 mid- to long- objective plan (in terms of quantitative indicators, 120% or more vis-à-vis planned mid to long-term objective 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 mid to long- term objective plan (in terms of quantitative indicators, 120% or more vis-à-vis planned mid to long-term objective value (or planned FY value).
- B: Performance exceeding the intended objectives is recognized in the mid to long- term objective plan (in terms of quantitative indicators, 100% or more but less than 120% vis-à-vis planned mid to long- term objective value (or planned FY value).
- C: Performance falls below the intended objectives in the mid to long- term objective plan, requiring improved performance (in terms of quantitative indicators, 80% or more but less than 100% vis-à-vis planned mid to long- term objective value (or planned FY value).
- D: Performance falls below the intended objectives in the mid to long-term objectives, requiring drastic improvement of business including its abolishment (in terms of quantitative indicators, less than 80% vis-à-vis the planned mid to long-term values (or values on prior fiscal year), or it is recognized that the competent Minister is required to make an order for improving business operation or taking other necessary measures).

The following grades are to be assigned when one is forced to raise an evaluation based on qualitative indicators such as evaluation of internal controls, and when operations performance is difficult to measure such as when meeting certain conditions is set as the target.

S:—

A: The agency reached the target level, for targets whose difficulty grade were set high.

B: The agency reached the target level (This excludes items that correspond to "A").

C: The agency couldn't reach the target level (This excludes items that corresponding to "D").

D: A fundamental review of operations is needed because the agency couldn't reach the target level, and this includes when the Minister in charge finds that the Minister needs to order improvements in operations management and order other necessary actions.