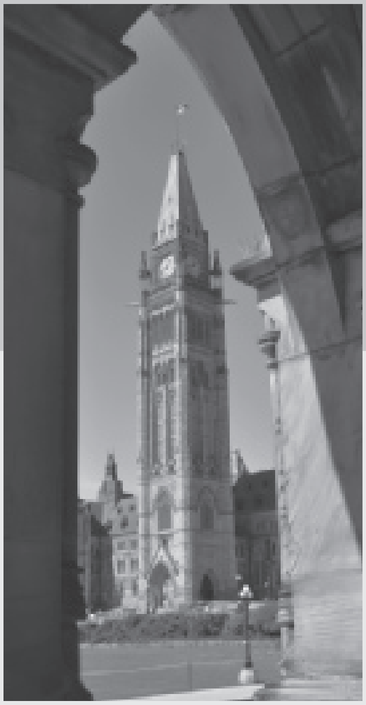
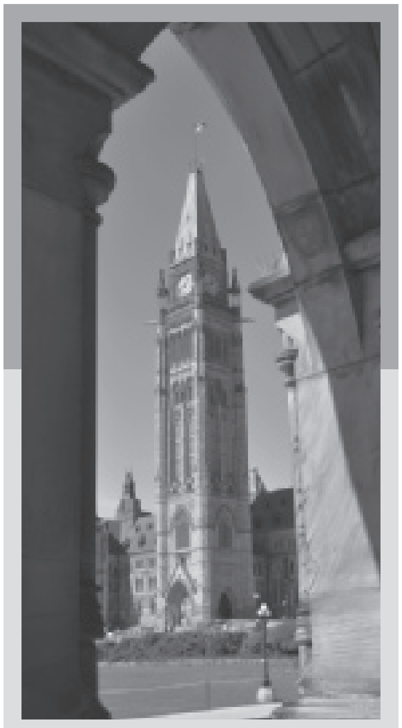


Report of the Auditor General of Canada to the Board of Directors of Marine Atlantic Inc.

Independent Auditor's Report

Special Examination—2018

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



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Special examination reports

Special examinations are a form of performance audit that is conducted within Crown corporations. The Office of the Auditor General of Canada audits most, but not all, Crown corporations.

The scope of special examinations is set out in the *Financial Administration Act*. A special examination considers whether a Crown corporation's systems and practices provide reasonable assurance that its assets are safeguarded and controlled, its resources are managed economically and efficiently, and its operations are carried out effectively.

More details about the audit objective, scope, approach, and sources of criteria are in About the Audit at the end of this report.

Ce document est également publié en français.

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

7 December 2018

To the Board of Directors of Marine Atlantic Inc.:

We have completed the special examination of Marine Atlantic Inc. in accordance with the plan presented to the Audit and Risk Committee of the Board of Directors on 17 January 2018. As required by section 139 of the *Financial Administration Act*, we are pleased to provide the attached final special examination report to the Board of Directors.

We will present this report for tabling in Parliament shortly after it has been made public by Marine Atlantic Inc.

I would like to take this opportunity 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,

Heather McManaman, CPA, CA
Principal

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Introduction

Background

Role and mandate

1. Ferry service in Newfoundland and Labrador has a long history. It became a federal responsibility when Newfoundland joined Canada in 1949. This responsibility has passed through several organizations over seven decades and now rests with Marine Atlantic Inc. Most goods—from food and retail products to medical supplies and construction materials—arrive in Newfoundland by ferry. Tourism, a major industry in the province, depends on the ferry service, as do the province's residents. Harsh weather and maintenance issues can disrupt what many Newfoundlanders see as a vital transportation link.

2. Marine Atlantic Inc. became a Crown corporation in 1986 as a result of the *Marine Atlantic Inc. Acquisition Authorization Act*. In 1995, the National Marine Policy narrowed the Corporation's mandate to the operation of a ferry system. The Corporation reports to the Minister of Transport.

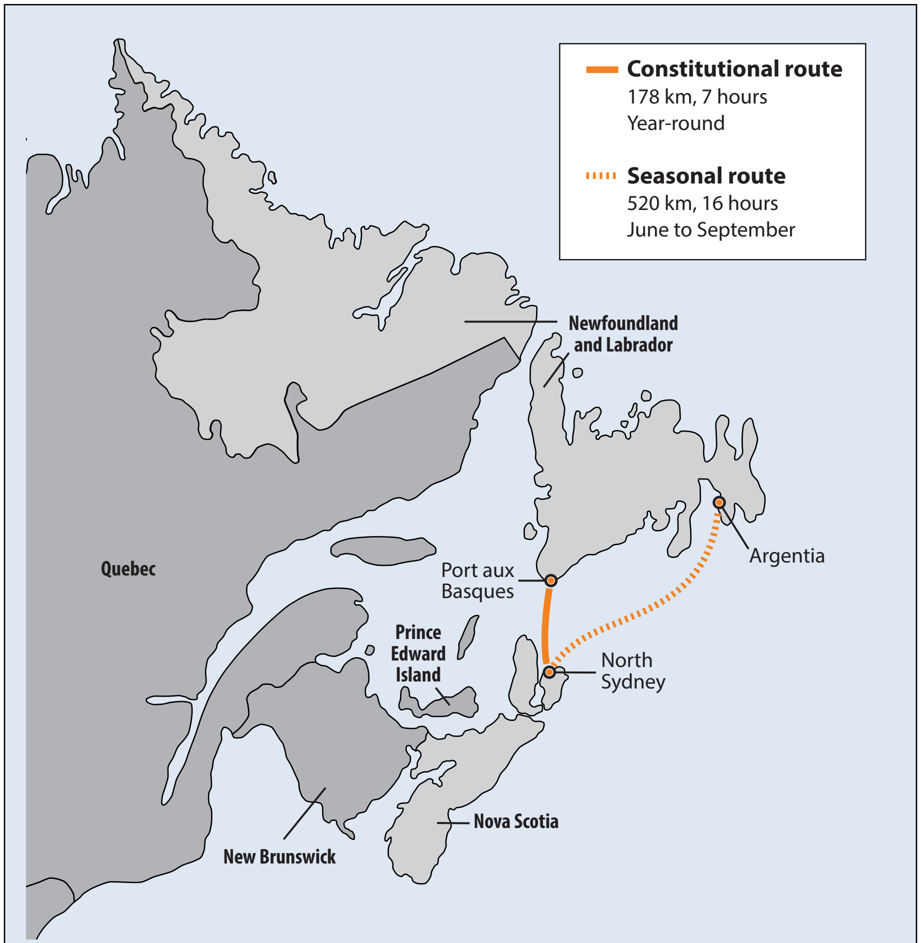
Nature of business and operating environment

3. The ferry service between the Island of Newfoundland and Nova Scotia was granted special constitutional status under the Terms of Union of Newfoundland with Canada (*Newfoundland Act*). The Act guarantees that "Canada will maintain in accordance with the traffic offering a freight and passenger steamship service between North Sydney and Port aux Basques, which, on completion of a motor highway between Corner Brook and Port aux Basques, will include suitable provision for the carriage of motor vehicles."

4. The Corporation's constitutional route consists of the year-round ferry service between North Sydney, Nova Scotia, and Port aux Basques, Newfoundland and Labrador. The Corporation also operates a seasonal service, from June to September, between North Sydney and Argentia, Newfoundland and Labrador. This seasonal route is not required by the *Newfoundland Act* (Exhibit 1).

5. The Corporation has about 1,300 employees. It provides about 1,700 sailings annually to over 300,000 passengers and 90,000 commercial vehicles.

Exhibit 1 Sailing routes of Marine Atlantic Inc.



Source: Based on information provided by Marine Atlantic Inc.

6. Serving both the travelling public and commercial customers, the Corporation has a fleet of four ice-capable vessels (Exhibit 2) and owns terminals in North Sydney, Port aux Basques, and Argentia.

7. The Corporation depends financially on the Government of Canada because revenues from its ferry service do not cover all of its operating costs (Exhibit 3). It can acquire capital assets, such as new vessels, only through an **appropriation** by Parliament.

Appropriation—An authority provided by an Act of Parliament to pay money out of the Consolidated Revenue Fund, up to a maximum amount, for a specified activity during a fiscal year.

Exhibit 2 Fleet of Marine Atlantic Inc.

Ferry	Corporate-owned or leased	Built	Year bought or start of lease	Estimated remaining useful life or end of lease	Usual route	Traffic type
MV Blue Puttees	Corporate-owned[1]	2006	2015	13 years	North Sydney to Port aux Basques	Passenger and commercial
MV Highlanders	Corporate-owned[1]	2007	2016	14 years	North Sydney to Port aux Basques	Passenger and commercial
MV Leif Ericson	Corporate-owned	1991	2001	4 years[2]	North Sydney to Port aux Basques	Commercial
MV Atlantic Vision	Leased	2002	2009	November 2019	North Sydney to Argentia	Passenger and commercial

[1]Vessel had been leased from 2011 to the purchase date.

[2]In Budget 2018, the government approved the refurbishment of the MV Leif Ericson to extend its life.

Source: Marine Atlantic Inc.

Exhibit 3 Key financial results of Marine Atlantic Inc.

Category	Results by fiscal year (in $ millions)		
	2017–18	2016–17	2015–16*
Revenues	112.6	113.9	109.4
Expenditures	237.2	220.4	237.4
Government funding	146.7	98.8	350.9
Operating surplus (deficit)	**22.1**	**(7.7)**	**222.9**

* Government funding and operating surplus are significantly higher than in subsequent years because the government provided funding to buy two ferries in the 2015–16 fiscal year.

Source: Marine Atlantic Inc.

Previous audits

8. In our 2009 audit, we found two significant deficiencies in the Corporation's systems and practices:

- unresolved strategic challenges, such as aging ferries and shore-based assets, which required long-term funding support from the government; and
- inadequate operational planning and capital asset management.

9. Our 2009 audit also identified other areas for improvement. For example, we noted that the Corporation had not developed an environmental management system after we raised this issue in our 2004 audit. We also noted that the Corporation had not yet put a system in place to automate staff scheduling.

Focus of the audit

10. Our objective for this audit was to determine whether the systems and practices we selected for examination at Marine Atlantic Inc. were providing it with reasonable assurance that its assets were safeguarded and controlled, its resources were managed economically and efficiently, and its operations were carried out effectively as required by section 138 of the *Financial Administration Act*.

11. In addition, section 139 of the *Financial Administration Act* requires that we state an opinion, with respect to the criteria established, on whether there was reasonable assurance that there were no significant deficiencies in the systems and practices examined. A significant deficiency is reported when the systems and practices examined did not meet the criteria established, resulting in a finding that the Corporation could be prevented from having reasonable assurance that its assets are safeguarded and controlled, its resources are managed economically and efficiently, and its operations are carried out effectively.

12. Based on our assessment of risks, we selected systems and practices in the following areas:

- corporate management practices, and
- management of safety and ferry operations.

The selected systems and practices, and the criteria used to assess them, are found in the exhibits throughout the report.

13. More details about the audit objective, scope, approach, and sources of criteria are in **About the Audit** at the end of this report (see pages 23–26).

Findings, Recommendations, and Responses

Overall message ➔

14. Overall, we found that Marine Atlantic Inc. had good practices in place to oversee the running of the Corporation and to manage its operations.

15. Nonetheless, we were concerned that the Corporation was not able to make long-term strategic decisions because of circumstances outside its control—specifically, delays by the government in approving the Corporation's full five-year corporate plans. We reported this issue in our 2009 special examination, and we found it to be a significant deficiency in the current audit.

16. This is important because the Corporation relies on the government's approval and funding to maintain and replace its fleet of vessels. If the government does not approve the Corporation's long-term fleet-renewal strategy, the Corporation can address only the fleet's short-term needs. This lack of long-term strategic direction affects the Corporation's core operations. It will become more problematic as time goes on, because repairing and maintaining aging vessels will eventually cost more than replacing them. The Corporation has also stated that it takes a minimum of four years to acquire a new vessel.

17. We also found that the Corporation did not have a clear understanding of the formula used to assess cost recovery for its non-constitutional services, including its seasonal service route to Argentia. This weakness matters because if the Corporation and the government do not have a common understanding of the cost-recovery formula, the calculation could misrepresent whether the Corporation had achieved its cost-recovery target.

18. Finally, we found that the Corporation did not have an environmental management plan. Implementing a plan that sets out the Corporation's environmental objectives would allow the Corporation to monitor its performance and operate in an environmentally responsible manner—a key point of its mission statement.

Corporate management practices

Context

19. The Corporation is governed by a board of 5 to 10 directors, including a Chairperson and a President and Chief Executive Officer (CEO). The Chairperson and the President and CEO are appointed by the **Governor in Council**. The other directors are appointed by the Minister of Transport, with the approval of the Governor in Council.

20. The Board of Directors was supported by an Audit and Risk Committee; a Safety, Corporate Governance and Accountability Committee; and a Human Resources and Pension Management Committee.

21. The Corporation used a balanced scorecard methodology, a system that uses strategic performance indicators and targets to measure progress. The balanced scorecard methodology is also intended to

- clearly communicate an organization's vision, mission, and strategy to employees and other stakeholders;
- align day-to-day work with a vision and a strategy; and
- provide a framework for prioritizing programs, projects, services, products, and resources.

There was a significant deficiency in corporate governance, and some corporate management practices needed improvement

What we found

22. We found that except for a significant deficiency in corporate governance, the Corporation had good corporate management practices, with improvement needed in some areas. The significant deficiency occurred because without timely approval of corporate plans, which was outside the Corporation's control, the Board could not provide strategic direction supported by the Government of Canada. The Corporation also needed to improve performance measurement, monitoring, and reporting; and risk mitigation, monitoring, and reporting.

23. Our analysis supporting this finding discusses the following topics:

- Corporate governance
- Strategic planning, performance measurement, and performance monitoring and reporting
- Corporate risk management

Governor in Council—The Governor General, acting on the advice of Cabinet, as the formal executive body that gives legal effect to those decisions of Cabinet that are to have the force of law.

Recommendations

24. Our recommendations in this area of examination appear at paragraphs 33, 39, 42, 45, and 50.

Corporate governance

25. **Analysis.** We found a significant deficiency in providing strategic direction, which was outside the Corporation's control (Exhibit 4).

Exhibit 4 Corporate governance—Key findings and assessment

Systems and practices	Criteria used	Key findings	Assessment against the criteria
Board independence	The Board functioned independently.	The Corporation had terms of reference for the Board and its committees, a governing policy on governance structure and responsibilities, and a code of conduct that required directors to be independent. Conflicts of interest were declared annually and at Board meetings. The Board held regular in camera meetings without management.	
Providing strategic direction	The Board provided strategic direction.	The Board approved the Corporation's strategic direction. The Board was active in setting the President and CEO's objectives, which aligned with the Corporation's strategic direction, and in assessing his performance against those objectives. **Significant deficiency** The Corporation had been unable to obtain the government's timely approval of its corporate plans for their full five-year periods. (Government approval of corporate plans requires approval by the Governor in Council and is therefore outside the control of the Corporation.)	

Legend—Assessment against the criteria

Met the criteria

Met the criteria, with improvement needed

Did not meet the criteria

Exhibit 4 Corporate governance—Key findings and assessment (continued)

Systems and practices	Criteria used	Key findings	Assessment against the criteria
Board appointments and competencies	The Board collectively had capacity and competencies to fulfill its responsibilities.	Recent Board appointments met the Corporation's profile of the skills and expertise the Board needed to be effective. Board members received orientation sessions and ongoing training. The Board had access to outside expertise when necessary.	✓
Board oversight	The Board carried out its oversight role over the Corporation.	The Board structure reflected the nature and complexity of the Corporation's operations. The Board received timely information from management. The Director of Internal Audit reported to the Audit and Risk Committee, which approved the 2018–20 strategic internal audit plan and regularly met in camera with the Director.	✓

Legend—Assessment against the criteria

✓ Met the criteria

! Met the criteria, with improvement needed

– Did not meet the criteria

26. ***Significant deficiency—Providing strategic direction.*** As in our 2009 special examination, we found that the Corporation was unable to obtain timely government approval of its corporate plans, which included its proposed fleet-renewal strategy. Although the Corporation had submitted its corporate plans to the Minister of Transport through the Department of Transport for the full five years, and although the plans had been approved by the Governor in Council, the approval covered only part of the plans' five-year planning periods:

- The 2016–17 to 2020–21 corporate plan was approved in May 2016 for the partial period of 1 April 2016 to 31 March 2017.
- The 2017–18 to 2021–22 corporate plan was approved in December 2017 for the partial period of 1 April 2017 to 31 March 2020.
- The 2018–19 to 2022–23 corporate plan was not yet approved by 22 November 2018.

27. The Minister's letter of expectations, received by the Corporation's Chairperson in July 2017, recognized that the delay in approving the 2017–18 to 2021–22 corporate plan was outside the Corporation's control.

28. Implementing a plan for a fleet-renewal strategy depends on the government's approval and significant government funding. We found that the Corporation had attempted to define a long-term strategic direction and had been working with the government since 2013 to secure funding for its long-term fleet-renewal strategy. In the 2015–16 fiscal year, the government approved funding to buy two vessels, the MV Blue Puttees and the MV Highlanders. After buying the vessels, the Corporation discussed its proposed fleet-renewal strategy with the government. While some progress was made, more work was needed to ensure that the fleet would continue to address the needs of the Corporation.

29. In an effort to clearly describe the issue to the government, the Corporation also submitted its long-term fleet-renewal strategy as an addendum to its 2016–17 to 2020–21 corporate plan. In the proposal, the Corporation asked for funds to replace both the Corporation-owned MV Leif Ericson, which was approaching the end of its useful life, and the leased MV Atlantic Vision, which was expensive to operate and not ideally suited to the Corporation's requirements.

30. The government did not provide the Corporation with the funds it asked for. However, in Budget 2018, it approved the refurbishment of the MV Leif Ericson and approved an extension of the MV Atlantic Vision's lease to November 2019. Although the Corporation had secured the lease extension, it had no guarantee that the vessel would be available for charter afterwards. The Corporation had also stated that it would take a minimum of four years to procure a new vessel.

31. Although the approved refurbishment and lease extension met the Corporation's short-term needs for its fleet, the government did not communicate a long-term funding plan for the Corporation.

32. This significant deficiency matters because it hampered the Corporation's ability to make multi-year funding commitments, which would allow the Corporation to carry out its proposed fleet-renewal strategy. That would help ensure that it would have stable operations and reliable service in the future.

33. **Recommendation.** The Corporation should continue to engage with relevant government officials to help ensure the timely approval of its corporate plans and to resolve the Corporation's long-term fleet-renewal strategy, along with funding requirements to support ongoing fleet renewal.

The Corporation's response. *Agreed. The Corporation will continue to engage with relevant government officials to help ensure the timely approval of its corporate plans and the resolution of the Corporation's fleet-renewal strategy, along with funding requirements to support ongoing fleet renewal.*

Strategic planning, performance measurement, and performance monitoring and reporting

34. **Analysis.** We found weaknesses in performance measurement and performance monitoring and reporting (Exhibit 5).

Exhibit 5 Strategic planning, performance measurement, and performance monitoring and reporting—Key findings and assessment

Systems and practices	Criteria used	Key findings	Assessment against the criteria
Strategic planning processes	The Corporation established its strategic plan, and strategic objectives aligned with its mandate.	The Corporation had systematic strategic planning processes and used a balanced scorecard methodology to develop its strategic plan. The strategic plan and strategic objectives aligned with the Corporation's mandate. The Corporation considered its internal and external environments, and its competitive strengths, weaknesses, threats, and opportunities.	
Performance measurement	The Corporation established performance indicators in support of achieving strategic objectives.	The Corporation developed quantitative performance indicators for its strategic objectives in its balanced scorecard. **Weaknesses** The Corporation's balanced scorecard lacked some of the key performance indicators set by the Minister. The Corporation's key performance indicators for its strategic objective to "protect people, property and the environment" were inadequate.	
Performance monitoring and reporting	The Corporation monitored and reported on progress in achieving its strategic objectives.	Performance results were reported monthly to senior management and quarterly to the Board. **Weakness** The Corporation did not have a clear understanding of the cost-recovery formula set by the Minister for non-constitutional services.	

Legend—Assessment against the criteria

Met the criteria

Met the criteria, with improvement needed

Did not meet the criteria

35. ***Weaknesses—Performance measurement.*** Although the Corporation established key performance indicators to support achieving strategic objectives, they were not sufficient. The Corporation omitted some key performance indicators set by the Minister, and its performance indicators for its strategic objective to "protect people, property and the environment" were incomplete.

36. The Minister's letter of expectations included nine key performance indicators and targets, which the Minister expected the Corporation to achieve by the end of the 2018–19 fiscal year. These targets were the same as those set by the previous Minister in 2014.

37. However, the Corporation reported on the key performance indicators in its corporate plan, but it omitted three of them from its balanced scorecard—most notably, the cost recovery of non-constitutional services (the Argentia route, **drop trailer services**, and on-board services) and the following:

- "sailings returned to published schedule and passengers/traffic rebooked following a mechanical breakdown or weather delay," and
- "passengers are very likely to recommend Marine Atlantic's service to others."

38. This weakness matters because monitoring key performance indicators would allow the Corporation to take timely action should it be at risk of not achieving the Minister's targets.

39. **Recommendation.** The Corporation should use its balanced scorecard to monitor all key performance indicators and targets set by the Minister.

The Corporation's response. *Agreed. The Corporation will incorporate all performance indicators and targets set by the Minister in its balanced scorecard by the end of the fourth quarter of the 2018–19 fiscal year.*

40. ***Weakness—Environmental protection.*** The Corporation did not have an environmental management plan that set out specific environmental objectives, activities, timelines, and resource requirements to achieve them. Nor did it have performance indicators related to environmental protection for its key strategic objective to "protect people, property and the environment." The Corporation's mission statement is "to provide a safe, environmentally responsible and quality ferry service between the Island of Newfoundland and the Province of Nova Scotia in a reliable, courteous and cost-effective manner."

Drop trailer services—Services that allow commercial customers to drop off their semitrailers full of goods at one of the Corporation's terminals and pick them up on the other side of the ferry route.

41. This weakness matters because without specific key performance indicators for environmental protection, the Corporation cannot demonstrate whether it is achieving its strategic objective to "protect people, property and the environment."

42. **Recommendation.** The Corporation should develop an environmental management plan that states the Corporation's objectives for environmental protection and the activities, timelines, and related resource requirements needed to achieve them. The Corporation should also develop key performance indicators to monitor progress against its strategic objective to protect the environment.

The Corporation's response. *Agreed. The Corporation will develop, enhance, and monitor key performance indicators for environmental protection during the 2018–19 fiscal year. This will augment its participation in an industry-accepted marine environmental certification program.*

The Corporation will also establish a formal environmental management plan that clearly documents the current and future plans in the area of environmental protection, as well as the timelines and resources required to execute it, by the second quarter in 2020.

43. ***Weakness—Performance monitoring and reporting.*** The Minister set a target of 100% for the cost recovery of non-constitutional services, using all expenses, including capital costs. However, the letter of expectations did not say how expenses were expected to be allocated or what constitutes capital costs. The Corporation used incremental expenses to calculate the cost recovery of the seasonal Argentia service.

44. This weakness matters because without a clear understanding of the cost-recovery formula for non-constitutional services, the Corporation might not be accurately reporting progress against the Minister's target. For example, calculating cost recovery against incremental expenses would result in recovering a higher percentage of costs incurred than if the calculation were based on all expenses.

45. **Recommendation.** The Corporation should ensure that it has a common understanding with the government on how to calculate cost recovery for non-constitutional services.

The Corporation's response. *Agreed. The Corporation reports on the cost-recovery targets in its corporate plans. The Corporation will continue its consultation with the Department of Transport to finalize the revised approach to the cost-recovery calculation for the non-constitutional services. This will be completed prior to the end of the 2018–19 fiscal year.*

Corporate risk management

46. **Analysis.** We found that the Corporation had good risk identification and assessment practices. However, we found weaknesses in risk mitigation and in risk monitoring and reporting (Exhibit 6).

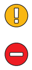
Exhibit 6 Corporate risk management—Key findings and assessment

Systems and practices	Criteria used	Key findings	Assessment against the criteria
Risk identification and assessment	The Corporation identified and assessed risks to achieving strategic objectives.	The Corporation developed a risk management policy and framework to help it identify and assess risks. The Corporation defined risk management roles and responsibilities for the Board, two of its committees, and its risk liaison network. The Corporation identified 12 corporate risks and established initial risk ratings, which it regularly reassessed. The Corporation mapped each risk against strategic objectives and supporting initiatives, and identified key risk tolerances.	
Risk mitigation	The Corporation defined and implemented risk mitigation measures.	The Corporation developed mitigation action plans and identified owners for its 12 corporate risks. **Weakness** The Corporation’s risk register described mitigation measures, but for some risks the measures were not clearly defined, and there were no timelines.	
Risk monitoring and reporting	The Corporation monitored and reported on the implementation of risk mitigation measures.	The Corporation monitored and reported risks through monthly reports to management and quarterly to the Board, through its balanced scorecard and risk dashboard. The Corporation periodically revised its risk register to address changes to risk assessments and mitigation measures. **Weakness** Because the Corporation did not have well-defined risk mitigation measures, it was unable to assess implementation of those measures in some areas.	

Legend—Assessment against the criteria

 Met the criteria

 Met the criteria, with improvement needed

 Did not meet the criteria

47. ***Weaknesses—Risk mitigation, and risk monitoring and reporting.*** The Corporation developed and maintained a risk register to monitor and report on risks. The risk register described the 12 top risks facing the Corporation and identified mitigation measures, which it assigned to individuals or groups. However, we found that the mitigation measures for some of the risks were not specific and lacked timelines, which would have allowed the Corporation to better assess their implementation.

48. For example, the Corporation had identified a significant risk to its ability to "increase efficiency of operations." We found that the description of the mitigation measure for this risk was too general. It did not communicate specifically what was required. As a result, the Corporation was not effectively measuring the risk it had identified, so it did not know if it was mitigating the risk or not.

49. These weaknesses matter because the Corporation needs to ensure that it has effective measures to mitigate risks that threaten its service to the public or cause other types of losses, such as environmental damage. The Corporation also needs to put in place specific actions and timelines for risk responses, so that management and the Board can monitor them comprehensively.

50. **Recommendation.** The Corporation should define its risk mitigation measures and ensure that related actions are specific, time-bound, and measurable and that implementation of these measures is monitored and reported.

The Corporation's response. *Agreed. Risk reporting to the Board of Directors will be updated to include mitigations, deadlines, and progress towards established timelines by the end of the second quarter in the 2019–20 fiscal year. The next priority for the Corporation will be the development of divisional-level risk registers. This initiative will commence in the 2018–19 fiscal year and is expected to be completed by the end of the 2019–20 fiscal year.*

Management of safety and ferry operations

Context

51. Safely transporting passengers, vehicles, and goods across open waters depends on having the right crew with the right training on each sailing and a deeply ingrained safety culture. Even in normal conditions, a marine incident can cause serious injury, loss of life, or damage to property or the environment. The Cabot Strait, where the Corporation operates its vessels, is subject to extreme and unpredictable weather, including ice conditions.

52. The marine industry is heavily regulated to ensure the safe operation of vessels at sea. The Corporation must comply with many acts and regulations, and has adopted the International Safety Management Code for the Safe Operation of Ships and for Pollution Prevention (ISM Code) as its safety management system.

53. During the period covered by the audit, the Corporation used two third-party software systems: one to manage its employee training and to allocate resources to individual ferries, the other for incident reporting. In 2016, the Corporation began a multi-year process to select and implement an enterprise resource planning system that would result in the replacement of both software systems.

The Corporation had good systems and practices for managing safety and ferry operations, but some improvements were needed

What we found

54. We found that the Corporation had a good safety management system to manage its ferry operations. However, we found that it needed to improve its training management, incident tracking processes, and crew scheduling, and the information systems used to support them.

55. Our analysis supporting this finding discusses the following topics:

- Management of safety
- Management of ferry operations

Recommendations

56. Our recommendations in this area of examination appear at paragraphs 62, 68, and 73.

Management of safety

57. **Analysis.** We found weaknesses in the management of crew and shore-based employee training, and incident and exception reporting and investigation (Exhibit 7).

Exhibit 7 Management of safety—Key findings and assessment

Systems and practices	Criteria used	Key findings	Assessment against the criteria
Operational planning	The Corporation defined operational plans that were aligned with strategic plans and its mandate.	The Corporation developed a five-year safety plan to support its strategic objectives. In setting the sailing schedule, the Operational Planning Committee considered minimum safe crewing requirements and the hours of rest needed between shifts. The Corporation performed gap analyses to identify supplemental environment work required at its terminal properties.	
Safety management system	The Corporation's ferry operation was managed to meet regulatory requirements to ensure the safety of passengers and employees and to safeguard assets and the environment.	A safety management system was in place that complied with the requirements of the ISM Code and outlined the roles and responsibilities of employees. The Corporation's vessels had valid inspection certificates issued by an organization under the authority of the Department of Transport.	
Crew and shore-based employee competency and training	The Corporation had a training and development program in place to ensure crew and shore-based employees acquired, maintained, and developed the skills and competencies needed to carry out required work in a safe manner.	The Corporation's training matrices took into account all the applicable regulatory requirements. The Corporation met minimum regulatory crewing requirements. **Weakness** In respect of the Corporation's additional internal training requirements, the Corporation did not always monitor employees' training.	

Legend—Assessment against the criteria

Met the criteria

Met the criteria, with improvement needed

Did not meet the criteria

Exhibit 7 Management of safety—Key findings and assessment (continued)

Systems and practices	Criteria used	Key findings	Assessment against the criteria
Incident and exception reporting and investigation	The Corporation had systems and practices in place to report and investigate incidents and exceptions and took action as needed to reduce the risk of future incidents.	The Corporation's manuals discussed how to address and report on incidents. Management received reports of incident statistics weekly, monthly, and quarterly; the Board received the quarterly reports. **Weaknesses** Changes to the Corporation's system for incident reporting led to inconsistencies in classifying incidents. The Corporation was inconsistent in applying its policies and procedures for closing safety incidents in a timely way and documenting corrective actions taken.	Met the criteria, with improvement needed

Legend—Assessment against the criteria

Met the criteria

Met the criteria, with improvement needed

Did not meet the criteria

58. ***Weakness—Crew and shore-based employee training.*** The Corporation's training requirements for its crew and shore-based employees were based on both regulatory requirements and the Corporation's internal requirements. While the Corporation's training matrices accurately reflected its training requirements, we found that its training reports were sometimes incomplete.

59. We tested a sample of 30 crew and shore-based employees to determine whether employee training requirements had been met as noted in the training matrices. We found that 23 of the 30 employees sampled did not meet the requirements of the training matrices or were missing data in the Corporation's human resources system, which the Corporation used to track employee training.

60. The missing training was not a regulatory requirement but rather a requirement of the Corporation, to avoid scheduling or other operational issues. The training matrices required more training than the regulations did, to aid in crew scheduling.

61. This weakness matters because monitoring training is critical to ensuring that crew and shore-based employees have acquired, maintained, and developed the skills and competencies needed to carry out their work.

62. **Recommendation.** The Corporation should improve its monitoring of compliance with its internal training requirements.

The Corporation's response. *Agreed. The Corporation will review the current training policies and monitoring processes in the 2018–19 fiscal year with a goal to realizing improvements by the fourth quarter of that year.*

Addressing the challenges associated with the timeliness and accuracy of the training tracking system and related reporting has been identified as a key deliverable in the scope of the Corporation's enterprise resource planning project. The Corporation is confident that the project will effectively meet its training management needs and address the identified limitations and information gaps once fully deployed. The first phase of this multi-year project will be implemented in 2019. The learning management module will be implemented in the 2020–21 fiscal year and is expected to yield the greatest benefits in the training area.

63. ***Weaknesses—Incident and exception reporting and investigation.*** The applicable occupational health and safety regulations require that employees report to the employer every accident or hazardous occurrence in the course of work that has caused or is likely to cause an injury. They also require that every accident, occupational disease, and other hazardous occurrence be investigated without delay by a qualified person appointed by the Corporation.

64. We found that, of the 971 safety incidents reported by the Corporation in 2017, only 1 was considered serious (according to the Corporation's standards, this means injury involving serious bodily harm or requiring medical aid, environmental contamination, damage to equipment or property estimated greater than $50,000, serious incident procedure or policy violation, or fatality).

65. Management had updated its classification system for incident reporting in recent years to provide the Corporation with more reliable statistics. For example:

- The term "non-occupational" was introduced as an incident type in 2015, to distinguish it from an "occupational" incident.
- The term "proactive" was introduced in 2017 to promote a safety culture where employees identify hazards in the workplace before an incident can occur. Previously, "proactive" incidents were included under the "near-miss" incident type, which described an incident that could have caused a potential loss, but was prevented only by chance.

As these new classifications were not included in the tracking system glossary, some employees used the previous classifications. This led to inconsistencies in reporting, particularly with the non-occupational versus occupational classifications.

66. We also found that, during the period covered by the audit, 50% of 640 safety incident reports were not closed within 30 days after the incident, as required by the Corporation's policy. In a sample of 30 reports, we also noted 4 reports that showed no evidence of corrective action having been taken before the incident report was closed in the system, as required by the Corporation's processes.

67. These weaknesses matter because improperly classifying incidents increases the risk of providing unreliable information to senior management and the Board for decision making. Moreover, delays in closing incident reports, especially without documenting corrective action where needed, puts the Corporation at risk of not maintaining its safe work practices or communicating the resulting experience throughout the Corporation.

68. **Recommendation.** The Corporation should consistently apply its incident reporting policies and procedures for classifying and documenting corrective actions in a timely way. The Corporation should ensure that its tracking system guidance is updated to reflect its revised classification system.

The Corporation's response. *Agreed. In October 2017, the Corporation rolled out a half-day incident reporting training session designed to educate employees on its current methods of incident management. The training is ongoing and to date, over 80% of employees have received this training.*

The Corporation established an Incident Management Review Committee in July 2018 to pursue improvements in the current processes and procedures in incident management.

In addition, the Corporation is working with ferry industry authorities to develop new injury reporting definitions and guidelines. Upon completion, these will be communicated to employees and incorporated into the classification system.

Management of ferry operations

69. **Analysis.** We found a weakness in crew scheduling (Exhibit 8).

Exhibit 8 Management of ferry operations—Key findings and assessment

Systems and practices	Criteria used	Key findings	Assessment against the criteria
Operational planning	The Corporation defined operational plans that were aligned with strategic plans and its mandate to deliver a reliable and cost-effective ferry operation.	The Corporation established a 2018–19 sailing schedule, vessel maintenance plans, and a preventive maintenance plan for shore-based assets.	
Crew and vessel scheduling	Vessel sailings, crewing, and vessel maintenance were scheduled to meet the traffic demand in a reliable and cost-effective manner.	The Corporation had a systematic process for planning its annual sailing schedule. In developing the 2018–19 sailing schedule, the Corporation considered internal inputs such as its maintenance plan and historical traffic data, and external inputs such as growth projections. The Corporation's crewing levels were sufficient in all 18 competency reports sampled. The Corporation considered various sources in developing future fleet configurations, including a traffic study and traffic forecasts, a market survey of available tonnage, a life-cycle assessment, and risk analyses. **Weakness** The Corporation's information system for crew scheduling was inefficient and did not address the complexities of its operations.	

Legend—Assessment against the criteria

Met the criteria

Met the criteria, with improvement needed

Did not meet the criteria

Exhibit 8 Management of ferry operations—Key findings and assessment (continued)

Systems and practices	Criteria used	Key findings	Assessment against the criteria
Vessel, terminal, and equipment maintenance	The Corporation maintained its vessels, terminals, and equipment in a manner that supported a safe and cost-effective ferry operation.	The Corporation's vessel maintenance plans, preventive maintenance plan for shore-based assets, and master capital projects plan covered all of its assets. The Corporation scheduled vessel, terminal, and equipment inspections in accordance with the requirements of the Department of Transport and the Corporation's classification society (a non-governmental organization, recognized by the Department of Transport, that establishes and maintains technical standards for construction and operation of marine vessels). The Corporation appropriately documented, tracked, and addressed vessel maintenance non-conformities (where a specific requirement of the safety management system is not met).	Met the criteria
Performance monitoring and reporting	The Corporation monitored and reported on its ferry operations and maintenance.	The Corporation monitored fleet-operation performance by using indicators for financial data, overtime, on-time performance, vessel availability, fuel management, and safety management. The Corporation reported the results through a weekly traffic report, a monthly vessel reliability report, and the Vice-President of Operations' quarterly report to the Board of Directors. The Corporation independently assessed its operations through a public opinion study, commercial customer research, customer satisfaction surveys, and Department of Transport fleet assessments.	Met the criteria

Legend—Assessment against the criteria

- Met the criteria
- Met the criteria, with improvement needed
- Did not meet the criteria

70. ***Weakness—Crew and vessel scheduling.*** In our 2009 special examination, we recommended that the Corporation put automated systems in place to improve staff scheduling and to help assign crew to individual ferries. However, we found that the Corporation's current system did not have the flexibility to fully address several factors that must be considered in the scheduling process, such as employee position, leave requests, leaves of absence, medical restrictions and accommodations, and seniority and "bumping" provisions in collective agreements (where employees with greater seniority can take the job of those with lesser seniority).

71. As a result, much of the process was still manual and not well documented, and the automated system was used only to store the completed schedules, rather than for the scheduling itself.

72. This weakness matters because manual scheduling is inefficient and depends on the knowledge and experience of a few employees.

73. **Recommendation.** The Corporation should ensure that the enterprise resource planning solution under development meets its scheduling needs and effectively addresses the limitations and information gaps in its current systems.

The Corporation's response. *Agreed. The Corporation's scheduling and information requirements were fully documented and considered as a key deliverable during the selection of its new enterprise resource planning solution.*

The Corporation is confident that the solution and processes will be deployed to meet the relevant regulatory, collective agreement, and information requirements. The first phase of this multi-year project will be implemented in 2019.

Conclusion

74. In our opinion, based on the criteria established, there was a significant deficiency in the Corporation's strategic direction setting, but there was reasonable assurance that there were no significant deficiencies in the other systems and practices that we examined. We concluded that except for this significant deficiency, the Corporation maintained its systems and practices during the period covered by the audit in a manner that provided the reasonable assurance required under section 138 of the *Financial Administration Act*.

About the Audit

This independent assurance report was prepared by the Office of the Auditor General of Canada on Marine Atlantic Inc. Our responsibility was to express

- an opinion on whether there is reasonable assurance that during the period covered by the audit, there were no significant deficiencies in the Corporation's systems and practices that we selected for examination; and
- a conclusion about whether the Corporation complied in all significant respects with the applicable criteria.

Under section 131 of the *Financial Administration Act* (FAA), Marine Atlantic Inc. 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.

In addition, section 138 of the FAA requires the Corporation to have a special examination of these systems and practices carried out at least once every 10 years.

All work in this audit was performed to a reasonable level of assurance in accordance with the Canadian Standard for Assurance Engagements (CSAE) 3001—Direct Engagements set out by the Chartered Professional Accountants of Canada (CPA Canada) in the CPA Canada Handbook—Assurance.

The Office applies Canadian Standard on Quality Control 1 and, accordingly, maintains a comprehensive system of quality control, including documented policies and procedures regarding compliance with ethical requirements, professional standards, and applicable legal and regulatory requirements.

In conducting the audit work, we have complied with the independence and other ethical requirements of the relevant rules of professional conduct applicable to the practice of public accounting in Canada, which are founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality, and professional behaviour.

In accordance with our regular audit process, we obtained the following from the Corporation's management:

- confirmation of management's responsibility for the subject under audit;
- acknowledgement of the suitability of the criteria used in the audit;
- confirmation that all known information that has been requested, or that could affect the findings or audit conclusion, has been provided; and
- confirmation that the audit report is factually accurate.

Audit objective

The objective of this audit was to determine whether the systems and practices we selected for examination at Marine Atlantic Inc. were providing it with reasonable assurance that its assets were safeguarded and controlled, its resources were managed economically and efficiently, and its operations were carried out effectively as required by section 138 of the *Financial Administration Act*.

Scope and approach

Our audit work examined Marine Atlantic Inc. The scope of the special examination was based on our assessment of the risks the Corporation faced that could affect its ability to meet the requirements set out by the *Financial Administration Act*.

As part of our examination, we interviewed Board members, senior management, and other individuals throughout the Corporation to gain insights into its systems and practices. We toured some of the vessels and met with senior crew members. We selected and tested samples of items such as inspection reports, safety incidents, employee training, and crew complements to determine whether systems and practices were in place and functioned as intended.

The systems and practices selected for examination for each area of the audit are found in the exhibits throughout the report.

In carrying out the special examination, we did not rely on any internal audits.

Sources of criteria

The criteria used to assess the systems and practices selected for examination are found in the exhibits throughout the report.

Corporate governance

Meeting the Expectations of Canadians: Review of the Governance Framework for Canada's Crown Corporations, Treasury Board Secretariat, 2005

Internal Control—Integrated Framework, Committee of Sponsoring Organizations of the Treadway Commission, 2013

Corporate Governance in Crown Corporations and Other Public Enterprises—Guidelines, Department of Finance and Treasury Board, 1996

20 Questions Directors Should Ask about Risk, Canadian Institute of Chartered Accountants, 2006

Performance Management Program for Chief Executive Officers of Crown Corporations—Guidelines, Privy Council Office, 2016

Practice Guide: Assessing Organizational Governance in the Public Sector, The Institute of Internal Auditors, 2014

Strategic planning, performance measurement, and performance monitoring and reporting

Meeting the Expectations of Canadians: Review of the Governance Framework for Canada's Crown Corporations, Treasury Board Secretariat, 2005

Guidelines for the Preparation of Corporate Plans, Treasury Board Secretariat, 1996

Corporate Governance in Crown Corporations and Other Public Enterprises—Guidelines, Department of Finance and Treasury Board, 1996

Recommended Practice Guideline 3, Reporting Service Performance Information, International Public Sector Accounting Standards Board, 2015

20 Questions Directors Should Ask about Risk, Canadian Institute of Chartered Accountants, 2006

Corporate risk management

20 Questions Directors Should Ask about Risk, Canadian Institute of Chartered Accountants, 2006

Internal Control—Integrated Framework, Committee of Sponsoring Organizations of the Treadway Commission, 2013

Corporate Governance in Crown Corporations and Other Public Enterprises—Guidelines, Department of Finance and Treasury Board, 1996

Management of safety

Guidelines for the Preparation of Corporate Plans, Treasury Board Secretariat, 1996

A Guide to the Project Management Body of Knowledge (PMBOK® Guide), fourth edition, Project Management Institute Inc., 2008

Plan-Do-Check-Act management model adapted from the Deming Cycle

Canada Shipping Act, 2001

Transportation of Dangerous Goods Act, 1992

Maritime Occupational Health and Safety Regulations

International Management Code for the Safe Operation of Ships and for Pollution Prevention (International Safety Management Code), International Maritime Organization

Policy on Learning, Training, and Development, Treasury Board, 2006

Ultimate HR Manual, Human Resource Professionals Association and CCH

Canada Labour Code

Management of ferry operations

Guidelines for the Preparation of Corporate Plans, Treasury Board Secretariat, 1996

A Guide to the Project Management Body of Knowledge (PMBOK® Guide), fourth edition, Project Management Institute Inc., 2008

Plan-Do-Check-Act management model adapted from the Deming Cycle

International Management Code for the Safe Operation of Ships and for Pollution Prevention (International Safety Management Code), International Maritime Organization

Letter of expectations to the Chairperson of Marine Atlantic Inc. from the Minister of Transport, July 2017

Financial Administration Act

Canada Shipping Act, 2001

Internal Control—Integrated Framework, Committee of Sponsoring Organizations of the Treadway Commission, 2013

Period covered by the audit

The special examination covered the period between 1 September 2017 and 30 April 2018. This is the period to which the audit conclusion applies. However, to gain a more complete understanding of the significant systems and practices, we also examined certain matters that preceded the starting date of this period.

Date of the report

We obtained sufficient and appropriate audit evidence on which to base our conclusion on 22 November 2018, in Halifax, Canada.

Audit team

Principal: Heather McManaman
Director: Paul Kelly

Firyal Awada
Nancy Bennett
Jacob Campbell
Nicole Musycsyn

List of Recommendations

The following table lists the recommendations and responses found in this report. The paragraph number preceding the recommendation indicates the location of the recommendation in the report, and the numbers in parentheses indicate the location of the related discussion.

Recommendation	Response
Corporate management practices	
33. The Corporation should continue to engage with relevant government officials to help ensure the timely approval of its corporate plans and to resolve the Corporation's long-term fleet-renewal strategy, along with funding requirements to support ongoing fleet renewal. **(26–32)**	**The Corporation's response.** Agreed. The Corporation will continue to engage with relevant government officials to help ensure the timely approval of its corporate plans and the resolution of the Corporation's fleet-renewal strategy, along with funding requirements to support ongoing fleet renewal.
39. The Corporation should use its balanced scorecard to monitor all key performance indicators and targets set by the Minister. **(35–38)**	**The Corporation's response.** Agreed. The Corporation will incorporate all performance indicators and targets set by the Minister in its balanced scorecard by the end of the fourth quarter of the 2018–19 fiscal year.
42. The Corporation should develop an environmental management plan that states the Corporation's objectives for environmental protection and the activities, timelines, and related resource requirements needed to achieve them. The Corporation should also develop key performance indicators to monitor progress against its strategic objective to protect the environment. **(40–41)**	**The Corporation's response.** Agreed. The Corporation will develop, enhance, and monitor key performance indicators for environmental protection during the 2018–19 fiscal year. This will augment its participation in an industry-accepted marine environmental certification program. The Corporation will also establish a formal environmental management plan that clearly documents the current and future plans in the area of environmental protection, as well as the timelines and resources required to execute it, by the second quarter in 2020.
45. The Corporation should ensure that it has a common understanding with the government on how to calculate cost recovery for non-constitutional services. **(43–44)**	**The Corporation's response.** Agreed. The Corporation reports on the cost-recovery targets in its corporate plans. The Corporation will continue its consultation with the Department of Transport to finalize the revised approach to the cost-recovery calculation for the non-constitutional services. This will be completed prior to the end of the 2018–19 fiscal year.
50. The Corporation should define its risk mitigation measures and ensure that related actions are specific, time-bound, and measurable and that implementation of these measures is monitored and reported. **(47–49)**	**The Corporation's response.** Agreed. Risk reporting to the Board of Directors will be updated to include mitigations, deadlines, and progress towards established timelines by the end of the second quarter in the 2019–20 fiscal year. The next priority for the Corporation will be the development of divisional-level risk registers. This initiative will commence in the 2018–19 fiscal year and is expected to be completed by the end of the 2019–20 fiscal year.

Recommendation	Response
Management of safety and ferry operations	
62. The Corporation should improve its monitoring of compliance with its internal training requirements. **(58–61)**	**The Corporation's response.** Agreed. The Corporation will review the current training policies and monitoring processes in the 2018–19 fiscal year with a goal to realizing improvements by the fourth quarter of that year. Addressing the challenges associated with the timeliness and accuracy of the training tracking system and related reporting has been identified as a key deliverable in the scope of the Corporation's enterprise resource planning project. The Corporation is confident that the project will effectively meet its training management needs and address the identified limitations and information gaps once fully deployed. The first phase of this multi-year project will be implemented in 2019. The learning management module will be implemented in the 2020–21 fiscal year and is expected to yield the greatest benefits in the training area.
68. The Corporation should be more diligent in applying its incident reporting policies and procedures for classifying and documenting corrective actions in a timely way. The Corporation should ensure that its tracking system guidance is updated to reflect its revised classification system. **(63–67)**	**The Corporation's response.** Agreed. In October 2017, the Corporation rolled out a half-day incident reporting training session designed to educate employees on its current methods of incident management. The training is ongoing and to date, over 80% of employees have received this training. The Corporation established an Incident Management Review Committee in July 2018 to pursue improvements in the current processes and procedures in incident management. In addition, the Corporation is working with ferry industry authorities to develop new injury reporting definitions and guidelines. Upon completion, these will be communicated to employees and incorporated into the classification system.
73. The Corporation should ensure that the enterprise resource planning solution under development meets its scheduling needs and effectively addresses the limitations and information gaps in its current systems. **(70–72)**	**The Corporation's response.** Agreed. The Corporation's scheduling and information requirements were fully documented and considered as a key deliverable during the selection of its new enterprise resource planning solution. The Corporation is confident that the solution and processes will be deployed to meet the relevant regulatory, collective agreement, and information requirements. The first phase of this multi-year project will be implemented in 2019.