

Laurentian Pilotage Authority

Special Examination Report

Presented to the Board of Directors

20 July 2005



Office of the Auditor General of Canada
Bureau du vérificateur général du Canada

15 July 2005

To the Board of Directors of
the Laurentian Pilotage Authority

We have completed the special examination of the Laurentian Pilotage Authority in accordance with the plan presented to the Board of Directors on December 10, 2004. As required by Section 139 of the Financial Administration Act (FAA), we are pleased to provide the attached final special examination report to the Board of Directors.

Pursuant to Section 140 of the FAA, it is my opinion that this report contains information, that should be brought to the attention of the Minister of Transport. Accordingly, following consultation with the Board, I will be forwarding a copy of the report to the Minister.

I would like to take this opportunity to express my appreciation to the Board members, management, and the Authority's staff for the excellent cooperation and assistance offered to us during the examination.

Yours sincerely,

(original signed by)

Nancy Y. Cheng, FCA
Assistant Auditor General

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To: The Board of Directors of the Laurentian Pilotage Authority

SPECIAL EXAMINATION OPINION

1. Under Part X of the *Financial Administration Act* (FAA), the Laurentian Pilotage Authority (the Authority) is required to maintain financial and management control and information systems and management practices that provide reasonable assurance that its assets are safeguarded and controlled; its financial, human, and physical resources are managed economically and efficiently; and its operations are carried out effectively.
2. The FAA also requires the Authority to have a special examination of these systems and practices carried out at least once every five years.
3. Our responsibility is to express an opinion on whether there is reasonable assurance that during the period covered by the examination—from September 2004 to March 2005—there were no significant deficiencies in the systems and practices we examined.
4. We based our examination plan on a survey of the Authority's systems and practices, which included a risk analysis. We submitted the plan to the Board of Directors on December 10, 2004. The plan identified the systems and practices that we considered essential to providing the Authority with reasonable assurance that its assets are safeguarded and controlled, its resources are managed economically and efficiently, and its operations are carried out effectively. Those are the systems and practices that we selected for examination.
5. The plan included the criteria for the special examination that we selected specifically for this examination in consultation with the Authority. The criteria were based on our experience with performance auditing. Our choice of criteria was also influenced by legislative and regulatory requirements, professional literature and standards, and practices followed by the Authority and other organizations. The systems and practices we examined and the criteria we used are listed in Appendix A.
6. We conducted our examination in accordance with our plan and with the standards for assurance engagements established by the Canadian Institute of Chartered Accountants. It included the tests and other procedures we considered necessary in the circumstances. In carrying out the special examination, we did not rely on an internal audit, because the Governor in Council exempted the Authority from the obligation to perform internal audits under subsection 1 31(3) of the FAA, until June 2004. On March 31, 2005, no internal audits had been performed.
7. During our special examination, we noted one significant deficiency with respect to the achievement of the Authority's financially self-sufficient.
8. The *Pilotage Act* stipulates that the tariffs of pilotage charges prescribed by an Authority are to be fixed at a level that permits the Authority to operate on a self-sustaining financial basis. Consequently, the Authority can no longer use parliamentary appropriations to fund its activities. The Authority's accumulated deficit, which nearly doubled in 2004, stands at \$7 million. As of December 31, 2004, the Authority had a working capital deficiency of \$4.3 million. The deterioration, in 2004, of an already precarious financial situation is mainly attributable to an increase in fees, retroactive to July 2002, payable to one of the pilot corporations, as awarded in an arbitrator's decision. To fulfil its obligations, the Authority published a proposed pilotage charge amendment in March 2005 that provides for a permanent increase of 5 percent in the tariffs of pilotage charges and an additional temporary tariff of 4.9 percent. The purpose of this temporary tariff is to enable the Authority to repay the amounts that it will have to borrow to pay

the retroactive fees owing to one pilot corporation. Objections were filed against the proposed tariff amendment. Even with these tariff increases, the Authority anticipates a loss of \$724,000 for 2005, which would bring its total accumulated deficit to \$7.7 million. Upon submitting its Corporate Plan for 2005–09, the Authority asked the Minister of Finance to approve an increased ceiling on the Authority's borrowing, from \$3.6 million to \$7.3 million for 2005. On March 31, 2005, the Authority's Corporate Plan had not yet been approved. Thus, we are concerned with the Authority's precarious financial situation and its future capacity for financial self-sufficiency.

9. In our opinion, except for the significant deficiency noted in the preceding paragraph, and based on the criteria established for the examination, there is reasonable assurance that there were no other significant deficiencies in the systems and practices we examined.

10. The rest of this report provides an overview of the Authority's activities and more detailed information on the significant deficiency noted above, and it contains additional findings and our conclusion.

For the Auditor General of Canada

(original signed by)

Nancy Y Cheng, FCA
Assistant Auditor General
Ottawa, Canada
March 31, 2005

OVERVIEW OF THE LAURENTIAN PILOTAGE AUTHORITY

Legislative mandates and powers

11. The Laurentian Pilotage Authority was incorporated in 1972 under the *Pilotage Act*. It is a Crown corporation subject to the *Financial Administration Act*, Part I, Schedule III, and it is not an agent of Her Majesty.

12. The Laurentian Pilotage Authority's mission is to establish, operate, maintain, and administer, in the interests of navigation safety, an efficient pilotage service in the areas for which it is responsible. The Laurentian District includes Canadian waters located in and around the province of Quebec, north of the northern entrance to the Saint-Lambert Lock, except the waters in Chaleurs Bay, south of Cap d'Espoir.

13. The *Pilotage Act* gives the Authority the power to make general regulations that must be approved by the Governor in Council, namely to:

- designate compulsory pilotage areas;
- prescribe ships or classes of ships that are subject to compulsory pilotage;
- establish the circumstances in which exemptions from compulsory pilotage may be granted;
- prescribe the conditions for obtaining pilotage licences or certificates; and
- prescribe the tariffs of pilotage charges to be paid to the Authority for pilotage services. Under section 33 of the Act, the tariffs of pilotage charges must permit the Authority to operate on a self-sustaining financial basis, and be fair and reasonable.

14. The Authority has a dual role—it makes regulations, and it delivers services.

Objectives

15. In its 2005–09 Corporate Plan, the Authority has set the following main objectives :

- achieve or maintain financial self-sufficiency;
- maximize the efficiency and safety of the pilotage system by responding to the users' needs; and
- implement the recommendations made by the Minister of Transport with respect to certain aspects of pilotage; the recommendations made by the Canadian Transportation Agency (CTA), which are included with the reasons for its 2003 decision regarding the publication of tariffs; and the recommendations made by the Office of the Auditor General, in the special examination report of May 2000.

Organizational structure

16. As a federal Crown corporation, the Authority reports on its activities to Parliament through the Minister of Transport. It is governed by a Board of Directors that is made up of one part-time chairman and six members. The members are appointed for revocable three-year terms by the Minister of Transport, with the approval of the Governor in Council.

17. The Chief Executive Officer is appointed by the Board of Directors. This person manages the Authority in conjunction with an operations manager, a treasurer, and legal counsel. The current Chief Executive Officer's mandate ends in May 2005. The Authority's headquarters are based in Montréal, and it has facilities in Trois-Rivières and Les Escoumins. On December 31, 2004, the Authority had a permanent workforce of 51 employees, including nine pilot employees.

Description of operations

18. The *Pilotage Act* provides the Authority with a monopoly status for the delivery of pilotage services in the Laurentian region. In addition to providing a service in the marine transport industry, pilotage contributes to public safety, by minimizing accidents and damage to the environment.

19. For safety purposes, the Authority has determined that pilotage is compulsory from the Saint-Lambert Lock to Les Escoumins, including the Saguenay River. Pilotage is not compulsory to the east of Les Escoumins. For administrative purposes, the Authority has established three compulsory pilotage areas in the Laurentian region :

- District 1-1 for the Port of Montréal
- District 1 between Montréal and Québec City
- District 2 between Québec City and Les Escoumins, including the Saguenay River.

20. Ships that are subject to compulsory pilotage, and that are travelling in the compulsory pilotage areas, must be under the conduct of a licensed pilot, a ship's master, or an officer who is holder of a pilotage certificate. Pilotage in District 1-1 is provided by nine licensed pilots who are employed by the Authority. Pilotage in the two other districts is provided by pilot-contractors, who are members of the two pilot corporations, with which the Authority negotiates exclusive contracts for service. The Corporation of Mid St. Lawrence Pilots (CMSLP) represents the licensed pilots in District 1, and the Corporation of Lower St. Lawrence Pilots (CLSPL) represents pilots in District 2. On December 31, 2004, 96 licences had been issued to pilots in District 1, and 73 had been issued to pilots in District 2, in addition to the seven pilotage certificates issued to Canadian masters and officers, permitting them to conduct their ship in designated areas.

21. The Authority is responsible for transferring pilots to the ships to which they have been assigned. Transfers for assignments based in Les Escoumins are made using three pilot boats, two of which belong to the Authority, and the third of which is leased. These boats are operated by LPA employees. Transfers to other areas (Québec City, Trois-Rivières, Sorel, Lanoraie, and Montréal) are made by companies with whom the Authority has negotiated contracts for service.

22. Pilot assignment services are provided 24 hours a day, seven days a week, all year round. As stipulated in the Authority Regulations, the master of a ship or their officer must provide a minimum notice of 24 or 12 hours, as applicable, prior to the anticipated boarding of the pilot. To reduce its operations costs, the Authority closed the Québec City dispatch centre in the summer of 2004 and centralized all of its dispatch operations in Montréal.

23. A computerized system is used to manage assignments and monitor ships. It is also used to provide the data required to establish pilots' remuneration and the pilotage tariff to be invoiced to users. A new computerized system was implemented in the summer 2004.

FINDINGS

24. This section presents our findings on the systems and practices used to achieve the principal results expected by the Authority. These findings also result from a review of each of the Authority's main areas of activity. The examined systems and practices are described in Appendix A, as are the criteria for examination.

Significant deficiency—Financial self-sufficiency is compromised

The current financial situation is precarious

25. Since the adoption of the new National Marine Policy in 1995, the Authority must fund its own operations, as it no longer receives parliamentary appropriations. After incurring operational losses of \$3.7 million in 1996 and 1997, the Authority's financial situation corrected itself slightly, enabling it to progressively reduce its accumulated deficit and increase its working capital. However, its financial situation deteriorated significantly in 2004. The year ended with a \$3.4 million loss, a \$7 million accumulated deficit, and a \$4.3 million working capital deficiency. The projected loss for 2005 is \$724,000. Table 1 provides the financial results for the past five years.

Table 1—Financial highlights

	YEAR ENDED DECEMBER 31 (in thousands of dollars)				
	2004	2003	2002	2001	2000
REVENUES					
Pilotage charges	45,639	42,131	41,747	36,379	36,479
Pilot boats	5,643	5,165	4,900	4,691	4,675
Other	53	451	87	45	193
TOTAL	51,335	47,747	46,734	41,115	41,347
EXPENSES					
Pilots' fees, salaries, and benefits	45,259	38,435	37,380	32,973	33,741
Operating costs of pilot boats	5,350	4,742	4,674	4,377	4,392
Operation and administration	4,113	3,998	4,268	3,925	3,584
TOTAL	54,722	47,175	46,322	41,275	41,717
NET INCOME (NET LOSS)	(3,387)	572	412	(160)	(370)
ACCUMULATED DEFICIT	(6,931)	(3,543)	(4,115)	(4,527)	(4,367)
WORKING CAPITAL	(4,319)	(1,163)	(1,829)	(2,243)	(3,761)

Source: Annual Reports submitted by the Authority

26. The Authority's financial situation is precarious, and a serious risk exists with respect to its future capacity for financial self-sufficiency. This situation is partly attributable to the fact that the tariff increases in past years have been lower than projected, in the budget, or have been just enough to cover expenses, more than 80 percent of which relate to pilots' fees. Consequently, the accumulated deficit is being reduced very slowly. For example, the Authority estimates that

the difference between the allowed tariffs and the requested tariffs, for 2003–04, will give rise to a recurring shortfall of nearly \$900,000 per year.

27. The loss incurred in 2004 is due mainly to the fees payable retroactively, for July 2002, to one pilot corporation. The contract for service with this company, which expired on June 30, 2003, provided for a yearly fee increase of 3 percent, with the possibility of renegotiating the increase for the final year. The two parties were unable to come to an agreement, and the dispute was resolved by an arbitrator who awarded an 8 percent increase to the pilots. The Authority challenged the soundness of this decision before the Federal Court, but was unsuccessful. Thus, the Authority owes this pilot corporation the difference between the projected increase of 3 percent and the 8 percent awarded by the arbitrator. For the period beginning July 1, 2002, and ending December 31, 2004, this debt amounts to \$2.7 million, including interest. The Authority believes that this amount could climb as high as \$4 million before it has the cash assets required to pay it off.

Important decisions need to be made

28. **Tariff increase.** In March 2005, the Authority filed a tariff amendment proposal in the District of Montréal-Québec City. This proposal provides for two increases beginning on July 1, 2005: one permanent 5 percent increase, and an additional temporary tariff of 4.9 percent. The purpose of the temporary tariff is to provide the Authority with the funds necessary to repay the money it will have to borrow to pay the retroactive fees owing to one pilot corporation. The expected duration of the temporary tariff is three years. Notices of objection have been filed with the Canadian Transportation Agency regarding the tariff amendment proposal. As stipulated in the *Pilotage Act*, the Agency is required to make a recommendation on this tariff increase proposal within 120 days, and the Authority is obligated to govern itself accordingly.

29. **Financial strategy.** When the 2004–08 Corporate Plan was approved, the government recommended that Transport Canada develop a strategy, in co-operation with the Authority, to ensure the Authority's financial self-sufficiency. We have been informed that the selected strategy will be incorporated in the presentation to be made to Treasury Board, for approval of the 2005–09 Corporate Plan. Although the Board of Directors approved the Corporate Plan in October 2004, the Authority was still awaiting approval from Treasury Board at the conclusion of our examination. In its Plan, the Authority asked the Minister of Finance to authorize an extension of its current borrowing limit, from \$3.6 million to \$7.3 million, to enable it to fulfil all of its contractual obligations. In the meantime, the Minister of Finance authorized an extension for the use of the \$2.1 million line of credit to September 30, 2005.

30. In the past, we have stated our concerns regarding the Authority's capacity for achieving financial self-sufficiency. Since then, amendments to the *Pilotage Act* have allowed for the accelerated implementation of the new proposed tariffs and a review of the dispute resolution process for service contract negotiations. Moreover, in this special examination, we noted that the Authority has made some progress with respect to its practices, and, through various means, has made efforts to reduce its expenses. For example, the Authority is better prepared for pilotage service contract negotiations. It still faces a number of challenges, as we note in this report, to improve its practices and achieve financial self-sufficiency. Despite the amendments made to the *Pilotage Act* in 1998 and the improvements made to its practices before now, we remain concerned about the Authority's precarious financial situation and its future capacity for self-sufficiency.

The dispute resolution mechanism may constitute a constraint for the Authority

31. The *Pilotage Act* provides for two dispute resolution mechanisms: one mechanism to resolve objections to tariff amendments, and another to resolve disputes that arise in negotiations for service contracts. The difference between these two mechanisms may constitute a significant constraint for the Authority, because the decisions are made by two separate authorities whose

final and binding determinations may have a serious impact on the Authority's financial results. On one hand, the Canadian Transportation Agency (CTA) must take public interest into consideration when it evaluates tariff increase applications. On the other hand, an arbitrator assigned to resolve a dispute, in the course of service contract negotiations, must make a determination by selecting the final offer in its entirety of either party. The *Pilotage Act* does not provide guidelines for the arbitrator, with respect to the factors to be considered, before accepting the final offer of either party. The arbitrator is not, therefore, required to take into account the financial situation of the Authority; the industry; or the legislative requirement of financial self-sufficiency, to which the Authority is subject.

32. This issue was raised by the users in their notices of objection to the CTA when the new pilotage tariffs were published. The committee responsible for reviewing the *Canada Marine Act* also raised this issue in its 2003 report. This committee recommended that the *Pilotage Act* be amended to include a provision similar to one in the *Canada Transportation Act*, which confers extended powers on the arbitrator, allowing them to request additional information.

33. The Authority could find itself in a situation that is difficult to manage where the decisions of either of the two authorities do not enable it to ensure the financial self-sufficiency of its operations.

34. It is our opinion that the Authority will be unable to achieve the financial self-sufficiency required by the *Pilotage Act* without the adequate support from the government.

ADDITIONAL FINDINGS

Governance

35. Governance deals with the structures, systems, and practices for monitoring direction and managing an organization that will enable it to fulfil its mandate and meet its objectives. Our examination of the governance practices focused mainly on the clarity of the roles and responsibilities relating to governance activities and to the quality of the information available to the Board of Directors for decision-making and accountability.

36. Since our last special examination, the Authority has made efforts to implement good governance practices. Namely, the Board of Directors developed a profile of its members' qualifications, defined the Audit committee's mandate, assessed the Chief Executive Officer's yearly performance, participated in establishing a strategic direction, and reviewed the Corporate Plan. The appointment of a part-time chairman and the creation of the full-time general manager position have also helped improve governance. We have noted that the roles and responsibilities of the Chief Executive Officer, the Chairman, and the Board members are generally well-defined.

37. The Authority should persevere with its efforts to improve its governance practices so that it is better able to oversee its interests. In her February 2005 report, the Auditor General dedicated a chapter to governance in Crown corporations. Also in February 2005, the Treasury Board Secretariat published a document entitled "Review of the Governance Framework for Canada's Crown Corporations." We encourage the Board of Directors to draw on the practices described in these two reports to improve its practices on an on-going basis.

Although the Board has taken steps to improve its governance framework, there is still room for improvement

38. **Composition of the Board.** According to best practices, directors should have the ability to make decisions objectively and independently, in order to be effective. Independence helps to establish the Board of Directors' credibility and promotes sound governance and effective accountability.

39. As stipulated in the *Pilotage Act*, the Authority is governed by a Board of Directors comprising one chairman and a maximum of six additional members. In addition to a part-time chairman, the Authority's Board of Directors includes two representatives from the pilots' corporations; two user representatives; and two representatives, who are members of the public. This composition follows the custom that has been established throughout the years, and is not a requirement of the *Pilotage Act*. Although we do not question the objectivity and qualifications of the current directors, we have reservations as to whether the current composition of the Board offers the necessary levels of independence and objectivity. In our view, there is an appearance of conflict of interest, particularly where the interests of the groups represented by the members are at stake. For example, decisions dealing with amending the Authority's Regulations, negotiating pilotage service contracts, and applying for tariff increases. The current composition of the Board of Directors could hinder the process of making objective decisions, in a timely manner.

40. The appointment committee, created in 2004, established the members' skills profile in a very general manner, based on the current representation of Board members. It is our opinion that the members' skills profile will need to specify the skills, knowledge, and experience that the Board, as a whole, should have in order to meet the needs of the Authority. They should then clearly communicate to the government the qualifications sought in its subsequent proposals for the appointment of new directors. Moreover, the Board should ensure that appointments are staggered over a certain period of time to ensure the continuity of the Board of Directors' operations and to comply with the *Financial Administration Act*. By the end of our examination, three mandates had expired; three more will end in the coming months.

41. **Mandate of committees.** The Audit Committee's current mandate dates back to 2001, and does not reflect the expanded responsibilities of audit committees since that time. The Board should update the Committee's mandate, and take into account—among other things—that, since July 2004, the Authority is no longer exempt from the obligation to perform internal audits. The Audit Committee is responsible for approving internal audit plans, reviewing the reports, and ensuring that management take necessary corrective measures. Also, the current composition of the Committee should be reviewed to ensure that all of the members have basic knowledge of financial matters; and that at least one member has specialized knowledge of accounting, or of the related financial management. The Authority should also set out the mandate and establish the operating mechanism for its new appointment committee.

42. **Performance assessment.** The Board has not assessed its own performance. We encourage the Board to carry out this assessment to identify the ways in which it has handled its governance responsibilities effectively.

43. **Information conveyed to the Board.** In our examination, we expected the information available to the Board to be sufficient, relevant, and received in a timely manner. Our interviews with the Board members show that, overall, these members are satisfied with the information received. At present, the main tools used to monitor performance are the informal activity reports from management and the analysis of financial results, which is used to identify discrepancies in the budget. It is the responsibility of the Board to ensure that the Authority sets out clear and measurable objectives and controls, and assesses the extent to which these objectives are achieved. Consequently, as we have indicated in the section on Strategic Planning and

Accountability, the objectives should be more specific and the performance indicators need to be improved.

44. **Values and ethics.** The onus is on the Board of Directors to ensure that the Authority develops a code of values and ethics that will assist it in guiding the behaviour of its directors and employees. We have noted that, although the Authority's by-laws contain some rules on conflict of interest, the Authority does not have a code of values and ethics. Codes of values and ethics are being used increasingly by private sector and public entities. We encourage the Authority to implement similar management practices. The Authority could look to the new *Values and Ethics Code for the Public Service*, made public in September 2003, for insight.

45. **Risk management.** Although the Authority is aware of a number of risks, it does not have an integrated risk management framework. It should identify all of the risks to which it is exposed, assess the impact of these risks on achieving its objectives, and establish the measures to be taken to reduce these risks. This framework should be reviewed reasonably often, in order to incorporate changes in the operational environment. The members of the Board would, then, be assured that the necessary measures have been taken to ensure the effective management of risks and to bring these risks back to an acceptable level.

Strategic planning and accountability

46. Strategic planning defines the nature of an organization, its activities, and the underlying reasons for these activities, while focussing on the future. This includes assessing and fine tuning the organization's direction to cope with a changing environment. The Board of Directors plays a key role in strategic planning. The Corporate Plan is the tool to be used to guide the definition of organizational objectives and the allocation of resources, whereas the Annual Report is used to account for the results obtained.

47. We have examined the strategic planning systems to determine whether the Authority's direction and plans are realistic; take into account the priorities of the government; and are based on an adequate analysis of its environment, market, risks, and financial and operational repercussions.

48. Our examination revealed that the planning process allows for a proper determination of the broader directions. A strategic planning committee, comprising the main members of the management team, meets early enough in the process to determine the basis for the Corporate Plan. The committee highlights past results, and reviews the commercial context and the issues that are important to the Authority. Input for the process comes from a number of reliable sources, both internal and external. The Board of Directors participates in establishing the strategic direction and reviews the Corporate Plan. We feel that the implementation of an integrated risk management framework could improve the process.

Objectives should be more specific and the performance indicators should be improved

49. We have noted that most of the objectives, and the strategies to meet them, are described very briefly in the Corporate Plan. For example, manage operations in a cost-effective manner, improve communications, and maintain the efficiency of employees. The Authority would benefit by specifying its objectives and expressing them in measurable terms, in order to clearly set out the corresponding strategies for success.

50. Moreover, the majority of the objectives are not related to performance indicators or quantified targets. Consequently, the relationship between the objectives and the results presented in the Annual Report is unclear, and it is difficult to determine to what extent the expected results have been achieved.

51. In our preceding special examination report, we suggested that some performance indicators be integrated to enable the assessment of the Authority's results. Examples of these indicators may include pilotage service delays, client satisfaction, and incidents involving pilot boats. Only one indicator—the percentage of marine occurrences—is included in the current Annual Report.

Consultation and communication with the various parties are important

52. During its examination of pilotage issues, the Canadian Transportation Agency recommended that the pilotage authorities consult more frequently with the involved parties, with respect to financial, operational, and planning issues. We have noted that the Authority has carried out these consultations and that a number of exchanges on a range of topics have taken place between the various parties. A consultative committee was created to ensure user participation in the negotiation process for renewing pilotage service contracts. A number of consultations were also held with respect to risk assessment studies.

53. We encourage the Authority to continue consulting and communicating with the various parties, particularly the users and pilots. Over the coming months, the Authority will have to resolve some important issues that will require numerous exchanges with various parties. The Authority would benefit from a communication strategy that takes into account means that are likely to foster reconciliation and consensus between the various parties.

Safe pilotage service

Risk assessment

54. The Authority is responsible for setting conditions that ensure an acceptable level of safety for navigation in the Laurentian region. It must consider the economic impact of these conditions on the marine industry. Where the conditions are too strict, user tariffs could be unreasonable or unfair. Consequently, we expected that the designation of compulsory pilotage areas and of the ships subject to compulsory pilotage would be based on an assessment of risks.

55. In past years, the number of marine occurrences has been less than half of 1 percent of all of the pilotage missions. The pilotage service and the requirements set out by the Authority contribute to navigational safety in the Laurentian region.

56. During its examination of the pilotage issues, the CTA noted a lack of documents and support for the criteria used in establishing the current requirements for compulsory pilotage. In its 1999 report, the Agency recommended that the Authority carry out risk assessment studies regarding compulsory pilotage areas, ships subject to compulsory pilotage, and double pilotage. Transport Canada requested that these studies be carried out using the *Pilotage Risk Management Methodology* (PRMM), developed by the Department and the pilotage authorities.

57. Further to consultations held with user associations and pilot groups in April 2001, the Authority determined the order in which these studies would be carried out as follows: (1) Canadian ships subject to pilotage; (2) double pilotage; and (3) compulsory pilotage areas.

The Authority should perform risk assessment studies and review its regulations accordingly

58. The study of the parameters for Canadian ships subject to compulsory pilotage began in July 2001 and ended in October 2003. In accordance with the PRMM, the key stakeholders were consulted at various stages of the study. Based on the documents analyzed, it appears that a consensus could not always be reached with respect to quantifying the risks and consequences and risk control strategies. To resolve this issue, the Authority has requested the continuation of

this study using a detailed statistical analysis of the accidents/occurrences involving Canadian and foreign ships over a period of 15 years—from 1988 to 2002 inclusively.

59. The Board of Directors followed the recommendation made in the assessment report to propose regulatory amendments. However, it excluded some classes of ships and added a series of conditions relating to the class of ship, equipment, and qualifications of the staff on board to minimize the risks. At the end of our examination, the Authority's management and Transport Canada were working to find a solution that meets the Board's expectations and that complies with the *Pilotage Act*. The Authority expects to publish some regulatory amendments during the year.

60. The risk assessment study on double pilotage is not yet complete. Given the Authority's limited financial resources, the high cost of risk assessment studies, and the need to respond to the CTA's recommendations within a reasonable timeframe, Transport Canada has arranged to have a consultant carry out the first phase of this study and has assumed the related costs, estimated to be nearly \$200,000. The report on the study, submitted in June 2004, recommended a second phase. The Authority indicated to us that differences of opinion and a lack of consensus existed between the pilots and the ship owners regarding the methodology used and the preliminary results. At the conclusion of our examination, a decision had not yet been made as to whether this study would be continued, and the study on the compulsory pilotage areas had not yet been started.

Pilots' competence

The systems and practices are in place to assess the proficiency of pilots and officers

61. The Authority should ensure that the certified pilots and officers have the competence and abilities required to ensure safe pilotage. We noted that the Authority had appropriate practices and systems in place to obtain reasonable assurance in this matter.

62. Pilot competence is recognized by all stakeholders in the marine industry. The low rate of marine accidents also confirms the pilots' competence. The Authority uses a structured process to select pilot apprentices.

63. Since the last special examination, the Authority has established a database to compile all of the relevant information about each of the pilots, such as the training they have received and their physical condition. During our examination, we noted that the Authority had not monitored compliance with the regulatory requirements regarding medical examinations and pilot training on a regular basis. However, the situation had been rectified by the end of our examination.

64. The 1999 departmental study on pilotage issues recommended that the pilotage authorities develop and implement a system that is fair and reasonable to assess the competence of pilots and the quality of their services. The recommendation stated that these assessments should be performed at regular intervals—every five years at a minimum. Although the Authority cooperated with the other pilotage authorities to develop a continued proficiency form, it has not yet assessed the performance of the pilots or the quality of the services provided. However, it does perform assessments further to marine occurrence analyses and complaints received, as needed.

Economical and efficient pilotage service

Planning process for requirement for pilots

65. We have examined the planning process for the requirement for pilots to determine whether the Authority was retaining the services of a sufficient number of pilots and at a reasonable cost in accordance with the projected volume of traffic, reasonable productivity standards and an acceptable level of quality of service in order to meet strategic and operational requirements.

66. The pilot-related costs account for more than 80 percent of the Authority's total expenses. The *Pilotage Act* provides for exclusive pilotage services in the compulsory pilotage areas. Thus, the Authority must negotiate the delivery of pilotage services with the corporations that have a monopoly.

The Authority should continue with its efforts to improve the planning process for its requirement for pilots

67. In our preceding special examination, we noted that the Authority needed to plan its short-and medium-term requirements for pilots in order to better determine recruiting needs, better control the related pilotage fees, and be in a position to meet the demand for services.

68. We noted that the Authority made efforts to determine and document its requirement for pilots during the preparation of its Corporate Plan. These analyses take into account the fluctuation of estimated traffic and potential retirements. These analyses could be improved by taking into account the respective class of licence of each pilot. This factor is important, because there are three classes of licences, and it takes eight years to train a pilot for the highest class of licence.

69. The demographic profile of pilots remains a source of concern. The active pilot population is aging. For example, the average age of a pilot is 51, and 41 percent of the CLSLP's active pilots are older than 55. In its latest Corporate Plan, the Authority estimates that it will have to recruit more than 50 apprentice pilots by 2008. The Authority acknowledged that there was some uncertainty with respect to the pool of candidates to replace these pilots. It had planned to analyze the pool of potential candidates in the fall 2004, but it has not yet followed through on this plan. We encourage the Authority to perform this analysis so that it may clearly assess the potential impact on its significant recruiting needs planned for the coming years.

70. In planning its pilot workforce, the Authority should not lose sight of the fact that any delay in pilotage services gives rise to additional costs for the users. It should, therefore, ensure that a sufficient number of pilots—licensed in accordance with the class of licence required—be available at all times to meet demand.

71. We noted that the Authority was experiencing a great deal of difficulty in implementing this planning process. During past years, it has been unable to recruit the number of apprentice pilots identified in its Corporate Plans. Table 2 provides information on the planned and actual numbers of apprentice pilots, recruited in the last five years.

Table 2—Details of apprentice pilot recruiting

Year	Number of Pilot Apprentices	
	Planned	Actual
2001	10	4
2002	11	0
2003	18	4
2004	14	9
2005	18	14

72. Although the recruiting plan is subject to discussion with the pilot corporations, it is apparent that it is difficult to come to a consensus. One of the problems that arises during this planning process relates mainly to the contractual provisions of the contracts for service with one of the pilot corporations. The Authority has some influence on the recruiting of apprentice pilots only when the “productivity clause” was paid in the previous year.

73. We also noted that the Authority has decided to reduce the recruitment of apprentice pilots for some years to reduce its expenses, further to a CTA decision not to allow the tariff increase it had requested.

74. During negotiations for the most recent contract for services with the Corporation of Lower St. Lawrence Pilots (CLSLP), the Authority delegated the responsibility of managing apprentice pilots to the CLSLP. We noted that the contract does not contain a clause that clearly defines the pilot corporation’s responsibility and accountability with respect to service. The Authority should ensure that the number of apprentice pilots and the service provided meets its expectations.

75. Having an insufficient number of pilots available may have an impact on quality of service and on the Authority’s financial situation. In the last year, the increase in the number of delayed ships is attributable in part to a lack of pilots and an increase in the costs relating to the productivity clause.

76. The pilot workforce in the Mid St. Lawrence (MSL) District is an issue for the Authority because the fees paid to the pilot corporation increase by 50 percent when the average workload per pilot exceeds 120 assignments. This clause exposes the Authority to additional costs, which may compromise its goal of financial self-sufficiency. The cost of these productivity premiums was \$361,000 in 2003 and \$1,000,000 in 2004, because the MSL pilot workforce was insufficient to maintain an average workload of 120 assignments per pilot. The Authority anticipates paying approximately \$1 million per year in productivity premiums for the next two years.

Pilot workload should be reviewed

77. The average 120-assignment workload involving the pilots from the Corporation of Mid St. Lawrence Pilots is based on historical analyses. During the last examination, we had recommended that the Authority assess the cost of a study to review pilot workload and the related benefits. We note that this study has not been carried out. It is our opinion that the Authority should reassess the appropriateness of such a study, given the evolution of ships and navigational technology, and the benefits and drawbacks relating to a change in the average workload. The impact of this change on the application of “productivity clause” should be determined. The Canadian Transportation Agency also recommended a similar study in its 2002 decision.

Although the negotiation process for contracts for pilotage services has improved, it has not yielded the expected results

78. We have examined some aspects of the pilotage service contract negotiation process into which contracts were entered with the two pilot corporations in December 2003 and July 2004. In both cases, we noted that the Authority adopted negotiation strategies based on specific objectives. It clearly indicated the contractual clauses that it should review as a priority, and the regulatory clauses, contained in former contracts that it should try to eliminate. The Authority assessed the monetary aspects of the offer and the demand throughout the negotiation process. The main issues were discussed regularly by the Board of Directors. A consultative committee was created to consult with users on a regular basis during the negotiation period.

79. The contract currently in effect with the CLSLP results from a negotiation between the two parties. The Authority gained a significant advantage with respect to withdrawing some

regulatory clauses that were included in preceding contracts. The contract with the CMSLP was concluded further to the decision of an arbitrator, based on the final offer, as set out in the *Pilotage Act*. The arbitrator selected the pilots' offer, and, consequently, the Authority was unable to have certain regulatory clauses withdrawn or to have the productivity clause eliminated.

80. The inclusion of regulatory clauses in a contract for pilotage services limits the actions the Authority can take and may restrict its ability to implement regulatory changes that it is authorized to make under the *Pilotage Act*.

81. The Authority, aware of this risk, tried unsuccessfully to rectify the situation during the negotiations for contracts for pilotage services. The withdrawal of the regulatory clauses was one of the Authority's main objectives in the most recent negotiations.

Pilot boat and facilities management

The Authority has improved its maintenance practices

82. Economical and efficient asset management relies on timely planning and monitoring of the maintenance and replacement of equipment and facilities.

83. In the 2000 special examination, we recommended that a process for regular and systematic inspection of facilities and major assets be implemented to better assess the condition of these facilities and assets, and better plan and manage related costs. Since that time, the operations section has created an asset inspection program that calls for visual inspections and a detailed examination at a frequency established on the basis of the class of assets. The inspection results, along with the planned maintenance work and an estimate of the related costs, are recorded summarily in a follow-up document. We noted that the inspections had been carried out at the frequency planned and that maintenance work on major assets had been performed.

The condition of contract pilot boats should also be monitored

84. In our 2000 special examination, we mentioned that the Authority did not inspect contract pilot boats according to the rules. We reiterate the importance of performing these inspections to ensure that the contract pilot boats are safe and available, as needed. Although the Authority can identify situations of non-compliance with safety requirements through complaints or reports from pilots, we believe that it would be better to establish inspection mechanisms in order to prevent any unfortunate incidents and to avoid compromising the safety of the crews and pilots.

Medium-term planning is necessary for one pilot boat

85. The *A. Martin* is the oldest of the three pilot boats in operation at Les Escoumins (21 years of service compared to nine and four years respectively for the *Charlevoix* and the *Côte-Nord*). Given its characteristics and the fact that it has the lowest cost of operation, it is also the most frequently used pilot boat of the three. In 2004, the *A. Martin* was used in more than 60 percent of pilot transfers, and it accumulated twice as many hours of operation as the other boats. Consequently, the staff assigned to its maintenance monitors its operations more closely and performs maintenance more frequently.

86. At the time of our examination, management was performing the major repairs needed on the *A. Martin*. The Authority believes that this work will extend the boat's useful life by nearly five years. Given this boat's high level of use and age, the Authority should—in the medium term—analyze potential alternate solutions to using this pilot boat and make decisions accordingly. The Authority should clearly determine its needs, limitations, and possibilities, and establish a timeframe for any necessary replacement processes, to avoid the emergency situation that arose when the pilot boats were replaced in 1996 and 2001.

Centralization of assignment operations

87. The centralization of all assignment operations in Montréal has been a topic of discussion for a number of years. In order to reduce its operating costs, the Authority closed the Québec City dispatch centre in July 2004. At that time, the Authority was also developing a new computerized dispatching and invoicing system. Because the project experienced some delays, the system was implemented around the same time as the dispatch centre was transferred.

88. We examined the planning and implementation aspects of merging the two dispatch centres. We focussed on human resources management and employee training.

Recruiting practices need to be improved

89. We noted that the Authority had not developed a detailed action plan, which would have enabled it to identify and assess all of the risks, the impacts, and the measures to be taken to mitigate them. The situation gave rise to higher risks because of the delay in implementing the computer system and the uncertainty surrounding the transfer of the Québec City employees.

90. Due to the transfer of one of the Québec City employees, retirements, and sick leave, the Authority had to hire a number of new dispatchers. The Authority had to act quickly in some cases, particularly after the unexpected resignation of five Québec City dispatchers who had initially agreed to go work in Montréal. We noted that the Authority did not have a stringent process in place to recruit and evaluate candidates. Thus, there was no pre-determined interview questionnaire or selection examination. In our view, the deficiencies in the recruiting process contributed substantially to the high turnover rate in the dispatch centre in 2004. Although the centre operates with an average workforce of 17 employees, the Authority had to staff 21 positions in the last year to fill the vacant positions created by departures, retirements, and sick leave. The Authority should improve its recruiting practices by defining its requirements and the skills needed, and evaluating candidates more thoroughly.

Action should be taken to improve training

91. We noted that the Authority had not developed a comprehensive training program adapted to its specific needs, at the time the assignment operations were centralized. Yet, it had a considerable need for training, given the centralization of assignment operations, the new computer system, and the recruitment of new employees.

92. It is our opinion that the lack of employee training and experience, combined with the implementation of a new computer system, contributed in part to the various problems experienced by the dispatch centre since the summer of 2004. Additional efforts were required over a number of months to validate all of the invoices, due to data capture errors made by employees in the dispatch centre.

93. The Authority also received complaints from the Lower St. Lawrence pilots, who voiced their dissatisfaction with the dispatch service. In October 2004, the Corporation of Lower St. Lawrence Pilots submitted a demand letter to the Authority. To resolve the dispute with the pilots, the Authority evaluated and followed up on each complaint and took the necessary corrective measures.

Information system

94. We have examined the planning, implementation, and management of the information systems to ensure that they allow for the continuity of operations; meet the information requirements, at an acceptable cost and in a timely manner; and, support the Authority's objectives.

95. The information systems provide key support for all of the organization's services and activities. During our previous special examination, the Authority was working toward finalizing a computerized system to track assignments and issue invoices. This system has been the source of numerous problems that have adversely affected the general efficiency of the dispatching and invoicing operations. Because of these problems, the Authority decided to change this system in November 2001. An information technology committee, made up of management and members of the Board of Directors, was created to select the new system. The Authority chose a turnkey option to reduce the programming risks it faced with the design of its former system. Moreover, the new computer system was selected largely because it was currently in use by two other pilotage authorities, and the supplier had knowledge of pilotage operations.

96. We noted that it took more than 18 months to complete the project and that the in-service date was postponed a number of times. The costs incurred by late December 2004 exceeded \$400,000; the projected cost was \$237,000. Although the Authority used current practices to select the system and manage the implementation of the project, we noted deficiencies in the planning and management of this project.

97. The Authority requested a number of modifications throughout the implementation of the various modules. The large number of modifications shows that the requirements were ill-defined by the users or not clearly communicated to the suppliers.

98. The users of the dispatch service did not analyze the impact of the new computer system on their business processes. They attempted to reproduce their business processes in their current format, rather than reviewing them using the new system's potential. Consequently, modifications and additions were requested regularly, giving rise to additional costs.

99. During our special examination, we noted that the dispatch service was still adapting, even though the users felt that there were fewer and fewer problems.

100. The Authority implemented two major changes, by placing the new information system in service and centralizing dispatch operations; it underestimated the combined repercussions of these activities. We believe that the Authority has exposed itself to business risks that could have been avoided, had the major changes been planned and managed better.

The emergency plan does not include an information technology recovery plan

101. We also examined the key systems and practices that ensure the continuity and resumption of operations. The Authority does have an emergency response plan. However, it does not have an official and concrete alternate plan for information technology. Best practices dictate that it is necessary to identify, develop, and periodically test the administrative measures necessary to resume activities, and mitigate the impact of an interruption of the activities relating to the information systems. We feel that the development of an activity resumption plan, and simulations and trials of the procedures, would improve the Authority's control of operational aspects in the event of a disaster or the interruption of its activities.

CONCLUSION

102. As we have noted in our opinion based on the special examination, during the period covered by the examination, a significant deficiency existed with respect to achieving financial self-sufficiency. We have also pointed out, throughout this report, the various opportunities for improving the quality of the systems and practices that should enable the Authority to manage its operations economically and efficiently. It is our opinion that the Authority should:

- review its governance practices, particularly with respect to the composition and assessment of its Board of Directors;
- implement an integrated risk management framework;
- identify more specific and measurable objectives, and correct the performance assessment deficiencies;
- adopt a strategy for communicating with the various stakeholders;
- carry out risk assessment studies, and make decisions accordingly;
- improve the pilot requirement planning process;
- develop a negotiation strategy for future pilotage service contract negotiations; and
- improve its recruiting process, and provide dispatch centre employees with appropriate training.

MANAGEMENT'S RESPONSE

Your 2005 special examination report is, yet again, a valuable management tool to be used to review our Authority's practices and services as provided to the marine industry. You identify, and rightfully so, a number of deficiencies that are of concern to us and that will be the focus of specific studies in the coming months. Our Authority's entire management team will be tapped to help identify and implement solutions to the problems encountered. Through this response, we wish to present to you a preliminary snapshot of the measures considered.

First, you pointed out the precariousness of the Authority's financial situation. The Authority, with Transport Canada, will review the financial strategy that Transport Canada has prepared, and that will be integrated in the 2005–09 Corporate Plan. Various aspects will be considered; specifically, we will examine the issues over which the Authority has some control. These issues include improving the training program for pilotage certificates for which a simulator is required and deciding when to hire or postpone the hiring of apprentice pilots.

Some contractual aspects will also be reviewed during the negotiation of contracts for service with the pilot corporations, specifically, the productivity clause in effect with the Corporation of Mid St. Lawrence Pilots. Aspects of these contracts that have an economic impact will also be considered.

The Authority will also examine the arbitration process applicable to selecting contracts for pilotage services. The difference between the increases authorized by the Canadian Transportation Agency (CTA) and those established in this arbitration process also raise questions. However, all of these issues will be examined using the legislation that is currently in effect.

With respect to reviewing governance practices for compliance with the directives issued by Privy Council, the Authority has already initiated a review of the composition and assessment of its Board of Directors, and it is making recommendations to Transport Canada.

In order to implement an integrated risk management framework, the Authority is preparing to award a contract for the preparation of an internal audit plan that will include a risk assessment. The Authority will examine the possibility of creating a Board committee, and it will develop terms of reference to achieve this objective with members of the management team.

To identify more specific and measurable objectives, the Authority will take the actions necessary to improve its strategic direction process by identifying its objectives in greater detail. It will list the actions taken, the timeframe for achieving results, and the human and financial resources required, and it will establish the criteria for measuring performance.

The Authority will review its communication plan to develop a more effective communication strategy. This means that it will communicate and establish relationships with the employees, the pilot corporations, the contractor pilots, the CTA, the marine industry, the Canadian Shipowners Association (CSA), and the Shipping Federation of Canada (SFC).

The first study of the Canadian ships subject to compulsory pilotage should be completed this year. The study on double pilotage should continue, resulting in regulatory decisions and amendments throughout 2006.

We anticipate carrying out a thorough study to identify a better way of planning for and managing the number of pilots required and the number of apprentice pilots to be recruited in the future. We will also implement a proficiency management and training process for each employee-and contractor-pilot. Further, we will investigate the possibilities of making the pilot corporations more accountable in this respect.

In anticipation of future negotiations for contracts for service, the Authority has already planned to develop a consultation strategy with the stakeholders, and to retain the services of an expert negotiator. The preparation work will be completed a number of months prior to the expiry of the next contract.

With respect to improving the recruiting process and providing appropriate training for the employees in the dispatch centre, the Authority will continue to revise its selection criteria and its dispatcher recruitment process. The Authority, in co-operation with the labour union, has already committed to developing a new training program for new dispatchers, and it plans to develop a new advanced training program for dispatcher supervisors.

In conclusion, we wish to express our appreciation for the scope of the work you have performed and the timeliness of your recommendations which will enable us to fulfil our mission more effectively.

APPENDIX A—SYSTEMS AND PRACTICES EXAMINED AND RELATED CRITERIA

Financial self-sufficiency

The pilotage tariffs are fair and reasonable, and they are fixed at a level that should ensure the Authority's financial self-sufficiency.

Governance, planning, and accountability

The Board of Directors ensures that the roles and responsibilities relating to governance activities are well-defined and applied, and that a clear governance plan protects the interests of the Authority and makes it liable for handling the responsibilities conferred upon it by the *Financial Administration Act* or otherwise.

The Authority communicates its direction and plans clearly. The direction and plans are realistic; take into account the government's priorities; and are based on appropriate analyses of the industry, the market, the risks, and the financial and operational implications.

The Authority's Board of Directors and management team have the relevant management and financial information they need, in a timely fashion, for purposes of decision-making and accountability.

Designation of compulsory pilotage areas and ships affected

The designation of compulsory pilotage areas and of the ships subject to compulsory pilotage is based on an assessment of navigational risks in such a way as to ensure the safe passage of ships in the Laurentian region.

Human resources management

The ships subject to compulsory pilotage are under the control of licensed pilots or officers who hold pilotage certificates, and who have the competencies and capabilities required to ensure safe pilotage.

The Authority employs a number of pilots and retains the services of a sufficient number of pilot-contractors, at a reasonable cost based on the projected volume of traffic, reasonable productivity standards, and an acceptable quality of service to meet the strategic and operational requirements.

Pilot boat and facilities management

The Authority plans and monitors the acquisition, use, replacement, and maintenance of the physical assets that meet operational needs in order to ensure the safety of users, in the most cost-effective manner possible.

Information systems

The information technology systems ensure the continuity of operations; meet the needs for information at an acceptable benefit/cost ratio, in a timely fashion; and support the Authority's objectives.