



## **Marine Atlantic Inc.**

Special Examination Report—2009



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

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Office of the Auditor General of Canada  
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14 September 2009

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 Committee of the Board of Directors on 11 February 2009. As required by Section 139 of the *Financial Administration Act* (FAA), we are pleased to provide the attached final special examination report to the Board of Directors.

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

We will be pleased to respond to any comments or questions you may have concerning our report at your meeting on 23 September 2009.

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,

A handwritten signature in black ink, appearing to read 'JO O'Brien'.

John O'Brien, CA  
Principal

Attach.



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# Marine Atlantic Inc.

## Special Examination Report—2009

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### Main Points

#### What we examined

Marine Atlantic Inc. is a Crown corporation responsible for providing ferry services between Nova Scotia and the Island of Newfoundland. The Corporation operates two routes—a year-round service between Port aux Basques and North Sydney and a seasonal service between Argentia and North Sydney. To provide this service, Marine Atlantic operates four large passenger/vehicle ferries. In 2007–08, the Corporation’s operating expenses were about \$160 million, of which \$73 million was funded by revenue from customers and \$77 million was federal government funding. The Corporation has the equivalent of about 950 full-time equivalents but the actual number of employees increases to about 1,250 during the summer season.

We examined whether Marine Atlantic Inc.’s systems and practices provide the Corporation with reasonable assurance that its assets are safeguarded and controlled, its resources are managed economically and efficiently, and its operations are carried out effectively. We focused on the areas of corporate governance, strategic and operational planning, safety and security, human resource management, operations, and capital asset management. Our examination covered the period from October 2008 to March 2009.

#### Why it’s important

Marine Atlantic is a vital transportation link to Newfoundland and Labrador. The only other practical option for passenger travel to the Island of Newfoundland is by air. The Corporation’s commercial customers transport about 50 percent of the goods entering Newfoundland and Labrador, including about 90 percent of the perishable goods. The Government of Canada is obligated to provide year-round ferry service between North Sydney and Port aux Basques under the Terms of Union governing Newfoundland’s confederation with Canada.

#### What we found

Our examination found two significant deficiencies in Marine Atlantic’s systems and practices: one relating to unresolved strategic challenges and the other relating to operational systems and practices in operational planning and capital asset management:

- **Strategic challenges.** Marine Atlantic is at risk of being unable to deliver the services it is responsible for providing, due to unresolved strategic challenges that will require support from the government to overcome. These challenges are the aging of its ferries and shore-based assets, difficulties ensuring that capacity is sufficient to meet the traffic demand, failure to meet the cost recovery target set by the government, and the need to increase its management capacity. Marine Atlantic needs to agree with the government on a plan of action, including long-term funding, to overcome these challenges.
- **Operational planning and capital asset management.** Marine Atlantic does not have an operational planning framework and performance measures in place to ensure that strategic direction and corporate plans are implemented. The Corporation exceeded approved operating budgets in 2006 and fiscal years 2007–08 and 2008–09, and commitments in its corporate plans have not been met. In addition, many observations raised in our 2004 special examination have not been addressed. Marine Atlantic’s capital asset management practices do not ensure that its operations are reliable and that assets are managed at the lowest cost over their useful lives. As a result, ferries have suffered mechanical breakdowns that have affected the reliability of service, and the physical condition of shore-based assets is poor.

In our opinion, given the significance of these deficiencies, and based on the criteria established for the examination, Marine Atlantic does not have the reasonable assurance required by section 131 of the *Financial Administration Act* that its assets were safeguarded and controlled, its resources were managed economically and efficiently, and its operations were carried out effectively.

In other areas, we noted that while no significant deficiency existed, Marine Atlantic would benefit from improving its practices.

- **Corporate governance.** The Board of Directors has many strong governance practices including an appropriate committee structure, and is an active, independent Board with qualified members. However, the Board has recognized the need to improve its governance practices, including clarifying the roles of Board committees and ensuring that its members obtain the information they need. A review of Board governance was started in 2007 but was put on hold for most of 2008. We also noted that a review of Marine Atlantic’s internal audit function found that it did not meet relevant standards.



- **Safety, security, and environmental stewardship.** During the period of our examination, the Corporation's ferries had up-to-date safety certifications. However, the Corporation is still implementing measures to comply with relevant international and upcoming Canadian security requirements. In addition, the Corporation has not developed an environmental management system since we raised this issue in our 2004 special examination.
- **Human resource management.** Since our 2004 special examination, Marine Atlantic has made progress in developing a succession plan and providing leadership and management training. However, the Corporation has not yet developed an overall human resources plan.
- **Operations.** Marine Atlantic has improved its processes for setting its 2009 sailing schedule and forecasting traffic demands. However, the Corporation has found that the system for scheduling staff is inefficient, the Corporation has not acted upon identified opportunities to improve efficiency, and its internal committee to improve customer satisfaction stopped meeting. The Corporation has experienced poor on-time performance, particularly during the period of peak demand in July and August 2008.

*The Corporation has responded. The Corporation agrees with our recommendations. Its detailed responses follow each recommendation throughout the report.*



## Special Examination Opinion

To the Board of Directors of Marine Atlantic Inc.

1. 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.
2. Section 138 of the FAA also requires the Corporation to have a special examination of these systems and practices carried out at least once every ten 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 2008 to March 2009—there were no significant deficiencies in the Corporation’s systems and practices.
4. We based our examination plan on our survey of the Corporation’s systems and practices and a risk analysis. On 11 February 2009, 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 Corporation 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 Corporation’s systems and practices. These criteria were selected for this examination in consultation with the Corporation. 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 did not rely on the work of internal audit because a quality assurance review carried out in 2008 concluded that the internal audit function only partially conformed to the International Standards for the Professional Practice of Internal Auditing established by the Institute of Internal Auditors.

7. We noted two significant deficiencies in the Corporation's systems and practices:

- **Strategic challenges.** Marine Atlantic is at risk of being unable to deliver the services it is responsible for providing, due to unresolved strategic challenges that will require support from the government to overcome. These challenges are the aging of its ferries and shore-based assets, difficulties ensuring that capacity is sufficient to meet the traffic demand, failure to meet the cost recovery target set by the government, and the need to increase its management capacity. Marine Atlantic needs to agree with the government on a plan of action, including long-term funding, to overcome these challenges.
- **Operational planning and capital asset management.** Marine Atlantic does not have an operational planning framework and performance measures in place to ensure that strategic direction and corporate plans are implemented. The Corporation exceeded approved operating budgets in 2006 and fiscal years 2007–08 and 2008–09, and commitments in its corporate plans have not been met. In addition, many observations raised in our 2004 special examination have not been addressed. Marine Atlantic's capital asset management practices do not ensure that its operations are reliable and that assets are managed at the lowest cost over their useful lives. As a result, ferries have suffered mechanical breakdowns that have affected the reliability of service, and the physical condition of shore-based assets is poor.

8. In our opinion, given the significance of the deficiencies mentioned above, and based on the criteria established for the examination, Marine Atlantic does not have the reasonable assurance required under section 131 of the *Financial Administration Act*.

9. The rest of this report provides an overview of the Corporation and more detailed information on our examination observations and recommendations.



Sheila Fraser, FCA  
Auditor General of Canada

Ottawa, Canada  
9 July 2009

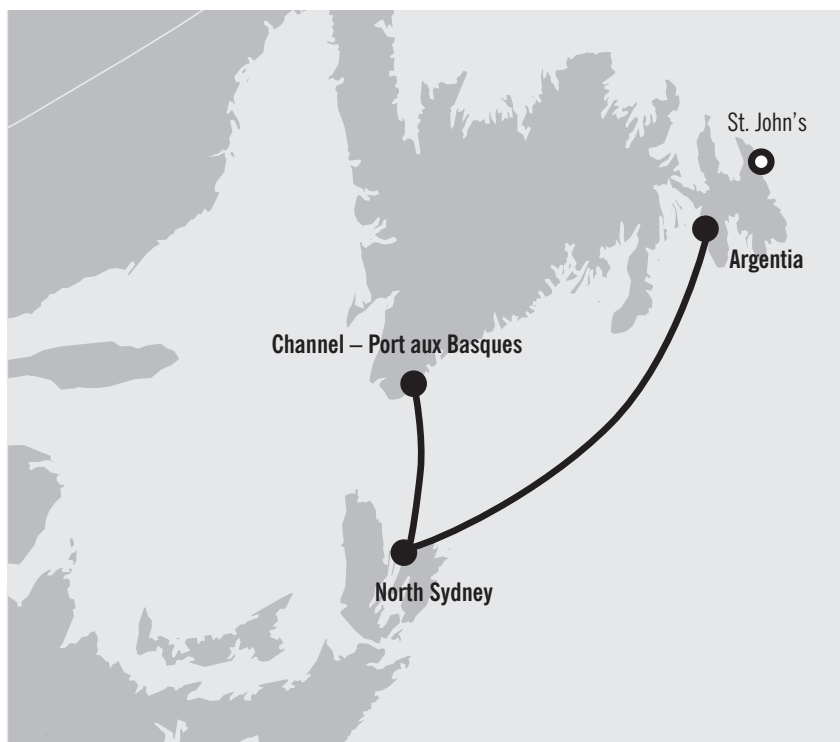
## Overview of Marine Atlantic Inc.

### Background

10. Marine Atlantic Inc. provides ferry services between North Sydney, Nova Scotia and Port aux Basques and Argentia, Newfoundland and Labrador (Exhibit 1). The North Sydney to Port aux Basques route runs year-round; the North Sydney to Argentia route is seasonal. These services provide a vital transportation link for passengers and commercial and passenger vehicles travelling to and from Newfoundland and Labrador. The ferry service between North Sydney and Port aux Basques was accorded special constitutional status when Newfoundland joined Canada in 1949. Term 32(1) of the Terms of Union of Newfoundland with Canada 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.

Exhibit 1 Map of Marine Atlantic's routes and locations



Source: 2008–09 to 2012–13 Corporate Plan Summary

11. The *Marine Atlantic Inc. Acquisition Authorization Act (1986)* established Marine Atlantic Inc. as a parent Crown corporation with a mandate for the "... acquisition, establishment, management, and operation of a marine transportation service, a marine maintenance repair and refit service, a marine construction business, and any service or business related thereto." Marine Atlantic reports to Parliament on its activities, through the Minister of Transport, Infrastructure and Communities.

12. Until the mid-1990s, the Corporation operated five ferry services and two coastal service routes within Atlantic Canada, maintained a fleet of 15 ferries, and owned a ship repair facility. As a result of the National Marine Policy (1995), all of these operations were closed or transferred except for the two ferry services between Newfoundland and Labrador and Nova Scotia.

13. **Vision, mission, and objectives of the Corporation.** Marine Atlantic's vision is "to achieve excellence in fulfilling the federal mandate to provide a ferry service between the mainland of Canada and the Province of Newfoundland and Labrador." Its mission 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."

14. In its 2008–09 to 2012–13 Corporate Plan Summary, Marine Atlantic describes its responsibility to provide the following services: "To continue to provide a year-round service between Port aux Basques, NL and North Sydney, NS and a seasonal service between Argentia, NL and North Sydney, NS."

15. In order to achieve its overall objective, the Corporation has established the following operational goals:

- to promote, foster, and maintain safety;
- to promote, foster, and maintain environmental stewardship;
- to operate an efficient and cost-effective ferry service;
- to provide a quality ferry service to customers in a reliable and courteous manner; and
- to manage and maintain a motivated and qualified workforce.

16. **Ferries and facilities.** Marine Atlantic currently owns four ice-class ferries—three passenger/vehicle ferries and one commercial freighter. The Corporation recently entered into a five-year lease to charter a fast passenger/vehicle ferry, the *MV Atlantic Vision*, until 2013, with an option to purchase the ferry at any time

during the contract. The commercial freighter, the *MV Atlantic Freighter*, is no longer in service and is available for sale because the Corporation no longer needs it. Exhibit 2 lists the ferries Marine Atlantic owns or operates and their capacity.

**Exhibit 2 Marine Atlantic's ferries and their capacity**

Ferry	Type	Year built	Capacity (auto equivalent units*)	Capacity (passengers)
<b>Operating ferries</b>				
<i>MV Atlantic Vision</i>	Fast passenger/vehicle ferry	2002	475	728
<i>MV Leif Ericson</i>	Passenger/vehicle ferry	1991	283	400
<i>MV Joseph and Clara Smallwood</i>	Passenger/vehicle ferry	1989	330	1,000
<i>MV Caribou</i>	Passenger/vehicle ferry	1986	336	829
<b>Non-operating ferry</b>				
<i>MV Atlantic Freighter</i>	Commercial freighter	1978	243	12

Source: Long-term Strategic Fleet Renewal Plan

\*1 auto equivalent unit (AEU) represents 6.096 metres

**17.** Marine Atlantic operates terminals and associated facilities in Port aux Basques, North Sydney, and Argentia. These facilities include docks, wharves, vehicle marshalling areas, passenger terminals, ticket booths, maintenance garages, and administrative offices. The Corporation's head office is in St. John's, Newfoundland and Labrador.

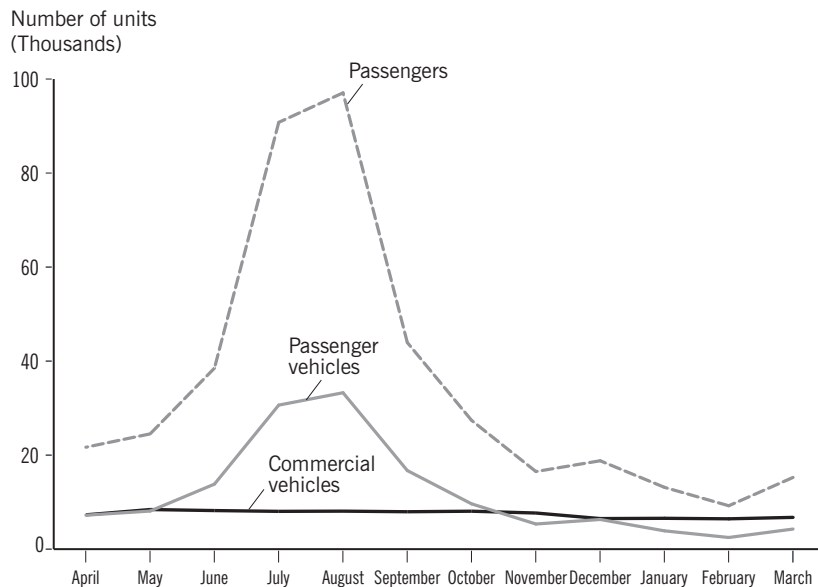
**18. Ferry traffic.** Marine Atlantic is integral to the economy of Newfoundland and Labrador, because it is one of the major transporters of goods for the province. The Corporation's commercial customers transport about 50 percent of goods entering the Island of Newfoundland, including about 90 percent of perishable goods. Commercial vehicles represent about 70 percent of the Corporation's traffic, which varies in volume only slightly from month to month. The Corporation experiences a significant peak in passenger-related traffic during the July and August tourist season. Exhibit 3 charts the major increase in passengers and passenger vehicle traffic during the summer months.

**19. Revenues and funding.** In the 2007–08 fiscal year, Marine Atlantic earned \$38.5 million in revenue from commercial customers and \$25.5 million from passenger-related traffic. The Corporation also

provides passengers with hospitality services through its accommodations, dining facilities, and gift shops—services that earned \$8.9 million in additional revenue in the 2007–08 fiscal year.

20. Marine Atlantic depends upon the Government of Canada for funding. The Corporation relies upon annual parliamentary appropriations to fund its cash operating losses and capital acquisitions. During the 2007–08 fiscal year, federal government funding for Marine Atlantic totalled \$76.6 million.

**Exhibit 3 Traffic statistics for the 2007-08 fiscal year, highlighting peak passenger and passenger-related traffic**



Source: 2007–08 traffic statistics

### Focus of the special examination

21. We examined whether Marine Atlantic Inc.'s systems and practices provide the Corporation with reasonable assurance that its assets are safeguarded and controlled, its resources are managed economically and efficiently, and its operations are carried out effectively. We focused on the areas of corporate governance, strategic and operational planning, safety and security, human resource management, operations, and capital asset management.

22. Further details on the audit objective, scope, criteria, and approach are provided in **About the Special Examination** at the end of the report.



## Observations and Recommendations

23. A deficiency is significant if it prevents a Crown corporation 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.

### Unresolved strategic challenges

#### The Corporation needs federal government support to overcome strategic challenges

24. One significant deficiency we noted was that Marine Atlantic is at risk of being unable to deliver the services it is responsible for providing, because of strategic challenges that will require support from the federal government to overcome. The Corporation's challenges include aging ferries and shore-based assets, difficulty matching capacity to traffic demand, failure to meet its cost recovery target, and its need to increase management capacity. Marine Atlantic needs to agree with the federal government on a plan of action, including long-term funding, to overcome these strategic challenges.

25. Marine Atlantic's current fleet is aging and unreliable. For example, when measured against its originally published sailing schedule for July and August 2008, the Corporation's ferries sailed on time only 10 percent of the time, because of mechanical breakdowns and weather delays, and because the schedule did not permit additional sailings. In addition, many of the Corporation's shore-based assets, such as docks and terminal buildings, are in poor condition, needing repair or replacement. Structural fatigue in Marine Atlantic's loading ramp in Port aux Basques has also resulted in additional costs and disrupted the sailing schedule. The ferries' mechanical breakdowns and the structural fatigue in the loading ramp in Port aux Basques resulted in service delays, trip cancellations, and backlogs of travellers.

26. In its 2008–09 to 2012–13 Corporate Plan Summary, the Corporation noted that the Minister of Transport, Infrastructure and Communities established expectations for the Corporation. In particular, Marine Atlantic was expected to develop revenue and cost containment strategies to achieve a cost recovery target of between 60 and 65 percent. In response to these expectations, the Corporation implemented a fuel surcharge and increased rates, based on the Consumer Price Index, on the constitutional route. However, while the Corporation has undertaken or begun a number of studies, it has not developed revenue or cost containment strategies designed to achieve the cost recovery target.

**27.** Marine Atlantic's 2008–09 to 2012–13 Corporate Plan Summary committed the Corporation to achieving a cost recovery target of 59 percent in the 2008–09 fiscal year and 58 percent in the 2009–10 fiscal year. The plan projected targets in the range the Minister had established for subsequent years. For the 2008–09 fiscal year, the projected cost recovery is 57 percent. Subsequently, the Corporation has indicated that it will not meet the 60 to 65 percent cost recovery target in the 2009–10 or 2010–11 fiscal years.

**28.** Marine Atlantic has a small senior management team, consisting of the President and Chief Executive Officer and three vice presidents. Each senior manager has broad responsibilities and a limited number of managers supporting them. Senior managers and the Board of Directors recognize that Marine Atlantic lacks the necessary management capacity to respond to the Corporation's major strategic and operational challenges. The Board of Directors has approved a management renewal plan. The first priority outlined in the plan is to reorganize the Corporation to improve accountability, to clarify responsibilities, and to add management capacity. The second priority is to improve management processes, including planning. The Corporation is in the process of hiring new managers based upon the management renewal plan. Those managers will be responsible for developing a detailed plan to change the way the business is managed, and for creating an implementation team.

**29.** Management has been developing a comprehensive fleet replacement plan for a number of years. For example, in both its 2005–2009 and 2006–2010 corporate plan summaries, the Corporation identified the need for additional fleet capacity. The Corporation has carried out a number of studies as part of developing a fleet renewal plan.

**30.** The Corporation submitted a proposed fleet renewal plan to the federal government in the 2007–08 fiscal year. However, the Governor in Council did not approve the proposed plan, which included the sale of the *MV Atlantic Freighter*, or the Corporation's request to enter into a charter agreement to obtain additional capacity. The Minister of Transport, Infrastructure and Communities directed Marine Atlantic to undertake further cost-benefit analysis and cost feasibility studies to determine the specific requirements and costs of a fleet renewal plan. The federal government subsequently approved the Corporation's request to charter an additional ferry.

**31.** After its original fleet renewal plan was not approved, Marine Atlantic submitted a long-term strategic fleet renewal plan to the Minister of Transport, Infrastructure and Communities and to

Transport Canada in October 2008, as the Minister had requested. In that plan, the Corporation identified the following challenges:

- a high level of customer dissatisfaction;
- an aging and unreliable fleet;
- deferred maintenance, which makes it costly and difficult to maintain the service;
- skill shortages, given an aging workforce, strong competition in the marine industry, and a lack of investment in leadership; and
- an inability to meet its cost recovery target.

**32.** While focusing on fleet renewal, the plan outlines other strategies to address Marine Atlantic's major operational challenges. These strategies include a new organizational structure and an increase in the number of senior managers with new, focused responsibilities. The Corporation is also developing plans to renew its business, with a concentration on customer experience, operations, talent and human resources management, information technology, safety and security, and the environment.

**33.** The Corporation used Transport Canada's cost-benefit approach in developing its long-term strategic fleet renewal plan. In its plan, the Corporation proposed three options for fleet renewal. The Corporation engaged numerous consultants, including naval architects, to advise and assist in developing the plan. Managers also consulted regularly with Transport Canada to ensure that the plan met the government's needs. Managers considered life cycle operating and capital costs when costing the various options.

**34.** Implementation of a fleet renewal plan depends upon the federal government's approval and significant federal funding. The Corporation has estimated it will need capital funding for vessels in the range of \$800 million to \$1.4 billion (in current dollars) for up to 25 years, and another \$150 million (in current dollars) for shore-based assets. The funding required for vessels depends upon the option the federal government approves. The Corporation's plan also identifies additional operating costs estimated at \$17 million over a five-year period, and capital costs of \$12 million to renew its business, including renewing management, and to implement the plan. Marine Atlantic and the federal government have not yet agreed upon plans to renew the Corporation's aging assets or to renew its business.

**35. Recommendation.** Marine Atlantic Inc., in collaboration with the federal government, should address its strategic challenges: an aging fleet and shore-based assets, inadequate cost recovery, and

management renewal. Together, the parties should resolve related funding issues. The Corporation should monitor progress in resolving each strategic challenge.

**The Corporation's response.** *Marine Atlantic Inc. agrees with the recommendation and, in collaboration with Transport Canada, is finalizing a comprehensive revitalization proposal for Marine Atlantic that will propose long-term solutions to government that address these strategic challenges, including a funding proposal for recapitalization of the fleet and shore-based assets.*

## Operational planning and capital asset management

### Corporate and operational planning is inadequate

**36.** We found a second significant deficiency in Marine Atlantic's operating systems and practices, concerning strategic and operational planning and capital asset management. Marine Atlantic does not have an operational planning framework and performance measures in place to ensure that it implements its strategic direction and corporate plans. The Corporation exceeded its approved operating budgets in 2006 and in the 2007–08 and 2008–09 fiscal years. It has not met commitments in its corporate plans, and it has not responded to many observations we raised in our 2004 special examination. Marine Atlantic's capital asset management practices do not ensure that its operations are reliable and that it is managing its assets at the lowest cost over their useful lives. As a result, ferries have suffered mechanical breakdowns affecting the reliability of service, and many of the Corporation's shore-based assets are in poor condition.

**37.** Strategic planning guides what an organization does and why it does it, with an eye to the future. It requires assessing and adjusting the organization's direction in response to a changing environment.

**38.** We expected the Corporation to have put systems and practices in place to establish strategic direction and set specific measurable goals and objectives, taking into account expected costs, funding needs and government priorities, identified risks, and the need to control and protect its assets and to manage its resources economically and efficiently.

**39.** As the *Financial Administration Act* requires, each year, Marine Atlantic prepares a five-year corporate plan that the Treasury Board of Canada must recommend and the Governor in Council approves. This plan and accompanying annual operating and capital budgets establish the Corporation's goals and targets for financial and operational performance. The Corporation's long-term strategic fleet renewal plan also contains elements of a strategic plan intended to guide the future.

40. Marine Atlantic's 2008–09 to 2012–13 Corporate Plan Summary contains high-level strategy statements in the areas of safety, environment, cost-effectiveness, customer service, and human resources. The Corporation does not have departmental operating plans that incorporate goals and objectives for managers and departments, and that would support their ability to achieve the strategies in the corporate plan summary. As a result, as we note elsewhere in this report, the Corporation did not take action on important strategies concerning the development of an environmental management system and the production of a sailing schedule in 2008 that allowed sufficient flexibility to respond to delays that weather and mechanical breakdowns caused. In addition, a committee designed to improve customer service stopped meeting. The Corporation has developed an operational planning framework, including formal procedures for strategic and operational planning, budgeting, and performance measurement, which it intends to implement during the 2009–10 fiscal year.

41. Each department within Marine Atlantic has its own operating and capital budgets. These budgets are based on the annual sailing schedule. Managers regularly monitor performance against budgets. The Corporation has consistently exceeded its original approved budgets, in part because of unanticipated increases in fuel costs, the requirement to make additional contributions to the pension plan, and currency fluctuations. As a result, the Corporation had to seek additional funding from the federal government for operations through amendments to its corporate plans in 2006 and in the 2007–08 and 2008–09 fiscal years. In 2007–08 and 2008–09, the Corporation did not identify the need for additional funding until late in the fiscal year.

42. **Recommendation.** Marine Atlantic Inc. should create a strategic and operational planning process that sets priorities and plans and allocates responsibilities for carrying out those plans.

*The Corporation's response.* Marine Atlantic Inc. agrees with the recommendation and has already implemented a corporate and management renewal process; it incorporates an operational framework, including formal procedures for strategic and operational planning, budgeting, and performance measurement. A new position of Vice President of Strategy and Corporate Affairs was recently staffed, which will deal directly with implementing a new planning process for the Corporation. A new management accountability framework has also recently been implemented, which will ensure that objectives and measurable targets are set for the Corporation and all senior managers.

**The Corporation has made little progress responding to our 2004 special examination**

43. One example of the Corporation's weakness in planning is the unsatisfactory progress it made in addressing weaknesses related to the systems and practices that we raised in our last special examination. Like this examination, our 2004 special examination reported significant deficiencies in the Corporation's systems and practices for planning and measuring performance. A number of our observations identified opportunities for the Corporation to improve. Appendix A summarizes our 2004 observations and recommendations, their current status, and the paragraphs in this report where we discuss these issues. In our view, the Corporation has made unsatisfactory progress overall in addressing these observations.

**Planning and implementation of a ferry charter was inadequate**

44. A second example of the Corporation's inadequate planning is the way it implemented the charter of the MV *Atlantic Vision*. In April 2008, Marine Atlantic received approval from the Governor in Council to charter a passenger/vehicle ferry to meet increasing traffic demands. That month, the Corporation negotiated an agreement to charter the MV *Atlantic Vision* for five years. The 2008–09 to 2012–13 Corporate Plan Summary indicated that the MV *Atlantic Vision* was to be delivered to the Corporation in September 2008, after being modified to meet Marine Atlantic's needs. The ferry was to begin operating in October 2008. However, it was only delivered to Marine Atlantic in November 2008, because the charter agreement gave the owners up to five months to deliver the ferry.

45. After the Corporation took possession of the ferry, it identified significant issues that managers had not considered in the original plan. For example, new mooring systems had to be installed, and additional modifications to the ferry had to be made, requiring additional time to bring the ferry into service and to meet Canadian regulatory requirements. The Corporation revised its implementation plan, instead gradually introducing the ferry into service after two months of sea trials and manoeuvres that were not originally scheduled. The MV *Atlantic Vision* began service on 1 April 2009, five months later than originally scheduled.

46. The five-year charter will cost significantly more than originally planned. The new mooring systems and additional modifications increased the capital costs. In addition, the Corporation was unaware when it entered the charter agreement that it was required to pay withholding taxes on behalf of the owner. Exhibit 4 provides details of the additional cost increases of an estimated \$17 million.

**Exhibit 4 Increased costs for the charter of the MV *Atlantic Vision***

(\$ millions)	Original estimated costs (January 2008)	Revised estimated costs (March 2009)
Charter fees	100.6	100.6
HST	6.5	5.3
Withholding tax	-	11.2
Modifications and upgrades	6.0	7.7
New mooring systems	-	5.8
Total	113.1	130.6

Source: Marine Atlantic Inc. management information

Note: Exchange rate is assumed to be 1 Euro = C\$1.60

47. The Corporation also found that it over-estimated the ferry's capacity. Its original estimate was that the ferry had a capacity of 615 auto equivalent units (AEUs). However, the ferry is currently carrying about 475 AEUs, although managers expect this may increase to 531 AEUs with further operating experience. This future capacity may not materialize, however, because it is based upon the load in two lower decks that may not accommodate as many automobiles as previously thought. The maximum number of passengers that the crew can safely muster in the event of an emergency is 728. Transport Canada has only certified the MV *Atlantic Vision* for a maximum of 800 people, including crew. This means the ferry's overall capacity is significantly less than the Corporation's original estimate of 1,000 passengers.

**Performance measures are inadequate**

48. In our 2004 special examination, we reported that Marine Atlantic was establishing performance measures and targets. The Corporation included a number of performance measures in its 2008–09 to 2012–13 Corporate Plan Summary. However, these performance measures do not fully address the Corporation's mandate, mission, and goals. For example, the Corporation has not defined the level of service it is expected to provide; nor does it measure and report the number of vehicles it cannot carry on each sailing. Each of these measures would directly relate to the Corporation's mandate to carry the traffic offered. Managers have informed us that they do not believe

their current performance measures are complete, and have said the Corporation intends to revise them.

49. The relationship between Marine Atlantic and the Government of Canada is stipulated in a bilateral agreement that dates from 1987. This agreement establishes the overall responsibilities of the Corporation to provide services and includes responsibilities for the Corporation to provide information to the Minister of Transport, Infrastructure and Communities. An operating agreement with the Minister of Transport, Infrastructure and Communities, which was last used for the 2007–08 fiscal year, also established performance expectations, but they were limited to the number of trips each route was to carry out per month.

50. Marine Atlantic and Transport Canada are re-drafting the bilateral agreement. Their draft agreement includes proposed performance measures, such as goals for deck space utilization on the ferries; measures of financial performance, including cost recovery and operational expenses per auto equivalent unit; and measures of service performance, such as on-time performance and documentation of the traffic left behind on the constitutional route because the ferry was at full capacity.

51. In June 2008, managers presented a draft balanced scorecard with performance measures to the Board of Directors. The Board asked managers to include additional measures and targets in the scorecard. At the time of our examination, the scorecard had not been finalized and the Board had not approved it.

52. **Recommendation.** Marine Atlantic Inc. should create a performance measurement process that establishes goals and performance expectations, and includes regular monitoring and progress reporting for senior managers and the Board of Directors.

*The Corporation's response.* Marine Atlantic Inc. agrees with the recommendation and recently initiated a corporate and management renewal process that incorporates an operational framework, including formal procedures for strategic and operational planning, budgeting, and performance measurement. Regular monitoring of management goals and performance expectations is a component of this process. A new management accountability framework has recently been implemented, which will ensure that objectives and measurable targets are set and tracked for all senior managers.



### **Marine Atlantic requires a systematic approach to risk management**

53. We expected that Marine Atlantic would have systems and practices in place to identify and manage its risks in a systematic manner, to assist the Corporation in fulfilling its mandate and achieving its operational goals. Managers and the Board of Directors are aware of the risks the Corporation faces. Since it hired a risk manager in late 2008, the Corporation has carried out formal risk assessments when planning and managing certain activities and has drafted a risk register and risk management policy. However, it does not yet have an approved risk management policy, a risk profile, a process to identify all risks, or a way to document the measures it takes to mitigate those risks.

54. We noted in our 2004 special examination that Marine Atlantic needed to develop a comprehensive business resumption plan in the event of a major service disruption. The Corporation has still not developed such a plan, although some elements exist, such as an information technology back-up plan.

55. **Recommendation.** Marine Atlantic Inc. should develop and implement a comprehensive risk management policy, including mitigating strategies such as a comprehensive business resumption plan.

*The Corporation's response.* Marine Atlantic Inc. agrees with the recommendation and notes that it has made progress in the use of risk assessments. The Corporation is in the process of staffing a new position of Director of Quality, Risk and Compliance. This position will continue the development of a comprehensive risk management program, including the development of a corporate risk register and associated mitigation strategies over the next two years.

### **The Corporation has adopted a reasonable approach to traffic forecasting**

56. Traffic forecasting is critical to developing the Corporation's corporate plan and annual sailing schedule. In addition, forecasting the traffic over the long term is an important factor in developing the Corporation's fleet renewal strategy. In 2007, the Corporation engaged external consultants to develop a long-range traffic forecast.

57. We concluded that the approach used to develop the traffic forecasts was reasonable and that the Corporation has implemented a process to adjust the forecasts on a regular basis. In addition, the Corporation revised its projected 2009 growth in commercial vehicle traffic based on the actual traffic it carried in 2008.

**Maintenance management systems are incompatible**

58. Given Marine Atlantic's extensive reliance on capital assets, it is important that the Corporation adopt a well-designed maintenance management system and effectively implement it.

59. The Corporation has identified maintenance problems in its corporate plan summaries for a number of years. For example, both the 2005–2009 and 2006–2010 corporate plan summaries identified mechanical breakdowns and unanticipated maintenance as problems in prior years.

60. Marine Atlantic has a computerized shipboard maintenance management system on each of its ferries. Since 2007, the Corporation has used another computerized maintenance management system for its shore-based facilities. It had intended to implement the purchasing module of the shore-based system on board all of its ferries, but it delayed that implementation. The only way to interface the two systems is to enter information manually from one system into the other.

61. Marine Atlantic uses its maintenance systems to schedule most preventive maintenance. We noted that the Corporation outsources maintenance for onboard hydraulics, but it does not use the onboard maintenance system to manage this arrangement. Information in the onboard system is incomplete, because some information is recorded separately in the shore-based system.

62. Shore-based technical managers, with overall responsibility for ferry maintenance, cannot directly access the onboard information. This limits their ability to oversee onboard maintenance. It also limits managers' ability to analyze inspections, defects, and non-conformities in a timely fashion, and to take corrective action.

63. **Recommendation.** Marine Atlantic Inc. should review its maintenance management systems to improve their usefulness and compatibility in capital asset management.

*The Corporation's response.* Marine Atlantic Inc. agrees with the recommendation and in its recent reorganization the Corporation placed particular emphasis on the life cycle management of assets. A new position of Director of Asset Management to head a consolidated division is being staffed to manage the life cycle of all of the corporate assets. This will include the establishment of a new operating committee on maintenance as well as the review and enhancement of maintenance practices and systems over the next two years.

**The Corporation has not adjusted maintenance practices as ferries and equipment age**

64. Marine Atlantic investigates equipment failures or incidents that meet the requirements of the *International Management Code for the Safe Operation of Ships and for Pollution Prevention* (ISM Code). These investigations ensure that operators report non-conformities to managers, that managers take appropriate action, and that the Corporation maintains records of the corrective action. However, the Corporation's reports are not used to identify potential systematic issues or to adjust preventive maintenance schedules.

65. During the period of our examination, Marine Atlantic's ferries had the required certifications from Transport Canada Marine Safety (TCMS) and classification societies (independent organizations responsible for monitoring compliance with marine industry standards). However, the certificates that TCMS issued have been for less than the full period allowed, to ensure that the Corporation addressed maintenance issues on a timely basis. Inspection reports from TCMS noted maintenance problems in a number of areas. However, as in the case of its own investigations, Marine Atlantic did not use the inspection reports to adjust maintenance schedules.

66. **Recommendation.** Marine Atlantic Inc. should use investigation and inspection reports to identify potential systematic issues and to adjust preventive maintenance schedules.

*The Corporation's response.* Marine Atlantic Inc. agrees with the recommendation and in its recent reorganization the Corporation placed particular emphasis on the life cycle management of assets. A new position of Director of Asset Management to head a consolidated division is being staffed to manage the life cycle of all of the corporate assets. This will include the establishment of a new operating committee on maintenance as well as the review and enhancement of maintenance practices and systems over the next two years.

**The Corporation does not manage assets using life cycle management principles**

67. Marine Atlantic does not use its maintenance systems to manage the full life cycle of assets from acquisition to disposal. Consequently, it does not make decisions to repair or replace assets on a systematic basis and managers cannot easily get information to adjust maintenance practices in response to assets' age or failure.

68. **Recommendation.** As it acquires new assets, Marine Atlantic Inc. should implement a life cycle management approach.

*The Corporation's response. Marine Atlantic Inc. agrees with the recommendation and in its recent reorganization the Corporation placed particular emphasis on the life cycle management of assets. A new position of Director of Asset Management to head a consolidated division is being staffed to manage the life cycle of all of the corporate assets. This will include the establishment of a new operating committee on maintenance as well as the review and enhancement of maintenance practices and systems over the next two years. Marine Atlantic recognizes that its shore-based facilities and equipment are in poor condition.*

69. As with its ferries, Marine Atlantic has identified long-standing problems with its shore-based facilities and equipment. The Corporation has not carried out regular maintenance for many pieces of mobile equipment for a number of years. It does not track the life cycle replacement of mobile equipment through its shore-based computerized maintenance system. There is also a backlog of maintenance issues, including leaking roofs and windows causing mould and moisture problems in several buildings.

70. In order to remain within its approved funding, the Corporation has deferred or cancelled proposed capital acquisitions for a number of years. For example, the Corporation has delayed the purchase of new specialized vehicles to load and unload trailers onto the ferries. Many of these vehicles were purchased in the early 1990s. Also, the Corporation first identified the need for a second dock in Port aux Basques in the late 1990s. That dock is currently under construction despite inclusion in the annual capital budget since 2002. Replacement of the Argentinia terminal roof has been deferred for three years. Investment in improved amenities on the existing ferries has been delayed or cancelled pending completion of the fleet renewal plan.

71. The Corporation uses the shore-based computerized maintenance system to schedule preventive maintenance for the Corporation's fuel blending equipment. However, it does not use the system to schedule preventive maintenance for physical dock structures.

72. The Corporation has systems and practices in place to ensure that maintenance and technical personnel have the appropriate competencies and receive appropriate technical and related training.

#### **Deferred maintenance is affecting service reliability**

73. Equipment failures, mechanical breakdowns, and damage to facilities have had negative consequences for service. From June to August 2008, the Corporation had to cancel 13 trips because of unplanned maintenance. An engine breakdown on the MV *Joseph and*

*Clara Smallwood* extended the length of the crossing to Argentina during the summer of 2008, resulting in the cancellation of sailings that forced customers to change travel plans. In December 2008, Marine Atlantic removed the MV *Caribou* from its scheduled service to repair fire dampers and louvers. The structural damage to the upper loading ramp in Port aux Basques delayed service and resulted in backlogs that were so large the terminal parking lot filled up, forcing commercial vehicles to wait on the highway leading to the terminal.

**74. Recommendation.** Marine Atlantic Inc. should implement maintenance practices that ensure effective oversight and take into account the age and condition of its assets.

*The Corporation's response.* Marine Atlantic Inc. agrees with the recommendation and has placed particular emphasis on the life cycle management of assets in the re-engineering of management and the business processes. A new position of Director of Asset Management to head a consolidated division is being staffed to manage the life cycle of all of the corporate assets. Current maintenance practices will be reviewed and a complete asset life cycle management approach will be implemented. Management, in collaboration with Transport Canada, is also finalizing a revitalization proposal on Marine Atlantic that will include a funding proposal for recapitalization of the fleet and shore-based assets.

## Corporate governance

**75.** Corporate governance refers to the practices that oversee the way an organization is managed, so it can carry out its mandate and achieve its objectives. Sound practices in corporate governance are essential to meeting the objectives outlined in Part X of the *Financial Administration Act* as it relates to Crown corporations.

**76.** We expected Marine Atlantic to have a well-performing corporate governance framework that enables the Board of Directors and senior managers to maximize the effectiveness of the Corporation and meets expectations for best practices in stewardship, relations with the shareholder, and communications with the public.

**77.** We found that the Corporation has a governance framework and practices to meet its corporate governance responsibilities, although we noted some opportunities for improvement.

### **The Board of Directors recognizes the need to strengthen governance practices**

**78.** The Governor in Council appoints the Board of Directors of Marine Atlantic Inc., on the advice of the Minister of Transport, Infrastructure and Communities. The Board is currently composed of

nine non-officer directors, the Chair, and the President and Chief Executive Officer, for a total of 11 directors.

**79.** The Chair and all of the independent directors of the Corporation were appointed in late 2006. In early 2008, the President and Chief Executive Officer left the Corporation. He was replaced on an interim basis until a permanent President and Chief Executive Officer was appointed in October 2008.

**80.** In 2007, the Board initiated a review of its corporate governance practices, which was intended to examine the mandates of Board committees, examine the Board's information requirements, and define the Board's relationship with senior management. The governance review was suspended during 2008 because of the change in the President and Chief Executive Officer; it was resumed in 2009.

**81.** The Board of Directors has established three committees to assist in fulfilling its responsibilities—Audit, Corporate Governance, and Human Resources and Pension Management. The committees report regularly to the Board and operate under terms of reference the Board approved. In March 2009, the committees' terms of reference were updated; they will be re-examined as part of the corporate governance review.

**82.** The Board of Directors has a profile, dating from 2004, outlining the skills and knowledge its members require, and describing the background of suitable candidates for Board positions. The Corporate Governance Committee is currently updating the Board profile.

**83.** Based on this profile, Board members collectively have the independence, ability, skills, and access to resources to allow them to meet their responsibilities. The Board and its committees have, on occasion, engaged independent consultants to assist them in meeting their responsibilities. The Board communicates regularly with the President and Chief Executive Officer and with officers of the Corporation. The Board and each committee regularly hold part of each meeting without management in attendance. This enhances Board and committee independence.

**84.** New directors receive an orientation package and the opportunity to take a tour to familiarize themselves with the Corporation's operations. Directors regularly take external governance training.

**85.** Managers regularly provide information to the Board and its committees. The Board has indicated that it needs better information

more suited to its needs. For example, during our examination we noted that

- managers provide reports that describe their recent activities at each Board meeting, but they do not regularly communicate their progress in meeting important commitments in corporate plans; and
- during 2008, although the Board regularly followed up on issues, its action items, such as the need to clarify its responsibilities under the *Canada Labour Code* and to develop a conflict of interest and confidentiality code, were outstanding for long periods of time—sometimes a year or more.

**86. Recommendation.** Marine Atlantic Inc.'s Board of Directors should complete and implement its review of corporate governance practices.

*The Corporation's response.* Marine Atlantic Inc. agrees with the recommendation and the Board and management recently completed a corporate governance review, including a revised board governance charter, codification of the expectations of the Board chair and directors, as well as a description of the respective roles of the Board and Chief Executive Officer.

#### **The Corporation's internal audit did not meet standards**

**87.** Internal audit is an important element of corporate governance because it provides assurance to senior managers and the Board that the Corporation is carrying out important financial, administrative, and operational matters efficiently and effectively. In February 2008, the Audit Committee received an external quality assessment review of Marine Atlantic's internal audit function. The review found that the internal audit function only partially conformed to the International Standards for the Professional Practice of Internal Auditing established by the Institute of Internal Auditors. Since the report was received, the Corporation has worked on strengthening the internal audit function. It has entered into a contract with a professional services firm to augment capacity and to carry out selected internal audits at the direction of the Audit Committee.

#### **Safety, security, and environmental stewardship**

**88.** Marine Atlantic is required to comply with legislation governing the safe operation of its ferries, in particular the *Canada Shipping Act, 2001* and its regulations. We expected the Corporation to have systems and practices in place to ensure that its operations meet current and expected regulatory requirements to ensure the safety and security of passengers and employees and to safeguard assets and the environment.

89. We found that the Corporation has systems and practices to ensure that it meets current and expected safety and security requirements, although we noted opportunities for improvement. The Corporation has not implemented an environmental management system and needs to improve its practices to ensure regulatory requirements are fully addressed.

**Ferries, seafarers, and shore facilities have up-to-date safety certifications**

90. Transport Canada, Marine Safety (TCMS) is responsible for inspecting Marine Atlantic's ferries and certifying that the ferries meet the Act's requirements. At the time of our examination, Marine Atlantic's ferries had the required safety certificates.

91. Marine Atlantic has established systems and practices to ensure that crew members are trained and certified. We noted that the Corporation has continued to invest in technical training for its crews. Seafarers must have appropriate certificates under the Marine Personnel Regulations of the *Canada Shipping Act, 2001*. At the time of our examination, TCMS had verified that all seafaring certificates were current and appropriate for the positions crew members occupied.

92. In addition to requirements under Canadian legislation, as a foreign-registered ferry the *MV Atlantic Vision* is required to comply with the *International Management Code for the Safe Operation of Ships and for Pollution Prevention* (ISM Code). The purpose of the Code is ". . . to ensure safety at sea, prevention of human injury or loss of life, and avoidance of damage to the environment, in particular to the marine environment and to property." The Corporation's other three ferries also voluntarily comply with the Code. Classification societies provide a certification of compliance with the Code. During the time of our examination, all of the Corporation's ferries had current Safety Management Certificates.

93. In order for ferries to receive Safety Management Certificates, shore operations are also required to conform to the ISM Code. During the period of our examination, the shore-based operations had received the required Document of Compliance.

94. As is common with all ferry operations, incidents and accidents occur on occasion at Marine Atlantic, although no major incidents or accidents occurred during our examination. The Corporation has procedures in place to investigate and report on safety and security aspects of incidents and accidents. The Corporation also has emergency responses documented in its Emergency Response Manual.



### **The Corporation has not fully implemented security measures**

**95.** As a foreign-registered ferry, the *MV Atlantic Vision* must comply with the *International Ship and Port Security Code* (ISPS Code). As a result, the terminals in North Sydney and Port aux Basques must also comply with the ISPS Code. The other ferries and the three terminals will have to comply with security regulations when these requirements come into force for Canadian ferry operations. Marine Atlantic and other Canadian ferry operators are discussing measures to implement these new regulations with Transport Canada.

**96.** The Corporation has carried out security assessments. These assessments concluded that none of the terminals fully meet the requirements of the ISPS Code. The Corporation has prepared security plans for the terminals and is now waiting for finalization of security regulations for ferry operators. The Corporation is working with TCMS to meet the requirements of the ISPS Code.

**97. Recommendation.** Marine Atlantic Inc. should develop and implement plans to respond to current and upcoming security requirements.

*The Corporation's response.* Marine Atlantic Inc. agrees with the recommendation and notes that the Corporation has been active in assisting in the development of the Domestic Ferry Security Regulations. The Corporation continues to proactively implement new security initiatives and to develop a strategy to ensure full compliance with the new security regulations once implemented and to meet current and upcoming security requirements. Given that the *MV Atlantic Vision* is dedicated solely to the domestic ferry service and is fully crewed by Canadians, discussions are ongoing with regulators in an attempt to better define the impact of the ISPS Code on Marine Atlantic's operations.

### **Marine Atlantic has not implemented an environmental management system**

**98.** Marine Atlantic's ferry and terminal operations give rise to environmental risks in several areas, including fuel management, air emissions, solid waste, and waste water management. In our 2004 special examination, we noted that Marine Atlantic did not have a formal environmental management system. The Corporation's 2008–09 to 2012–13 Corporate Plan Summary included a commitment to develop an environmental management system in 2008. Without such a system, it is difficult for managers and the Board of Directors to be assured that the Corporation is in compliance

with applicable legislation. It is also difficult to demonstrate that the Corporation achieved its corporate goal to promote, foster, and maintain environmental stewardship. We found that the Corporation has not begun to develop an environmental management system. The basic elements necessary to establish an environmental management system, such as an environmental policy and identification of all of its environmental and compliance risks, do not exist.

**99.** Transport Canada commissioned studies that confirmed the presence of contamination beyond accepted standards at all three of the Corporation's terminals. These studies outline weaknesses in Marine Atlantic's current practices, and we confirmed several during our examination. The Corporation needs to improve its monitoring and assurance of the quality of the drinking water it distributes and its management of hazardous materials and solid waste in order to address regulatory requirements fully. The absence of a fuel tank management program is of particular concern.

**100. Recommendation.** Marine Atlantic Inc. should develop and implement a formal environmental management system that identifies and assesses risks, establishes priorities, and includes a means of monitoring and reporting on environmental performance and compliance.

*The Corporation's response.* Marine Atlantic Inc. agrees with the recommendation and, under the recent reorganization, has created a new consolidated compliance division that will include responsibility for the environmental stewardship of the Corporation. The Corporation is in the process of staffing a new position of Director of Quality, Risk and Compliance. Through the new Director and division, the Corporation will renew and enhance its environmental plan over the next two years.

## Human resource management

**101.** We expected Marine Atlantic to have systems and practices in place to ensure that it has and will continue to have the human resources capacity and the work environment necessary to achieve its corporate goals and objectives.

**102.** We found that the Corporation has systems and practices to ensure that it has the human resources capacity to achieve its corporate goals and objectives, although we noted some opportunities for improvement.

### The Corporation needs a strategic human resources plan

**103.** We expected to find a human resources plan containing strategies to support the Corporation's overall corporate plan. The Corporation has made progress in developing components of a human resources plan, such as a succession plan for key positions, a plan to introduce an employee performance review system, a plan for management renewal, and strategies for collective bargaining. However, it has not developed an overall human resources plan. As a result, the Corporation cannot fully demonstrate that it has plans in place to ensure that it has the right number of qualified people to achieve its mission and goals.

**104.** At the time of our examination, Marine Atlantic had not adopted an accountability framework that set out the results it expected senior managers to achieve. In addition, its performance review system for managers and supervisors did not establish measurable goals and objectives. The Corporation has established accountability expectations for the President and Chief Executive Officer, and is establishing such expectations for the vice presidents, and those who report to the vice presidents for 2009–10. In April 2009, Marine Atlantic intends to implement a new annual performance evaluation system for all non-unionized staff.

**105.** Marine Atlantic develops strategies for current and upcoming negotiations and has established what the Corporation needs to achieve through its collective bargaining. The Corporation has successfully negotiated some flexibility in its collective agreements.

**106. Recommendation.** Marine Atlantic Inc. should finalize a strategic human resources plan to enable the Corporation to have the appropriate number of qualified people to achieve its mission and goals.

*The Corporation's response.* Marine Atlantic Inc. agrees with the recommendation. The Human Resources Department has been restructured and additional resources are being added that will assist in enhancing the existing human resource strategies and in bringing the necessary components together over the next two years into an integrated human resources plan.

### Operations

**107.** We expected Marine Atlantic to have systems and practices in place to ensure that its operations provide consistent and reliable transportation, meet customer needs, and ensure appropriate utilization of resources.

**108.** Except for the significant deficiency in the Corporation's management of capital assets, which has an impact on its service reliability, we found that the Corporation has other systems and practices that support consistent and reliable transportation, meet customer needs, and ensure appropriate use of resources. However, we noted additional opportunities for improvement.

**Marine Atlantic took steps to improve the 2009 sailing scheduling process**

**109.** The development of the sailing schedule is an important part of the Corporation's annual planning process. There are a number of considerations that affect the schedule's development, including

- forecasted traffic, including seasonal variability;
- the size and speed of the ferries;
- the differences in the length of crossings between Port aux Basques and Argentia;
- the time required to load and unload ferries; and
- planned and unplanned maintenance.

**110.** During our examination, we noted that the Corporation had difficulty meeting its 2008 sailing schedule during the peak summer months. As Exhibit 3 shows, the Corporation experiences a significant peak in passenger traffic in July and August. The Corporation's internal statistics for managers and the Board of Directors indicated on-time performance of 48 percent and 60 percent for July and August 2008 respectively. However, these results were based on on-time performance for rescheduled sailings. When compared with the original sailing schedule, a consultant engaged by the Corporation calculated that the ferries were on time only about 10 percent of the time during the 2008 summer season.

**111.** The Corporation informed us that a combination of mechanical breakdowns and tight scheduling that left no room for discretionary sailings caused the poor on-time performance in 2008. Once ferries went off schedule because of mechanical or weather delays, it was difficult, if not impossible, to get back on the original schedule.

**112.** We noted that the Corporation revised its process for developing the 2009 sailing schedule. The Corporation took into account the forecasted traffic and allowed for unplanned delays and opportunities for planned maintenance. However, the Corporation has not set performance targets for the main components of turnaround time (such as the time to lower the ramp, to get the first and last vehicle off the ferry, and to load the first vehicle).

**The Corporation needs to improve its staff scheduling and use**

**113.** Marine Atlantic requires a crewing system to allocate resources to individual ferries. The Corporation uses a manual scheduling system that depends on the knowledge and experience of a few employees. Changing one employee's schedule can result in changes for many other employees because of seniority and "bumping" provisions in collective agreements. Each of these changes is tracked manually.

**114.** A study of the staff scheduling system, carried out by consultants on behalf of Marine Atlantic, found that the system is inefficient and could be automated to better manage the allocation of staff to ferries. The study noted that the human resource management software the Corporation currently uses for the rest of its operations may be a suitable automated solution for crew scheduling. At the time of our examination, Marine Atlantic had decided to implement an automated approach to crew scheduling but had not yet decided which system to use.

**115.** In our 2004 special examination, we noted that Marine Atlantic had not established productivity expectations. There are still no such measures in place. The Corporation engaged consultants who indicated that there are opportunities to improve efficiency and reduce costs in the area of human resources.

**116. Recommendation.** Marine Atlantic Inc. should implement an automated system to improve its staff scheduling and human resource use.

*The Corporation's response.* Marine Atlantic Inc. agrees with the recommendation and is proceeding with implementation of the recommendation over the next two years.

**The acceptable measure of customer satisfaction has changed**

**117.** Marine Atlantic carries out customer satisfaction surveys. The survey for the months of June to September 2008 asked 70 questions of 1,215 passengers who travelled on the ferries during that period. We found the sample size appropriate. In its 2007–08 Annual Report, the Corporation reported that 95 percent of customers surveyed were completely or mostly satisfied with the Corporation's service. By contrast, in its long-term strategic fleet renewal plan, the Corporation has more recently reported a much lower level of customer satisfaction. This change in reported results occurred because the Corporation now views the category of "completely satisfied", which was 43 percent in the 2007–08 customer survey, as the acceptable measure of customer satisfaction (rather than both the "completely" and "mostly" satisfied responses).

**118.** In its 2008–09 to 2012–13 Corporate Plan Summary, the Corporation reported that it had formed a customer service committee to resolve customer complaints and review new initiatives. We found that committee meetings were poorly attended and frequently cancelled, and the committee eventually stopped meeting. As part of its management renewal initiative, the Corporation has recognized the need to address customer service. At the time of completing our examination, the Corporation had created a new position—Vice President, Customer Experience, as part of its management renewal plan. It was in the process of staffing the position.

#### **The Corporation implemented a new reservation system**

**119.** During the 2008–09 fiscal year, the Corporation implemented a new reservation system that has improved the online reservation process. The new system is more customer-friendly than the previous system, because it allows direct online bookings. In addition, it maintains a reservation database that permits additional analysis, such as detailed information about the traffic carried.

## **Conclusion**

**120.** We found significant deficiencies in Marine Atlantic’s systems and practices related to the following areas:

- **Strategic challenges.** Marine Atlantic is at risk of being unable to deliver the services it is responsible for providing, due to unresolved strategic challenges that will require support from the government to overcome. These challenges are the aging of its ferries and shore-based assets, difficulties ensuring that capacity meets the traffic demand, failure to meet the cost recovery target set by the government, and the need to increase its management capacity. Marine Atlantic needs to agree with the government on a plan of action, including long-term funding, to overcome these challenges.
- **Operational planning and capital asset management.** Marine Atlantic does not have an operational planning system and performance measures in place to ensure that strategic direction and corporate plans are implemented. The Corporation exceeded approved operating budgets in 2006 and fiscal years 2007–08 and 2008–09; and commitments in its corporate plans have not been met. In addition, many observations raised in our 2004 special examination have not been addressed. Marine Atlantic’s

capital asset management practices do not ensure that its operations are reliable and that assets are managed at the lowest cost over their useful lives. As a result, ferries have suffered mechanical breakdowns that have affected the reliability of service, and the physical condition of shore-based assets is poor.

**121.** In our opinion, given the significance of these deficiencies, and based on the criteria established for the examination, Marine Atlantic does not have the reasonable assurance required by section 131 of the *Financial Administration Act* that its assets are safeguarded and controlled, its resources are managed economically and efficiently, and its operations are 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 FAA 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 5 of this report.

Special examinations answer the question: For the period covered by the examination, do the corporation's systems and practices provide reasonable assurance that assets are safeguarded and controlled, resources are managed economically and efficiently, and operations are carried out effectively?

### Key systems and practices examined and criteria

At the start of this special examination, we presented the Corporation's Audit Committee with an examination plan that identified the key systems and practices, and related examination criteria, that we considered essential to providing the Corporation 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 the examination. The period covered by our examination was from October 2008 to March 2009. Our examination approach in each area included a follow-up of observations and recommendations made in our 2004 special examination.

Key systems and practices examined	Examination criteria
<b>Corporate governance</b>	
Board charter Terms of reference for Board and committees Board committee structure Information provided to the Board Board profile Strategic direction, guidance, and oversight Follow-up and monitoring of Board direction	To maximize the Corporation's effectiveness, the Corporation has a corporate governance framework that functions well and that meets the expectations of best practices in board stewardship, shareholder relations, and communication with the public.



Key systems and practices examined	Examination criteria
<b>Strategic and operational planning</b>	
Corporate planning process Risk management framework Operational and budgetary planning process Traffic forecasting Setting performance expectations Financial and operational performance measurement and reporting	The Corporation has clearly defined strategic directions and specific and measurable goals and objectives for achieving its legislative, commercial, and public policy mandate. The Corporation's strategic direction and goals take into account expected costs, funding and government priorities, identified risks, the need to control and protect its assets, and the need to manage its resources economically and efficiently.
<b>Safety and security</b>	
Safety management system Incident and accident reporting and investigation Emergency response system Business resumption plans Vessel staff competency and training Compliance with security codes Environmental management system	Operations are managed to meet current and expected regulatory requirements to ensure the safety and security of passengers and employees, and to safeguard assets and the environment.
<b>Human resource management</b>	
Human resource planning Succession planning Management capacity Recruitment and retention of key skills and competencies Guidance on management and supervision Productivity measures Long-term strategy for collective bargaining	Human resources are managed to provide the Corporation with the human resources capacity and the work environment that it needs to achieve its goals and objectives.
<b>Operations</b>	
Vessel scheduling Crewing model and scheduling Annual customer satisfaction survey Reservations system	Operations are managed to provide consistent and reliable transportation, meet customer needs, and ensure appropriate utilization of resources.

Key systems and practices examined	Examination criteria
<b>Capital asset management</b>	
Capital asset renewal planning, particularly fleet renewal Fleet renewal planning Traffic forecasting Maintenance planning and implementation Computerized maintenance management system (AMOS) Incident and accident reporting and investigation	Strategies for acquiring and using vessels and shore-based facilities are designed to meet operating needs based on the full life cycle cost.

**Audit work completed**

Audit work for this special examination was substantially completed on 9 July 2009.

**Audit team**

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## Appendix A Status of observations in our 2004 Special Examination Report

2004 Observations	Paragraph references in this report	Status
<b>Significant deficiencies</b>		
Efficiency and economy of operations <ul style="list-style-type: none"> <li>• Need to define performance expectations and put in place performance indicators and targets to measure the extent to which expectations are met</li> <li>• Need to develop and implement plans to accomplish critical aspects of the strategic plan</li> </ul>	48 to 51  39 to 41 and 43 to 47	Partially addressed—measures have been developed but are not finalized  Not addressed
Annual operating agreements <ul style="list-style-type: none"> <li>• Operating agreements have not reflected the known full cost of providing the service</li> </ul>	41 and 49 to 50	Not applicable—operating agreements are no longer used; annual operating budgets have been exceeded
<b>Other observations</b>		
<b>Vessel, strategic, operational, and corporate planning</b>		
<ul style="list-style-type: none"> <li>• Vessel planning has been reactive, ad hoc, and poorly documented</li> <li>• A comprehensive vessel replacement plan should be developed</li> </ul>	29 to 34	Partially addressed—long-term fleet renewal plan was recently submitted to the Minister
<ul style="list-style-type: none"> <li>• Strategic plan is not updated annually and there is no action plan to guide implementation of strategies</li> </ul>	29 to 34 and 39 to 41	Partially addressed—long-term fleet renewal plan has elements of a strategic plan
<ul style="list-style-type: none"> <li>• Schedule conflicts affected on-time performance</li> </ul>	109 to 112	Addressed
<ul style="list-style-type: none"> <li>• Traffic forecasting methodology in place overstates the future traffic demand</li> </ul>	56 and 57	Addressed
<ul style="list-style-type: none"> <li>• The gap between initially approved funding in the corporate plan and the subsidy needed to provide the contracted service is growing</li> </ul>	41	Not addressed—Corporation continues to seek more government funding
<ul style="list-style-type: none"> <li>• Current strategic, corporate, and annual plans are not well integrated</li> </ul>	39 to 41 and 43 to 47	Not addressed—accountability mechanisms are not yet in place
<ul style="list-style-type: none"> <li>• No formal ongoing process for managing risk is in place</li> <li>• No complete threat risk assessment has been performed</li> </ul>	53	Partially addressed—risk management policy and risk register were drafted
<ul style="list-style-type: none"> <li>• No complete plan for business resumption is in place</li> </ul>	54	Not addressed

2004 Observations	Paragraph references in this report	Status
<b>Performance measurement</b>		
<ul style="list-style-type: none"> <li>Goals for key components of turnaround time have still not been set</li> </ul>	112	Not addressed
<ul style="list-style-type: none"> <li>Specific standards for employee productivity and customer service have still not been set</li> </ul>	115	Not addressed
<ul style="list-style-type: none"> <li>Customer surveys highlight a low level of on-time performance</li> </ul>	110	Not addressed—on-time performance was low in peak 2008 summer season
<b>Corporate governance</b>		
<ul style="list-style-type: none"> <li>Chief Executive Officer's performance is not monitored</li> <li>Board policies and practices are not documented in a governance manual</li> <li>Code of conduct and ethics guidelines are not updated</li> </ul>	78 to 85	Addressed
<b>Human resources</b>		
<ul style="list-style-type: none"> <li>Matching of human resources to operational needs has been a long-standing concern</li> <li>Opportunities to increase efficiency of staffing were observed</li> </ul>	103 and 113 to 115	Partially addressed—studies have been carried out but no plan is in place
<ul style="list-style-type: none"> <li>A complete and documented human resources plan is not yet in place</li> </ul>	103	Partially addressed—components of a human resources plan are in place
<ul style="list-style-type: none"> <li>Managers are not provided with adequate training on how to manage in a heavily unionized environment</li> </ul>		Partially addressed
<ul style="list-style-type: none"> <li>No long-term strategy to renegotiate restrictive provisions of collective agreements is in place</li> </ul>	105	Addressed
<b>Environment</b>		
<ul style="list-style-type: none"> <li>No formal environmental management system is in place</li> </ul>	98 and 99	Not addressed
<b>Asset management</b>		
<ul style="list-style-type: none"> <li>Shore-based facilities assessment only recently began</li> </ul>	69 to 72	Not addressed— shore-based assets are in poor condition

## Appendix B 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
<b>Unresolved strategic challenges</b>	
<p><b>35.</b> Marine Atlantic Inc., in collaboration with the federal government, should address its strategic challenges: an aging fleet and shore-based assets, inadequate cost recovery, and management renewal. Together, the parties should resolve related funding issues. The Corporation should monitor progress in resolving each strategic challenge. (24–34)</p>	<p>Marine Atlantic Inc. agrees with the recommendation and, in collaboration with Transport Canada, is finalizing a comprehensive revitalization proposal for Marine Atlantic that will propose long-term solutions to government that address these strategic challenges, including a funding proposal for recapitalization of the fleet and shore-based assets.</p>
<b>Operational planning and capital asset management</b>	
<p><b>42.</b> Marine Atlantic Inc. should create a strategic and operational planning process that sets priorities and plans and allocates responsibilities for carrying out those plans. (36–41)</p>	<p>Marine Atlantic Inc. agrees with the recommendation and has already implemented a corporate and management renewal process; it incorporates an operational framework, including formal procedures for strategic and operational planning, budgeting, and performance measurement. A new position of Vice President of Strategy and Corporate Affairs was recently staffed, which will deal directly with implementing a new planning process for the Corporation. A new management accountability framework has also recently been implemented, which will ensure that objectives and measurable targets are set for the Corporation and all senior managers.</p>
<p><b>52.</b> Marine Atlantic Inc. should create a performance measurement process that establishes goals and performance expectations, and includes regular monitoring and progress reporting for senior managers and the Board of Directors. (48–51)</p>	<p>Marine Atlantic Inc. agrees with the recommendation and recently initiated a corporate and management renewal process that incorporates an operational framework, including formal procedures for strategic and operational planning, budgeting, and performance measurement. Regular monitoring of management goals and performance expectations is a component of this process. A new management accountability framework has recently been implemented, which will ensure that objectives and measurable targets are set and tracked for all senior managers.</p>

Recommendation	Response
<p><b>55.</b> Marine Atlantic Inc. should develop and implement a comprehensive risk management policy, including mitigating strategies such as a comprehensive business resumption plan. (53–54)</p>	<p>Marine Atlantic Inc. agrees with the recommendation and notes that it has made progress in the use of risk assessments. The Corporation is in the process of staffing a new position of Director of Quality, Risk and Compliance. This position will continue the development of a comprehensive risk management program, including the development of a corporate risk register and associated mitigation strategies over the next two years.</p>
<p><b>63.</b> Marine Atlantic Inc. should review its maintenance management systems to improve their usefulness and compatibility in capital asset management. (58–62)</p>	<p>Marine Atlantic Inc. agrees with the recommendation and in its recent reorganization the Corporation placed particular emphasis on the life cycle management of assets. A new position of Director of Asset Management to head a consolidated division is being staffed to manage the life cycle of all of the corporate assets. This will include the establishment of a new operating committee on maintenance as well as the review and enhancement of maintenance practices and systems over the next two years.</p>
<p><b>66.</b> Marine Atlantic Inc. should use investigation and inspection reports to identify potential systematic issues and to adjust preventive maintenance schedules. (64–65)</p>	<p>Marine Atlantic Inc. agrees with the recommendation and in its recent reorganization the Corporation placed particular emphasis on the life cycle management of assets. A new position of Director of Asset Management to head a consolidated division is being staffed to manage the life cycle of all of the corporate assets. This will include the establishment of a new operating committee on maintenance as well as the review and enhancement of maintenance practices and systems over the next two years.</p>
<p><b>68.</b> As it acquires new assets, Marine Atlantic Inc. should implement a life cycle management approach. (67)</p>	<p>Marine Atlantic Inc. agrees with the recommendation and in its recent reorganization the Corporation placed particular emphasis on the life cycle management of assets. A new position of Director of Asset Management to head a consolidated division is being staffed to manage the life cycle of all of the corporate assets. This will include the establishment of a new operating committee on maintenance as well as the review and enhancement of maintenance practices and systems over the next two years. Marine Atlantic recognizes that its shore-based facilities and equipment are in poor condition.</p>

Recommendation	Response
<p><b>74.</b> Marine Atlantic Inc. should implement maintenance practices that ensure effective oversight and take into account the age and condition of its assets. (73)</p>	<p>Marine Atlantic Inc. agrees with the recommendation and has placed particular emphasis on the life cycle management of assets in the reengineering of management and the business processes. A new position of Director of Asset Management to head a consolidated division is being staffed to manage the life cycle of all of the corporate assets. Current maintenance practices will be reviewed and a complete asset life cycle management approach will be implemented. Management, in collaboration with Transport Canada, is also finalizing a revitalization proposal on Marine Atlantic that will include a funding proposal for recapitalization of the fleet and shore-based assets.</p>
<hr/> <p><b>Corporate governance</b></p>	
<p><b>86.</b> Marine Atlantic Inc.'s Board of Directors should complete and implement its review of corporate governance practices. (78–85)</p>	<p>Marine Atlantic Inc. agrees with the recommendation and the Board and management recently completed a corporate governance review, including a revised board governance charter, codification of the expectations of the Board chair and directors, as well as a description of the respective roles of the Board and Chief Executive Officer.</p>
<hr/> <p><b>Safety, security, and environmental stewardship</b></p>	
<p><b>97.</b> Marine Atlantic Inc. should develop and implement plans to respond to current and upcoming security requirements. (95–96)</p>	<p>Marine Atlantic Inc. agrees with the recommendation and notes that the Corporation has been active in assisting in the development of the Domestic Ferry Security Regulations. The Corporation continues to proactively implement new security initiatives and to develop a strategy to ensure full compliance with the new security regulations once implemented and to meet current and upcoming security requirements. Given that the <i>MV Atlantic Vision</i> is dedicated solely to the domestic ferry service and is fully crewed by Canadians, discussions are ongoing with regulators in an attempt to better define the impact of the ISPS Code on Marine Atlantic's operations.</p>

Recommendation	Response
<p><b>100.</b> Marine Atlantic Inc. should develop and implement a formal environmental management system that identifies and assesses risks, establishes priorities, and includes a means of monitoring and reporting on environmental performance and compliance. (98–99)</p>	<p>Marine Atlantic Inc. agrees with the recommendation and, under the recent reorganization, has created a new consolidated compliance division that will include responsibility for the environmental stewardship of the Corporation. The Corporation is in the process of staffing a new position of Director of Quality, Risk and Compliance. Through the new Director and division, the Corporation will renew and enhance its environmental plan over the next two years.</p>
<p><b>Human resource management</b></p>	
<p><b>106.</b> Marine Atlantic Inc. should finalize a strategic human resource plan to enable the Corporation to have the appropriate number of qualified people to achieve its mission and goals. (103–105)</p>	<p>Marine Atlantic Inc. agrees with the recommendation. The Human Resources Department has been restructured and additional resources are being added that will assist in enhancing the existing human resource strategies and in bringing the necessary components together over the next two years into an integrated human resources plan.</p>
<p><b>Operations</b></p>	
<p><b>116.</b> Marine Atlantic Inc. should implement an automated system to improve its staff scheduling and human resource use. (113–115)</p>	<p>Marine Atlantic Inc. agrees with the recommendation and is proceeding with implementation of the recommendation over the next two years.</p>