Follow-up to the Evaluation of the Science and Technology Advisory Board

Audit and Evaluation Branch





Report Clearance Steps

Follow-up process implemented
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Committee (DAEC)

Acronyms used in the report

ADM	Assistant Deputy Minister
CISE	Canadian Information System for the Environment
CSTA	Council of Science and Technology Advisors
EC	Environment Canada
EMB	Environment Management Board
R&D	Research and Development
S&T	Science and Technology
ToR	Terms of Reference

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Follow-up to the Evaluation of the Science and Technology Advisory Board

This follow-up was initiated approximately two years after the management response to the recommendations put forth in the January 2000 evaluation report of the Science and Technology Advisory Board. The follow-up was done in order to determine the level of implementation of the recommendations made in the original report. Follow-ups are important, as they give senior management a crucial indicator as to the implementation rate of recommendations and adjustments made in relation to the management responses.

Context and Current Status

Environment Canada established the Board in 1996 in response to the federal government's S&T Strategy, which was released earlier that year. The main purpose of the Board is "to provide the Deputy Minister with broad, strategic advice on the relevance of the Department's entire R&D portfolio".

The first mandate of the Board ended in 1999. In keeping with the terms of reference (ToR) for the first mandate, a formative evaluation of the Board was conducted after it had been in operation for three years. The study found that the Board functioned relatively well, given that it was a start-up period. The Board had not yet accomplished its main mandated objective—the provision of an external review and validation of the relevance of the Department's R&D portfolio. The Department had not asked the Board to do this, and the information upon which to base such a review was not available to the Board.

Eleven recommendations were made from the evaluation findings relating to: the functioning of the Board to date; accomplishments of the Board to date; potential future role, structure, and operation. The main recommendations of the report are:

- to confirm the role of the Board as a source of external advice on the relevance of R&D and strategic advice on S&T;
- to modify the composition of the board accordingly;
- to reduce the number of working groups:
- · to formally record the Board recommendations; and
- to limit the role of the Secretariat to logistics only.

Since the evaluation, the Department and the Board have continued to discuss improving the operations of the Board and accordingly, its operations have been evolving. Although not all the recommendations from the evaluation have been implemented, the recommendations were discussed at the Environment Management Board (EMB) and the Board has been revised to function in a way that is compatible with the results of the evaluation.

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¹ Environment Canada S&T Advisory Board Terms of Reference, page 1.

For example, in response to recommendations contained in the evaluation report, the terms of reference for the second mandate of the Board were revised. The revised ToR stipulates that the mandate of the Board is to provide broad, strategic advice to the Deputy Minister of Environment on the relevance of the Department's entire R&D portfolio, that the Board also performs special assignments requested by the Deputy Minister, and that a workplan will be developed annually with the Deputy Minister.

It was determined that the following recommendations would not improve the operations of the Board and as a result they have not been implemented:

- an R&D Working Group will not be created. The discussions that were supposed to take place at the Working Group level will take place at the Board's meetings;
- there was a feeling that ex-officio status for senior ADM and ADM responsible for S&T were not required because S&T executives attend the Board's meetings;
- the recommendation to ensure that half of the members should have experience with R&D issues, but not be active researchers was felt too limiting. EMB preferred to keep more flexibility in membership.

As a result of Board discussions in March 2002 concerning the effectiveness of operations, a changed modus operandi for the Board was approved. The Board meetings will be 3 per year instead of 4 and panels (working groups) will meet more often to consider specific issues. There was a recognition by members that the work of the panels would not necessarily be as intensive as that of the previous working groups. Presentation time has also been cut back to ensure there is adequate time for discussion.

Areas Requiring Attention

All of the issues raised in the evaluation have been considered and actions have been taken to improve the operations of the Board. The process of improving operations is expected to continue and does not pose any undue risk to the department. Therefore, no further follow-up actions are recommended.

Summary of Recommendations and Management Actions

RECOMMENDATION	ACTIONS TAKEN
The Department should re-confirm that an essential role of the Board is to provide an external review of the relevance of the Department's R&D program.	The ToR has made the Board's role clearer and all parties are aware of the mandate of the Board. The Board has been reviewing selected areas of the Department's R&D, areas that have been identified by the Deputy Minister as in need of special attention by the Board.
2) Other than its role to review the relevance of the R&D program, the Board should be responsible for providing strategic advice to the Department regarding S&T issues on which advice has been requested by the Deputy Minister or the Environment Management Board.	The revised ToR stipulates that the mandate of the Board is to provide broad, strategic advice to the Deputy Minister of Environment on the relevance of the Department's entire R&D portfolio, that the Board also performs special assignments requested by the Deputy Minister, and that a workplan will be developed annually with the Deputy Minister.
	The principal client of the Board is the Deputy who involves the ADMs, RDGs and the S&T Executive Committee. The Board has provided strategic advice on S&T issues requested by the Deputy. Three panels have been established to examine the major issues that are of priority to the Deputy Minister and the Department and that are current areas of work in the federal government. The Panels are: Canadian Environmental Sciences Network (CESN); Environment and Health; and Biotechnology. Work plans have been developed for each Panel.
3) The Board and the Deputy Minister should jointly agree to an annual terms of reference for the Board. In addition to its responsibility to review the R&D program, the terms of reference could include, for example, responsibility for:	In response to recommendations contained in the evaluation report, the ToR for the second mandate of the Board were revised and agreed to by the Board.
 reviewing the Department's annual science advice compliance report; reviewing reports from CSTA or Advisory Council on Science and Technology (ACST) and providing advice regarding 	The Board has provided input to the CSTA as well as reviewed reports from CSTA and provided advice regarding the implications for the Department.
the implications for the Department; • bringing to the attention of the DM/EMB emerging issues and concerns (these could include not just environmental science emerging issues, but information from the Board's collective broad background on issues of concern to the	The Board has been proactive and suggested other issues they feel are worthy of attention including: environmental macro-economics; green chemistry; and aboriginal communities. These issues were explored with the Department.

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RECOMMENDATION	ACTIONS TAKEN
 public and the various sectors from which they have been drawn; providing advice on any other S&T issue the DM/EMB wants the Board to address. 	The Board has also provided advice on other S&T issues that have been requested by the DM (e.g. CISE).
Approximately one-third of the Board members should be rotated each year. The Senior ADM and the ADM responsible for Science should be designated as exofficio members of the Board.	It has not always been possible to have this exact ratio since some Board members have unexpectedly resigned and others, whose terms were up, have been asked to continue. Still, there has been rotation in the Board membership. The terms of about half the Board members will expire in March 2003.
	In order to ensure that the Board members are familiar with the Department they are given a briefing on the Department at the beginning of their appointment.
	There was general consensus that as S&T Executive Committee members attend the Board's meetings, it is not appropriate for any ADMs to be Board members.
5) Assuming recommendation #1 is accepted, Environment Canada should ensure that at least half the membership of the Board consists of people who have had experience dealing with R&D issues (but not, in general active researchers).	The recommendation to ensure that half of the members have experience with R&D issues, but not be active researchers was felt too limiting. EMB preferred to keep more flexibility in membership.
	The Department chooses members who have a diversity of complementary backgrounds that give them an overall view of S&T issues. The intent is to ensure that the members are as experienced as possible in relation to the Board's work plans.
	To ensure adequate representation in the panels and Board meetings, efforts are currently under way to expand the Board to approximately 18-20 members (Originally there were eleven members, which was then increased to fourteen).
6) The Board should have one standing Working Group, on R&D Priorities, comprised of at least four Board members willing to devote sufficient time to the tasks of the Working Group and who are interested in the performance of R&D programs (e.g., people who have had senior-level experience in R&D management). This Working Group would be responsible for: • reviewing available information on the	An R&D Working Group has not been created because the DM has asked the Board to focus on three areas that include broad aspects of R&D. The discussions that were supposed to take place at the Working Group level take place at the Board's meetings. S&T priorities have been discussed by the Board.

RECOMMENDATION	ACTIONS TAKEN
RECOMMENDATION Department's planned and on-going R&D activities and the rationale for these activities; • reviewing available information on the performance of the R&D program, such as the external impact assessments called for in the Framework for External Review of R&D • participating in any major strategic planning exercises for the R&D program; • based on the activities listed above, providing advice to the Board as a whole regarding what R&D the Department should be carrying out and how it should be carried out (this would be an input to the annual R&D program review—see recommendation #8); and • any other tasks related to the review and planning of the Department's R&D program which cannot be addressed in regular Board meetings. 7) The Board should be empowered to constitute additional Working Groups from time to time to carry out tasks that may be assigned to it by the Deputy/EMB. However, there should never be more than three Working Groups in existence, and there should be at least three Board members on each Working Group.	In response to the evaluation, the Board operated without working groups for one year. It was found, however, that the Board was not functioning optimally without the working group structure. The Board encountered difficulties in considering issues in sufficient depth to be able to offer substantial advice. As a result, panels were formed to focus on issues of priority to the DM and the Department, facilitate discussions and to allow for a more in-depth analysis of issues. The work of the newly constituted panels will probably not be as intensive as that of the previous working groups. At this time, there are three panels with approximately one third of the membership on each to ensure there are enough Board members per panel. The Board can constitute additional panels. In addition, panel members have actively involved themselves in the activities of other agencies involved in environmental sciences.
8) One meeting of the Board per year (probably a two-day meeting) should be devoted to an annual review of the	A yearly meeting to review the Department's R&D Agenda was considered and deemed not relevant. The research agendas for the three
Department's R&D program.	science-based business lines are long-term

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RECOMMENDATION	ACTIONS TAKEN
	agendas and a yearly review would not be productive.
	The Board has been provided with the research agendas and has provided feedback.
9) Following each meeting of the Board, the Board Chair should prepare a letter to the Deputy summarizing the recommendations made by the Board. This letter could also be used to bring other issues of importance to the Deputy's attention.	The Board Chair formally transmits the recommendations of the Board through a letter to the Deputy. Recommendations are also captured in the minutes of Board meetings. A mechanism (Status of Action Items) is in place which provides an update on the progress that the Department is making on action items arising from Board deliberations.
	Overall, the Board Chair has become more involved in the Board's operations both internally and externally.
10) Neither the Board nor its Working Groups should be expected to produce reports or other products. The Board may commission staff reports or consulting reports from time to time, but the job of the Board is to provide advice – not analysis or products.	The Board has not produced any formal reports since the evaluation, nor are any reports expected in 2002-03. Outputs from panels may take various forms dependent on the subject matter. Summaries of discussions are developed and strategic advice is provided.
	The Board and the Department will explore what work needs to be performed and if necessary reports will be commissioned.
11) Assuming the previous recommendation is accepted, the Secretariat for the Board should be responsible for logistics only (assisting the chair with preparing agendas, distributing material to Board members, arranging logistics for meetings, etc.).	The Secretariat provides support in terms of information and logistics and other support functions needed to ensure the smooth running of the Board. With the formation of the panels, the Secretariat expects to be involved with some research activities and possibly the letting of contracts.
When the Board wishes to commission reports (which should be rarely), that work should be distributed throughout the Department as appropriate, with the necessary resources to either assign staff or let contracts.	As recommended in the evaluation, in future operations of the Board, when research is needed it will be assigned to the most appropriate party.