

Laurentian Pilotage Authority Special Examination Report—2013



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

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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 Audit Committee of the Board of Directors on 28 January 2013. We are pleased to provide the attached final special examination report to the Board of Directors, as required by Section 139 of the *Financial Administration Act*.

We will be pleased to respond to any comments or questions you may have concerning our report.

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

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Sylvain Ricard', written in a cursive style.

Sylvain Ricard, CPA, CA
Assistant Auditor General

Montréal, 3 July 2013

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Laurentian Pilotage Authority

Special Examination Report—2013

Main Points

What we examined

The Laurentian Pilotage Authority (the Authority) was incorporated on 1 February 1972 under the *Pilotage Act*. The Act provides the basis for the Authority's mission, which is to establish, operate, maintain, and administer in the interests of navigation safety an efficient marine pilotage service in the area between Les Escoumins and Montréal, including the Saguenay River.

The *Pilotage Act* empowers the Authority to make or amend general regulations, which then require the approval of the Governor in Council. Regulations may establish compulsory pilotage areas; prescribe ships or classes of ships subject to compulsory pilotage; prescribe the classes of licences and pilotage certificates that may be issued; and prescribe the tariffs of pilotage charges that are fair and reasonable and permit the Authority to fund its operations. Only the Authority is empowered to provide services in the designated compulsory pilotage areas. The compulsory pilotage requirements in the three designated areas are in effect 24 hours a day, seven days a week. Pilotage services are provided by contract pilots, who are members of the two pilot corporations with which the Authority negotiates exclusive service contracts.

We examined whether the Laurentian Pilotage Authority's systems and practices provide it with reasonable assurance that its assets are safeguarded and controlled, its resources are managed economically and efficiently, and its operations are carried out effectively. Among other things, we focused on the areas of governance, strategic planning, risk management, and operations. Our examination work was completed on 29 March 2013. For details on the conduct of the examination, see **About the Special Examination** at the end of the report.

Why it's important

While compulsory pilotage is a service provided to the marine transportation industry, it also helps to enhance public safety and reduce the risk of accidents and damage to the environment by ensuring that ships travelling in designated areas are under the conduct of a licensed pilot or a ship's master or officer who holds a pilotage certificate. The Authority issues licences and pilotage certificates and ensures that the conditions governing them are met.

What we found

We found no significant deficiencies in the Authority's systems and practices. A significant deficiency is reported when there is a major weakness in a Crown corporation's systems and practices that could prevent it from having reasonable assurance that its assets are safeguarded and controlled, its resources are managed efficiently and economically, and its operations are carried out effectively. We noted good practices in a number of areas. However, we noted some areas where the Authority would benefit from improving its practices.

- The Authority has sound governance practices. It has operating policies, procedures, and regulations in place to ensure that members of the Board of Directors collectively have the independence, abilities, and skills required to fulfill their responsibilities. Through the strategic planning process it has selected, the Authority is able to establish its strategic directions and tie them to its operations.
- The Authority's management is aware of the key risks to which the organization is exposed. The key components of a risk management framework are in place. There is, however, room for improvement in the follow-up to the steps taken to manage the risks.
- Through its regulations, the Authority is responsible for setting conditions that ensure safe pilotage in areas under its responsibility. With the systems and practices in place, about 22,000 assignments are made annually, and efficient and safe pilot boarding services are provided.
- The Authority ensures that the regulatory requirements relating to the issuing and maintenance of licences for all the pilots from both corporations are monitored. However, apprentice pilot training programs must be formally approved by the Authority, as specified in the contracts signed with the pilot corporations.
- Finally, the Authority attaches great importance to providing high quality services. It has implemented practices that enable it to provide high-quality pilotage services and to follow up on complaints received. It consults and communicates with marine community stakeholders on an ongoing basis to properly identify their needs. The Authority succeeded in keeping pilotage-related delays below two percent in 2012.

The Laurentian Pilotage Authority has responded. *The Authority agrees with our recommendations. Its responses follow each recommendation in the report.*

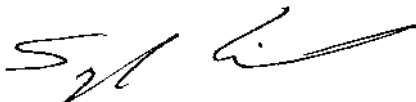
Special Examination Opinion

To the Board of Directors of the Laurentian Pilotage Authority

1. Under section 131 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. Section 138 of the FAA also requires the Authority to have a special examination of these systems and practices carried out at least once every 10 years.
3. Our responsibility is to express an opinion on whether there is reasonable assurance that during the period covered by the examination—from October 2012 to March 2013—there were no significant deficiencies in the Authority’s systems and practices.
4. We based our examination plan on our survey of the Authority’s systems and practices and a risk analysis. On 28 January 2013, we submitted the plan to the Audit Committee of the Board of Directors. 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 managed economically and efficiently, and its operations carried out effectively. Those are the systems and practices that we selected for examination.
5. The examination plan also included the criteria that we used to examine the Authority’s systems and practices. These criteria were selected for this examination in consultation with the Authority. The criteria were based on our experience with performance auditing and our knowledge of the subject matter. The criteria and the systems and practices we examined are listed in **About the Special Examination** at the end of this report.
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. Accordingly, it included the tests and other procedures we considered necessary in the circumstances. In carrying out the special examination, we relied on internal audits of the activities at the Les Escoumins boarding station.

7. In our opinion, based on the criteria established for the examination, there is reasonable assurance that during the period covered by the examination there were no significant deficiencies in the Authority's systems and practices.

8. The rest of this report provides an overview of the Authority and more detailed information on our observations and recommendations.



Sylvain Ricard, CPA Auditor, CA
Assistant Auditor General for the Auditor General of Canada

3 July 2013
Montréal, Canada

Overview of the Laurentian Pilotage Authority

9. The Laurentian Pilotage Authority (the Authority) was incorporated on 1 February 1972 under the *Pilotage Act*. The Act provides the basis for the Authority's mission, which is to establish, operate, maintain, and administer in the interests of navigation safety an efficient pilotage service within the region for which it is responsible.

10. The Authority reports to Parliament through the Minister of Transport. A board of directors appointed by the Governor in Council oversees the Authority's activities. The Authority has 43 employees. Its offices are in Montréal and Les Escoumins.

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

- the Port of Montréal;
- the area between Montréal and Québec City; and
- the area between Québec City and Les Escoumins, including the Saguenay River.

12. The *Pilotage Act* empowers the Authority to make or amend general regulations, which then require the approval of the Governor in Council. Regulations may

- establish compulsory pilotage areas;
- prescribe the ships or classes of ships that are subject to compulsory pilotage;
- prescribe classes of licences and pilotage certificates that may be issued; and
- prescribe tariffs of pilotage charges that are fair and reasonable and permit the Authority to operate on a self-sustaining financial basis.

13. Pursuant to the *Pilotage Act*, only the Laurentian Pilotage Authority is empowered to provide services in designated compulsory pilotage areas. While compulsory pilotage is a service provided to the marine transportation industry, it helps to enhance public safety by minimizing accidents and damage to the environment.

Under the conduct of—This wording comes from the *Pilotage Act*. It means that a pilot is brought on board those vessels requiring a licensed pilot. The pilot is responsible for the navigation of that vessel, under the leadership of the ship’s master, through the compulsory pilotage areas.

14. Ships that are subject to compulsory pilotage while travelling in the designated areas must be **under the conduct of** a licensed pilot or a ship’s master or officer who holds a pilotage certificate. The Authority issues licences and pilotage certificates and ensures that the conditions governing them are met.

15. Compulsory pilotage requirements in the three designated areas are in effect 24 hours a day, seven days a week. Pilotage services are provided by contract pilots, who are members of the two pilot corporations with which the Authority negotiates exclusive service contracts. As of 31 December 2012, there were 189 contract pilots and eight apprentice pilots, as well as seven Canadian masters and officers holding pilotage certificates that authorized them to operate their ships in the designated areas.

16. In its Corporate Plan 2013–2017, the Authority set the following principal objectives:

- to maintain financial self-sufficiency and create a reserve equal to approximately 10 percent of revenues;
- to maximize efficiency, quality, and safety by being attentive to the needs of the marine community; and
- to comply with Government of Canada policies.

17. Exhibit 1 presents a summary of the Authority’s performance over the past three years.

Exhibit 1 Financial and operating results, 2010 to 2012 (\$ millions)

(en millions de dollars)			
Revenues:	2012	2011	2010
• Pilotage charges	69	68	60
• Pilot boats*	10	10	9
Expenses:			
• Pilots’ fees, salaries, and benefits	62	60	52
• Operating costs of pilot boats	9	8	8
• Operations and administration	5	5	4

*Boats used to bring pilots to the assigned vessels

Source: Laurentian Pilotage Authority, 2012 Annual Report

Focus of the special examination

18. Our objective was to determine whether the Laurentian Pilotage Authority's systems and practices provide it with reasonable assurance that its assets are safeguarded and controlled, its resources are managed economically and efficiently, and its operations are carried out effectively during the period covered by the audit. We focused on the areas of

- governance;
- strategic planning, risk management, performance measurement and communication of results; and
- operations—pilotage services.

19. More details on the audit objectives, systems and practices, and criteria are provided in **About the Special Examination** at the end of the report.

Observations and Recommendations

Governance

20. Corporate governance refers to the structures, systems, and practices used to oversee the direction and management of an organization so as to ensure that it fulfills its mandate and achieves its objectives. Sound practices in corporate governance are essential to meeting the objectives outlined in Part X of the *Financial Administration Act* (FAA) as it relates to Crown corporations. These objectives specifically have to do with whether the organization's assets are safeguarded and controlled, its resources are managed economically and efficiently, and its operations are carried out effectively.

21. We examined whether the Authority has adopted an effective governance framework that meets expectations with regard to best practices in Board of Directors' stewardship and shareholder relations.

22. In examining the Authority's governance, we reviewed the following aspects:

- Board members' competency profiles and the way they are appointed,
- functioning of the Board and its committees,
- information required by the Board to exercise oversight,
- ethics,
- internal audit, and

- the evaluation process for the Board and its members.

23. Overall, we found that the Authority has in place the components of an effective governance framework and has sound governance practices.

The Authority has sound governance practices

24. The Authority is administered by the Board of Directors, which consists of seven members appointed for fixed terms by the Governor in Council. Terms are staggered to ensure that the Board maintains its corporate knowledge.

25. The Board has drawn up a profile of competencies and knowledge required of its members as a whole. In addition to the Chair of the Board of Directors, two members are from pilot corporations, two are from user groups, and two are from the general public.

26. The Authority has adopted an official charter, which sets out the Board's stewardship responsibilities. It assigns to the Board clearly defined roles, responsibilities, and powers. Two committees support the Board in its work: the Audit Committee, and the Corporate Governance and Human Resource Committee. Each committee operates under the mandate given to it by the Board and reports regularly to the Board. The Authority has also adopted a code of ethics and professional conduct for Board members. It has obtained conflict of interest statements which assist in the management of issues related to the independence of Board members.

27. During this examination, we gave particular attention to the Board's operating rules and their enforcement. After reviewing meeting minutes and analyzing the Board's work, we noted that the Board has the operating rules required to prevent the occurrence of conflict of interest situations. Board members also confirmed that they are satisfied with the current composition of the Board and the effectiveness of Board discussions. Finally, we noted that the Authority has the means to ensure that Board members collectively possess the degree of independence, abilities, and competencies needed for them to fulfill their responsibilities. They also receive training, if needed.

28. In 2011 and 2012, the Board completed a self-evaluation with a view to enhancing its governance abilities. The Chair of the Board provided the members with the results of this self-evaluation for discussion purposes. We noted that the self-evaluation allowed the Board to analyze the way it and its committees performed and operated in carrying out most of the Authority's key oversight activities.

29. The Board has identified its information needs. We noted that management provides the Board with timely and relevant information to allow it to carry out its oversight responsibilities. The Authority also informs government bodies about its strategic direction every year.

30. The FAA requires Crown corporations to conduct internal audits of their activities in order to provide senior management and the Board of Directors with assurance that their key financial, administrative, and operational activities are carried out economically, efficiently, and effectively. We found that internal audit work is based on the Authority's risk analysis, and that internal audit reports are submitted to the Audit Committee. An action plan seeks to implement each report's recommendations for improving management practices.

Strategic planning, risk management, performance measurement, and reporting

31. Strategic planning defines an organization's long-term direction and activities in fulfillment of its mandate. It involves assessing and adjusting the corporate strategic direction in accordance with changes within the organization and the risks it faces. Risk management consists of identifying and assessing risks, as well as a process for documenting the steps taken by management to mitigate them. The Board of Directors plays an important role in this regard in terms of both strategic planning and risk management. Performance measurement and reporting are important tools for informed decision making. They require management to be accountable, and show the extent to which the organization has achieved the expected results set out in its strategic plan, as well as the objectives specified in its enabling legislation.

32. We examined whether the Authority has a clearly defined strategic direction as well as specific and measurable objectives that help it to fulfill its statutory, business, and public interest mandates. The strategic direction and objectives must take into account the government's priorities and the identified risks, along with the fact that the Authority is required to safeguard and control its assets, and to ensure that its resources are managed efficiently and economically.

33. To examine strategic planning, risk management, performance measurement, and results reporting, we reviewed the following processes:

- strategic, operational, and budgetary planning, including the analysis of the business environment and human resource planning;
- risk identification, assessment, monitoring, and mitigation;

- performance indicators and monitoring of performance information; and
- accountability, including the review of internal performance reports and the annual report.

34. Overall, we found that the Authority has a clearly defined strategic direction based on specific and measurable objectives, and that the strategic direction takes government priorities and identified risks into account.

The Authority has a rigorous strategic planning process

35. Strategic directions and corporate plan. The Authority's corporate plan sets out its direction for a five-year period. The Board of Directors is involved in preparing the corporate plan and approves it. We found that the Authority has clearly defined its strategic direction and has aligned its operational planning with it. Our examination of the strategic planning process also showed that the Authority's strategic direction is in keeping with its mandate, and that the strategic objectives are directly linked with operational planning.

36. The main members of the management team sit on a strategic planning committee, which meets fairly early in the process to develop the basis for the corporate plan. The committee takes stock of past results, and reviews the business environment and the issues of importance to the Authority. Input for the process comes from a number of reliable sources, both internal and external. The Board of Directors is involved in the different stages of the strategic planning process and actively participates in discussions about strategic direction.

37. The Corporate Plan 2013–2017 sets out the Authority's mandate and mission, and presents its strategic objectives and corresponding performance targets and indicators. It takes into consideration the Authority's internal and external environment, as well as its strengths and weaknesses. It also presents the principal strategies to be proposed during the planning period in order to achieve the stated objectives. The Treasury Board of Canada approved the corporate plan in May 2013.

38. Financial self-sufficiency. Under the *Pilotage Act*, pilotage authorities must be financially self-sufficient and not rely on parliamentary appropriations. During our 2005 special examination, we identified a significant deficiency in the systems and practices used to achieve financial self-sufficiency: the Authority was unable to

balance pilotage charges due from users and fees payable to pilots. At the time, revenue from approved pilotage charges was insufficient to cover the Authority's expenditures, over 80 percent of which related to pilots' fees set out in service contracts.

39. Since then, the Authority has used various systems and practices to act on our observations and remedy this significant deficiency. It established pilotage tariffs for three years without receiving any notices of objections. It also negotiated and obtained by mutual agreement two pilotage service contracts: one for three years, and another for five years. Through these measures, the Authority was able to put its finances on a sound footing in 2007 and it has maintained its financial self-sufficiency since then.

40. The Authority is, however, affected by several external factors beyond its control, and these may have a significant impact on its ability to maintain its financial self-sufficiency. These factors include mechanisms for objections to pilotage tariffs, arbitration mechanisms in pilotage contract negotiations, and economic factors having a direct impact on shipping in the St. Lawrence River. Consequently, the Authority has decided to create a reserve equal to approximately 10 percent of its revenues so that it will be able to face possible issues related to its financial self-sufficiency. This initiative has become one of the Authority's key strategic objectives.

41. Human resource and succession planning. Human resource and succession planning for key positions is integrated into the strategic planning process. The Authority analyzes its human resource requirements every year during the strategic planning committee meeting, as well as its payroll during the budget planning process. These analyses enable the Authority to identify its human resource requirements for the planning period. Although the Authority does not have a formal succession plan, the processes in place enable it to identify the key positions it will have to staff. We noted that key positions are staffed in a way that allows for a transition and knowledge transfer.

42. The Authority identifies its ad hoc human resource or skills requirements during its strategic planning exercise. We have therefore noted that the Authority has ensured it has the skills required to properly carry out specific processes, such as negotiations, the employee survey, and pay analyses.

There is room for improvement in the monitoring of measures to be implemented for managing risks

43. Integrated risk management allows an organization to obtain consolidated information on the risks inherent in its operations, and on the management practices and controls that can mitigate the risks. If an organization puts in place a formal, integrated process for identifying, assessing, and monitoring risks, it can address major risks systematically and comprehensively.

44. Our 2005 special examination report included observations concerning risk management systems and practices. We recommended that the Authority adopt an integrated risk management approach and obtain consolidated information on risks.

45. During the current examination, we noted that the Authority's management team is aware of the key risks to which it is exposed, and it has in place several of the components of a risk management framework: an analysis of the identified risks, a list of the greatest risks ranked in order of importance, and a description of the controls or mitigation steps that have been taken or that management will take. The risks have been communicated to the Audit Committee and the Board of Directors. The Board members and senior management regularly discuss overall risk management. They therefore have reasonable assurance that all critical risks have been identified in all sectors of activity.

46. We noted that several initiatives have been implemented to address the shortcomings identified in the risk analysis; for example, the pilot boat operating manual was updated and an internal audit program was adopted in 2012. We found, however, that there is no formal action plan indicating how and when management intends to take steps to address the shortcomings identified in the risk analysis. If the Authority drew up this type of action plan, it would have reasonable assurance that systems and practices have been put in place to manage each risk effectively.

47. **Recommendation.** The Laurentian Pilotage Authority should ensure that it monitors the measures to be implemented to manage risks, and should report to the Board of Directors on this topic so as to ensure that the Authority manages risks in a more integrated manner.

The Authority's response. Agreed. The Laurentian Pilotage Authority will develop an action plan to document and, as required, implement the measures to be taken to address the shortcomings identified in the risk

analysis. The action plan will be developed during the latter half of the 2013 fiscal year, and will be completed during the first half of the 2014 fiscal year.

The Authority has processes in place to measure its performance and communicate its results

48. To ensure effective management, an organization must measure its performance. A well-designed performance assessment process and proper performance indicators provide an overview of the results achieved. They enable management and the board of directors to correct strategies promptly, and they facilitate decision making. The annual report is the public communications tool that reports on results achieved.

49. We noted that the Authority has processes for measuring its performance. The key performance indicators it uses are defined in the corporate plan and they are monitored. Management periodically reports on these indicators. Activity reports are submitted to the internal management committee on a regular basis so that it can analyze the results and take the necessary corrective action. The activity reports are also compiled to produce quarterly reports, which are submitted to the Board of Directors.

50. Finally, we noted that the annual report presents results in relation to the strategic objectives, key performance indicators, and established targets. The results include a number of examples that explain the environment within which the Authority operates and its challenges, particularly in cases where the established targets have not been achieved during the reporting period.

Operations—pilotage services

51. Safety is the primary objective of the Authority as well as the reason for its creation in 1972. To fulfill its mandate, the Authority must take into account various factors related to navigation safety and must coordinate its efforts, activities, and management with a certain number of government and private-sector organizations. It must also comply with the laws and regulations in force to ensure the safety of its services and facilities.

52. We sought to determine whether the Authority has systems and practices in place enabling it to provide safe, efficient, and high-quality services as follows:

- The designation of compulsory pilotage areas and of ships subject to compulsory pilotage is based on an assessment of navigation risks.

- The ships subject to compulsory pilotage are under the conduct of competent, licensed pilots or competent officers holding pilotage certificates.
- Pilot assignment and boarding services are provided safely.
- The services provided meet the needs of users and pilots.
- The Authority provides for the use, maintenance, and replacement of pilot boats and facilities.

53. In our review of operations management, we examined the following components:

- designation of compulsory pilotage areas and ships subject to compulsory pilotage;
- issuing and management of licences and pilotage certificates;
- safety management, including follow-up on marine incidents and accidents;
- assignment of pilots and the process for monitoring the implementation of pilotage contracts;
- management of pilot boat service contracts;
- communications with users;
- complaint monitoring;
- determining needs for pilot resources and recruiting;
- supervision of apprentice pilots during their training; and
- asset management.

54. Overall, we found that the Authority has the systems and practices required to ensure that pilotage services are safe, efficient, and high quality.

The Authority sets conditions to ensure safe pilotage services

55. Under the *Pilotage Act*, the Authority is empowered, among other things, to designate compulsory pilotage areas and the classes of ships subject to compulsory pilotage, as well as the classes of licences and pilotage certificates that can be issued. Consequently, we expected the Authority to use risk assessments as the basis for designating compulsory pilotage areas and the ships subject to compulsory pilotage. We also expected the Authority to ensure that ships subject to compulsory pilotage would be under the conduct of competent

licensed pilots or competent officers holding pilotage certificates. Finally, we expected the Authority to ensure the safety of the pilotage services provided by following up on marine incidents and accidents involving pilotage services in areas under its responsibility.

56. Designation of compulsory pilotage areas. As indicated in paragraph 11, for navigation safety purposes, the Authority decided that pilotage is compulsory between Les Escoumins and Montréal, including the Saguenay River. We noted that the Authority has mechanisms, such as ongoing consultations with marine community stakeholders as well as tracking of marine incidents and accidents, for monitoring changes in risk factors relating to pilotage safety in areas under its responsibility. These mechanisms are presented in more detail in paragraphs 62 to 76. However, since the Authority was created in 1972, there have been no changes to its compulsory pilotage areas.

57. In our 2005 special examination report, we recommended that the Authority complete the risk assessment studies that it had undertaken. Concerning designation of compulsory pilotage areas, the Authority concluded that there had not been any significant change in the factors and conditions determining the designation of compulsory pilotage areas. As a result, there was no need for a more in-depth risk assessment study. Also, in December 2010, the Authority advised government officials that it did not intend to conduct a risk assessment study on the demarcation of the compulsory pilotage areas because no change was expected. The Authority's approach was accepted on the condition that if it wanted to establish new compulsory pilotage areas or modify existing ones, it would have to conduct assessment studies of the navigation risks associated with these regulatory changes.

58. Designation of classes of ships subject to compulsory pilotage. We noted that in much the same way as it designates compulsory pilotage areas, the Authority has systems and practices for monitoring changes in factors related to pilotage safety in areas under its responsibility. As mentioned in paragraph 56, the Authority has implemented an approach based on consultations with marine community stakeholders. It also conducts risk assessment studies on the designation of ships subject to compulsory pilotage when it deems necessary. For example, the Authority participated in the risk assessment study on the possible arrival of a new type of ship, the "post-Panamax," on the St. Lawrence River. Based on this study, and in consultation with marine community stakeholders, it was decided that pilots would require special training to operate these large ships on the river.

59. Issuing and maintaining licences and pilotage certificates, and apprentice pilot training. The Authority must ensure that ships subject to compulsory pilotage are under the conduct of licensed pilots or certified officers who have the skills required for safe pilotage. The skills required to obtain and maintain a licence or pilotage certificate are described in the *Pilotage Act* and the *Laurentian Pilotage Authority Regulations*. During our examination, we noted that the Authority has systems and practices for ensuring that the regulatory requirements relating to the issuing of licences are monitored for all pilots from both corporations. For example, the service contracts signed with pilot corporations specify that the Authority must review and approve apprentice pilot training programs. We also noted that the Authority has obtained training programs for apprentice pilots and has conducted analyses of them. However, these programs have not been officially approved.

60. We noted as well that, as part of its assignment activities (see paragraphs 65 to 69), the Authority has implemented systems and practices enabling it to regularly monitor compliance with regulatory requirements, such as medical examinations and the validity of competency certificates held by licensees or pilotage certificate holders. This allows the Authority to ensure that the pilots assigned to ships have valid licences and the competencies required by the Regulations.

61. Recommendation. The Laurentian Pilotage Authority should ensure that it approves apprentice pilot training programs.

The Authority's response. Agreed. The Laurentian Pilotage Authority will approve apprentice pilot training programs for both pilot corporations by 30 September 2013, after receiving their comments on the analyses mentioned in paragraph 59. The Authority will then approve the apprentice pilot training programs according to the terms of the contracts in effect.

62. Follow-up on marine incidents and accidents. We noted that in addition to ensuring that regulatory requirements are met, the Authority follows up on pilotage-related marine incidents and accidents to ensure the safety of pilotage activities and pilots' competency. If a marine incident or accident occurs, the *Laurentian Pilotage Authority Regulations* state that the pilots or certified officers involved must notify the Authority as quickly as possible and must submit a detailed report on what happened. We also noted that the Authority has developed, as far as the Act allows it to, a marine incident and accident analysis and management policy for ships under the conduct of licensed pilots. The purpose of this policy is to enable the Authority to identify factors and circumstances that help to

establish the causes of incidents and accidents in which a licensed pilot was involved, and then to take the appropriate steps to address the situation or lessen the risk of recurrence of such an accident.

63. Based on a review of the Authority's results, we noted that for the past several years the rate of marine incidents and accidents has been less than 0.5 percent of all assignments. In 2012, there was no report of any major accident caused by a pilotage system failure. We also noted that a marine incident and accident report, as well as a follow-up report by the Authority, is submitted to the Board of Directors every three months.

The Authority has systems and practices to ensure efficient, high-quality pilotage services

64. A key priority of the Authority is ensuring the quality and efficiency of pilotage services. In its corporate plan, the Authority has set an objective of maximizing the efficiency, quality, and safety of services by being attentive to the needs of users and pilots. Consequently, we expected that pilot assignment and boarding activities would enable the Authority to meet its operational objectives while responding to the needs of users and pilots. We also expected the Authority to consult with marine community stakeholders and ensure that it followed up on complaints. Finally, we expected the Authority to determine the need for pilots in the medium and long term, together with pilot corporations.

65. Assignment of pilots. The Authority takes charge of ships subject to compulsory pilotage from the Les Escoumins station to Montréal. For this purpose, the pilot assignment centre in Montréal operates 24 hours a day, 365 days a year, and handles about 22,000 assignments a year. The centre is responsible for assigning all pilots working in areas under the Authority's responsibility.

66. To ensure the safety of pilots and ships, pilot assignment conditions are specified in the service contracts entered into with pilot corporations. There are numerous conditions and they vary depending on the area, applicable service contract, period of the year, and navigation conditions. Overall, we noted that the Authority has systems and practices in place enabling it to provide a safe assignment service.

67. We noted that the assignment centre uses a management system called KLEIN to support its pilot assignment activities. Several conditions come into play in the assignment of pilots, such as the licence class, pilot availability, and mandatory rest periods. Several of these conditions have been included in KLEIN, allowing dispatchers at the

assignment centre to quickly identify which pilots can meet the pilotage requirements. In addition to assignment conditions managed by KLEIN, the assignment management team has adopted systems and practices to ensure that all assignment-related conditions are taken into account when a pilot is assigned to a ship. For example, it has implemented mechanisms to ensure that dispatchers take into account seasonal navigation conditions with a potential impact on pilot assignments.

68. Our examination also showed that the assignment management team has implemented mechanisms to monitor regulatory requirements relating to the maintenance of licences and pilotage certificates. These mechanisms enable the Authority to ensure that each pilot and apprentice pilot has a valid licence, and is meeting deadlines for the repeat of medical examinations and renewal of certificates of competency. The assignment management team also monitors the number of one-way trips made by holders of pilotage certificates to ensure that requirements are met.

69. Finally, we noted that the pilot assignment service has met the needs of users and pilots while keeping to a minimum delays related to compulsory ship pilotage. The assignment management team has systems and practices enabling it to monitor key performance indicators, such as a detailed analysis of navigation delays. This analysis shows that delays related to compulsory pilotage accounted for less than two percent of the delays reported by ships in 2012.

Pilot boarding—Service used to bring pilots to the assigned vessels.

70. Pilot boarding. The quality of pilotage services is closely related to the efficiency and safety of the pilot boarding services provided by the Authority. Having pilot boats and crews available at all times is essential for the Authority to reach its strategic and operational objectives. To achieve its objectives, the Authority must provide safe boarding services for pilots. We noted that the Authority has put in place systems and practices enabling it to ensure the safety of the pilot boarding services that it provides. The Authority uses pilot boats to transfer pilots from shore to the ships, and it owns and operates a pilot boarding station in Les Escoumins as well as pilot boats able to provide boarding services year-round. Companies under contract to the Authority provide pilot boarding services at the other boarding stations (Québec City, Trois-Rivières, Sorel, and Montréal).

71. During our visit to the Les Escoumins station, we noted that the Authority has a pilot boat operating manual, and that it has implemented various management mechanisms through which it can ensure the safety of pilot boarding operations.

72. Concerning boarding operations at the other stations, our examination of pilot boarding service contracts for Québec City, Trois-Rivières, Sorel, and Montréal shows that these contracts contain clauses concerning the safety of boarding services available for pilots. Also, an inspector hired by the Authority conducts an inspection every year to ensure that contractors implement the contract provisions.

73. Finally, to ensure the quality of pilot boarding services and safeguard its assets in Les Escoumins, we noted that the Authority has implemented a periodic inspection system. For its pilot boats and wharves at the Les Escoumins station, it has prepared a maintenance plan to guarantee that there are regular inspections of the key components of the boats and a schedule for their periodic replacement. The purpose of this plan is to reduce the number of unexpected repairs and provide assurance that the pilot boats and facilities will be safe at all times and operational for the balance of their estimated useful life.

74. Consultation with marine community stakeholders.

The Authority regularly meets with stakeholders in the marine transportation industry to identify their needs and possible concerns relating to pilotage quality, efficiency, and safety. These meetings are either formal or informal. The formal meetings include the Authority's annual general meeting, which brings together the main marine industry stakeholders. The Authority also holds consultations concerning any regulatory changes that it would like to make.

75. The Authority is in ongoing contact with industry representatives and the pilot corporations through its assignment activities. It communicates with shipping agents as well as with Canadian and foreign shipowners. It also communicates on a daily basis with pilots to manage assignments and pilotage service form.

76. Finally, the Authority has installed on its website a system for filing and tracking complaints and compliments. This enables users, pilots, and other stakeholders to submit complaints or compliments directly to the Authority's management. The assignment management team follows up on complaints and sends each complainant a response. A quarterly report on the complaints and compliments received by the Authority is submitted to the Board of Directors.

77. Pilot resource planning. To fulfill its mandate and achieve the objectives set out in its corporate plan, the Authority must maintain a sufficient number of pilots to provide the services required under the *Pilotage Act*. During our 2005 special examination, we indicated that

there was room for improvement of the Authority's pilot resource planning because an insufficient number of pilots could adversely affect service quality and efficiency.

78. During this special examination, we noted that the Authority's risk analysis showed that it must address several challenges to find a sufficient number of good candidates who would enable it to meet its apprentice pilot needs. Although the Authority indicates that there does not seem to have been a negative impact to date, one of its greatest risks remains difficulty in finding a sufficient pool of candidates to meet the demand. Recruiting conditions in the marine sector are currently very competitive because the entire industry is affected by the many people retiring and the relatively few replacements for them.

79. In 2006, the Authority conducted a study to assess apprentice pilot requirements and find ways to expand the pool of qualified candidates so as to compensate for a possible shortage. This study led to a few regulatory changes that enabled the Authority to have access to a larger pool of candidates. However, we have noted that since the study, the Authority has not kept statistics or analyzed pilot requirements. Finally, we noted that in 2013, in consultation with users and pilots, the Authority is planning an assessment of pilotage services, during which it will raise the topic of pilot succession planning to meet future requirements.

Conclusion

80. Our audit has enabled us to conclude that during the period covered by the special examination, the Laurentian Pilotage Authority had systems and practices providing it with reasonable assurance that its assets are safeguarded and controlled, its resources managed economically and efficiently, and its operations carried out effectively.

About the Special Examination

All of the audit work in this report was conducted in accordance with the standards for assurance engagements set by The Canadian Institute of Chartered Accountants. While the Office adopts these standards as the minimum requirement for our audits, we also draw upon the standards and practices of other disciplines.

Objective

Under section 138 of the *Financial Administration Act* (FAA), federal Crown corporations are subject to a special examination once every 10 years. Special examinations of Crown corporations are a form of performance audit where the scope is set by the Act to include the entire corporation. In special examinations, the Auditor General provides an opinion on the management of the corporation as a whole. The opinion for this special examination is found on page 3 of this report.

Special examinations answer the following question: Do the corporation's systems and practices provide reasonable assurance that its assets are safeguarded and controlled, resources are managed economically and efficiently, and operations are carried out effectively? A significant deficiency is reported when there is a major weakness in the corporation's key systems and practices that could prevent it from having reasonable assurance that its assets are safeguarded and controlled, its resources are managed efficiently and economically, and its operations are carried out effectively.

Key systems and practices examined and criteria

At the start of this special examination, we presented the Laurentian Pilotage Authority's audit committee with an audit plan that identified the systems and practices, and related criteria, that we considered essential to providing the Authority with reasonable assurance that its assets are safeguarded and controlled, its resources managed economically and efficiently, and its operations carried out effectively. These are the systems and practices and criteria that we used for our special examination.

These criteria were selected for this examination in consultation with the Authority. They were based on our experience with performance auditing—in particular, with our special examinations of Crown corporations—and on our knowledge of the subject matter. Management reviewed and accepted the suitability of the criteria used in the special examination.

Key system and practice examined	Criteria
Governance	To maximize the Authority’s effectiveness and its ability to balance public policy objectives with its commercial objectives, the Authority should have a well-performing corporate governance framework that meets the expectations of best practices in Board stewardship, shareholder relations, and communication with the public.
Strategic planning, risk management, performance measurement and reporting	The Authority has clearly defined strategic directions as well as specific and measurable goals and objectives to achieve its legislative, commercial, and public policy mandate. Its strategic direction and goals take into account government priorities, identified risks, and the need to control and protect its assets and manage its resources economically and efficiently.
Operations—safe, efficient, and high-quality pilotage services	<p>The Authority has systems and practices enabling it to ensure safe pilotage services with respect to the following points:</p> <ul style="list-style-type: none"> • The designation of compulsory pilotage areas and ships subject to compulsory pilotage is based on an assessment of navigation risks. • Ships subject to compulsory pilotage are under the conduct of competent licensed pilots or competent officers who hold pilotage certificates. • Pilot assignment and boarding services are safely provided. <p>The Authority has systems and practices enabling it to ensure efficient, high-quality pilotage services with respect to the following points:</p> <ul style="list-style-type: none"> • The required services meet the needs of users and pilots. • The Authority ensures that pilot boats and facilities are used, maintained, and replaced.

Period covered by the special examination

The special examination covered the systems and practices that were in place between October 2012 and March 2013.

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Appendix List of recommendations

The following is a list of recommendations found in the Special Examination Report. The number in front of the recommendation indicates the paragraph where it appears in the report. The numbers in parentheses indicate the paragraphs where the topic is discussed.

Recommendation	Response
Strategic planning, risk management, performance measurement and reporting	
<p>47. The Laurentian Pilotage Authority should ensure that it monitors the measures to be implemented to manage risks, and should report to the Board of Directors on this topic so as to ensure that the Authority manages risks in a more integrated manner. (31–46)</p>	<p>The Authority’s response. Agreed. The Laurentian Pilotage Authority will develop an action plan to document and, as required, implement the measures to be taken to address the shortcomings identified in the risk analysis. The action plan will be developed during the latter half of the 2013 fiscal year, and will be completed during the first half of the 2014 fiscal year.</p>
Operations—pilotage services	
<p>61. The Laurentian Pilotage Authority should ensure that it approves apprentice pilot training programs. (51–60)</p>	<p>The Authority’s response. Agreed. The Laurentian Pilotage Authority will approve apprentice pilot training programs for both pilot corporations by 30 September 2013, after receiving their comments on the analyses mentioned in paragraph 59. The Authority will then approve the apprentice pilot training programs according to the terms of the contracts in effect.</p>