

The evaluation criteria of Japan Agency for Marine-Earth Science and Technology (JAMSTEC) and related indicators (Draft)

Item	Evaluation criteria	Related Indicator
III-1. Promotion of fundamental R&D in marine science and technology	(1) R&D for situational awareness of global environmental and forecast of changes	<p>○Is R&D for the policy positioned as Basic Plan on Ocean Policy promoted based on Mid to Long-term Objectives, and Mid to Long-Term Plans devised strategically produced big results with scientific significance in view of the international standard?</p> <p>○Did the obtained outcomes offered to the global community and the country, and did they contributed to policy making?</p> <p>○Was the R&D management to maximize research and development outcomes planned appropriately?</p> <p>(Evaluation indicator)</p> <ul style="list-style-type: none"> •Progress of the R&D set to Mid to Long-term Objectives, and Mid to Long-Term Plans •Specific research and development outcomes •Contribution to the global community and the national government •Management concerning the progress of R&D etc. <p>(Monitoring indicator)</p> <ul style="list-style-type: none"> •No. of papers published in academic paper magazines •Indexes for the quality of papers (No. of papers cited) •No. of collaborative researches etc.
	(2) R&D for sustainable and effective utilization of marine resources	<p>○Is R&D for the policy positioned as Basic Plan on Ocean Policy promoted, and based on Mid to Long-term Objectives, and Mid to Long-Term Plan devised strategically produced big results with scientific significance?</p> <p>○Are obtained results offered to the industry and promotion of their industrial use planned?</p> <p>○Is the R&D management to maximize research and development outcomes planned appropriately?</p> <p>(Evaluation indicator)</p> <ul style="list-style-type: none"> •Progress of the R&D set to Mid to Long-term Objectives, and Mid to Long-Term Plans •Specific research and development outcomes •Status of social returns of the R&D outcomes •Management concerning the progress of R&D etc. <p>(Monitoring indicator)</p> <ul style="list-style-type: none"> •No. of papers published in academic paper magazines •Indexes for the quality of papers (No. of papers cited) •No. of collaborative researches •No. of patent applications etc.
	(3) R&D on earthquakes and volcanoes in sea areas	<p>○Is the R&D for the policy positioned as Basic Plan on Ocean Policy promoted based on Mid to Long-term Objectives, and Mid to Long-Term Plan devised strategically, produced big results with</p> <p>(Evaluation indicator)</p> <ul style="list-style-type: none"> •Progress of the R&D set to Mid to Long-term Objectives, and Mid to Long-Term Plans •Specific research and development outcomes

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	<p>scientific significance?</p> <p>○Are obtained outcomes offered to the national government and related organizations, and contributed to long-term evaluation of earthquake occurrence zone?</p> <p>○Is the R&D management to maximize research and development outcomes planned appropriately?</p>	<p>•Contribution to long-term evaluations of earthquake occurrence zones performed by national government.</p> <p>•Management concerning the progress of R&D etc.</p> <p>(Monitoring indicator)</p> <p>•No. of papers published in academic magazines</p> <p>•Indexes for quality of papers (No. of papers cited)</p> <p>•No. of collaborative researches etc.</p>
(4) R&D for the enhancing and optimizing marine geophysics information using mathematical method	<p>○Is the R&D for the policy positioned as Basic Plan on Ocean Policy promoted based on Mid to Long-term Objectives, and Mid to Long-Term Plans devised strategically produced big results of scientific significance?</p> <p>○Are improvements/operations of the information infrastructure accomplished effectively based on Mid to Long-term Objectives, and Mid to Long-Term Plan, and is the cooperation with related domestic and foreign organizations progressing?</p> <p>○Are obtained outcomes dispatched to the society, and is the contribution to the approach for solution to the problem planned?</p> <p>○Is the R&D management to maximize research and development outcomes planned appropriately?</p>	<p>(Evaluation indicator)</p> <p>•Progress of the R&D set to Mid to Long-term Objectives, and Mid to Long-Term Plans</p> <p>•Progress of the R&D set to Mid to Long-term Objectives, and Mid to Long-Term Plans</p> <p>•Status of information linkage with related organizations through effective operations of information infrastructures</p> <p>•Status of the social returns of R&D outcomes</p> <p>•Management concerning the progress of R&D etc.</p> <p>(Monitoring indicator)</p> <p>•No. of papers published in academic paper magazines</p> <p>•Indexes for quality of papers (No. of papers cited)</p> <p>•No. of problems using information infrastructure, and the No. of registered R&D outcomes</p> <p>•No. of collaborative researches etc.</p>
(5) Challenging and original R&D and development of advanced fundamental technologies	<p>○Is the challenging and creative R&D promoted, looking ahead to the future based on Mid to Long-term Objectives, Mid to Long-Term Plan strategically, and are the big results with scientific significance obtained in view of the international standard?</p> <p>○Was Maximization of R&D achievements of the Is the agency planned by the advancement of the ocean</p>	<p>(Evaluation indicator)</p> <p>•Progress of the R&D set-to Mid to Long-term Objectives, and Mid to Long-Term Plans</p> <p>•Specific research and development outcomes (originality, innovativeness, leading characteristics, expandability etc.)</p> <p>•Operation of the platform for marine survey/observation and acquisition of the ability for exploration/investigation for diverse marine environment</p>

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	<p>study/observation technology and the effective operation of the platform for ocean study/observation feasible?</p> <p>○Is the R&D management to maximize research and development outcomes planned appropriately?</p>	<p>•Management concerning the progress of R&D etc.</p> <p>(Monitoring indicator)</p> <ul style="list-style-type: none"> •No. of papers published in academic paper magazines •Indexes for the quality of papers (No. of papers cited) •No. of collaborative research •No. of patent application •No. of days for ship operation (use in the institute and public offering problem) etc.
<p>III-2 Formation of a core institution for marine science and technology</p>	<p>(1) Promotion of social returns of the R&D outcomes through closer collaboration with related organizations</p>	<p>○Has the Agency promoted the means of strengthening cooperation with related domestic and foreign organizations as a core institution in the field of marine science and technology, and was the promotion of the social returns of the R&D outcomes planned in advance?</p> <p>(Evaluation indicator)</p> <ul style="list-style-type: none"> •Linkage with research organizations related to domestic industry-university-government circles, and approach for the use and application of intellectual properties . and their outcomes •Linkage with overseas research organizations, and approach for participation in planning international framework and its outcomes •Approach for acquisition of sponsored funds and its outcomes •Upbringing young human resources in the field of marine science and technology, and approach for the expansion of the range of human resources and their outcomes •Approach for public information and outreach activities and their outcomes etc. <p>(Monitoring indicator)</p> <ul style="list-style-type: none"> •No. of papers published in academic magazines, and No. of patent applications, and No. of possessions of intellectual properties and No. of licensing approaches •Amount and number of sponsored funds obtained •No. of international joint research contracts •No. of young researchers accepted from domestic and foreign research organizations, and No. of research students, and internship students accepted •No. of plans in PR media and response such as access to them etc.

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	(2) Promotion of sharing large research facilities and data, etc.	<p>○Did the Agency contribute to improvement of the standard for the marine science and technology and development of the scientific study in our country by planning the provision of the R&D infrastructure and expansion of the use of the data/sample ?</p> <p>(Evaluation indicator)</p> <ul style="list-style-type: none"> •In service of the R&D infrastructure, and the approach for promotion of in-service data and the necessary outcomes through in-service provisions. •Navigation/operation of ships relating to scientific study and relevant outcomes obtained through them •Provision of various data/samples and the use and application of them etc. <p>(Monitoring indicator)</p> <ul style="list-style-type: none"> •No. of days of operation of the vessel in entrusted voyage (day) •No. of public offering projects in earth simulator (number) •No. of days of operation of the vessel relating to scientific study (day), and No. of presentation of the research outcome •No. of open public data in Data and Sample Research System for the Whole Cruise Information in JAMSTEC etc.

Note) The “Evaluation indicator” is a standard indicator for evaluation/rating, and the “Monitoring indicator” is a necessary indicator for grasping the exact fact contributing to an appropriate and rigorous evaluation process.