## 2007



## A Status Report of the Auditor General of Canada to the House of Commons

## **FEBRUARY**

# Chapter 4 Managing the Coast Guard Fleet and Marine Navigational Services— Fisheries and Oceans Canada



The February 2007 Status Report of the Auditor General of Canada comprises a Message from the Auditor General, Main Points—Chapters 1 to 7, an Appendix, and seven chapters. The main table of contents for the Report is found at the end of this publication.
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Chapter
4

Managing the Coast Guard Fleet and Marine Navigational Services

Fisheries and Oceans Canada

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

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## Managing the Coast Guard Fleet and Marine Navigational Services

## Fisheries and Oceans Canada

### **Main Points**

#### What we examined

We examined progress made in addressing our recommendations from audits in 2000 and 2002, when we reported that Fisheries and Oceans Canada had not managed the Canadian Coast Guard fleet and marine navigational services cost-effectively. Many management problems we found in those audits were similar to our observations in a 1983 audit of Canadian Coast Guard operations. The Coast Guard became a special operating agency within Fisheries and Oceans Canada in 2005. This change is intended to affirm the Coast Guard as a national institution.

Since our 2002 audit, the Coast Guard has played an increasing role in supporting maritime security. In our follow-up audit, we looked at this emerging role and its implications for managing the fleet and marine navigational services.

#### Why it's important

The safe and efficient passage of vessels through Canadian waters depends on reliable and sophisticated marine navigation systems. Like others around the world, Canadian mariners are increasing their reliance on electronic navigation rather than traditional physical infrastructure such as buoys and light stations. As the main Canadian provider of marine navigational services, the Coast Guard must make the same transition.

The Coast Guard also provides icebreaking and search and rescue services, and supports other programs of Fisheries and Oceans Canada, such as science and fisheries management, and those of other government departments. Its fleet is used to gather scientific data for key decisions such as how much fish can be taken by fishers, what species need protecting, and where aquaculture sites can be established. Use of the Coast Guard's fleet is also important to fishery officers who enforce domestic and certain international rules that govern the fisheries.

#### What we found

• Fisheries and Oceans Canada has made unsatisfactory progress over the last four to six years in implementing our recommendations. The Coast Guard has not been able to use its status as a line organization, and then as a special operating agency within the Department, to become a strong national institution. It still operates largely as five regional coast guards, each with its own way of doing things. The Coast Guard has not developed national policies, service levels, and integrated planning, management, and performance information systems that are necessary to transform itself into a national institution.

- The Coast Guard has an aging fleet that is costly to maintain and operate. Progress in renewing the Coast Guard's fleet has been slow. The current replacement schedule is already becoming outdated and unrealistic. It provides for replacing many vessels long after they have passed their estimated useful lives. For example, the estimated useful life of an icebreaker is 30 years, but, as currently scheduled, they will be between 40 and 48 years old when they are replaced.
- The Coast Guard's vessels are becoming increasingly unreliable, which is having an impact on its ability to support the Department's programs and those of other government departments. For example, certain key fish stock surveys have had to be cancelled because vessels were not available. The absence of standard vessel maintenance practices has contributed to equipment failure on board vessels leading to lengthy and costly periods when vessels are not in service. The project designed to address life cycle management issues is at least two years behind schedule.
- The Coast Guard's modernization of its operations has been slow and not managed well. The Coast Guard has a history of failing to complete planned initiatives. For example, implementation of the special operating agency, which is a key government initiative designed to change the way the Coast Guard operates, is behind schedule. As the Coast Guard has modernized through investing in new technologies, it has been unable to develop and implement strategies to shed old infrastructure and facilities that are no longer needed for their original purpose. New technologies designed to improve marine safety and to save costs through efficiency end up costing the organization more.

**Fisheries and Oceans Canada has responded.** Fisheries and Oceans Canada has agreed with our recommendation. Its detailed response follows our recommendation in paragraph 4.89.

### Introduction

- **4.1** In 2000, we reported on Fisheries and Oceans Canada's management of the Coast Guard's fleet of large vessels and the staff that were directly involved in managing and operating the fleet, at sea and on shore. In 2002, we examined the marine navigational services that the Department provided, including
  - navigational aids (for example, buoys, radio beacons, and light stations);
  - marine communication and traffic services;
  - navigational charts;
  - navigable waters protection; and
  - boating safety.
- **4.2** Our overall conclusion in 2000 and 2002 was that the Department had not managed these operations cost-effectively.

#### What we found in 2000

- **4.3 Fleet management.** We observed the following problems in the fleet's management practices:
  - The Department had not established clear, concrete, realistic, and agreed-upon performance expectations for the fleet.
  - The funding was only for one year, even though the fleet is a capital-intensive activity with high fixed costs that requires long-term funding certainty.
  - The Coast Guard did not have service agreements that clearly established performance and funding arrangements between the Department's programs and the fleet.
  - Internal budgetary processes did not support accountability for fleet activity.
  - Information systems were not integrated and did not provide managers with reliable, timely information about performance and cost.
  - The method of allocating costs to programs discouraged vessel
  - The fleet did not employ a life-cycle approach (that considers benefits, costs, and risks over the long-term) to managing its vessels.

- The Coast Guard was not adequately managing its single-largest operating expense—its human resources.
- There was too much shore-based support, given the size of the fleet.
- There were weaknesses in the Department's reporting to Parliament.

#### What we found in 2002

- **4.4 Marine navigational services.** We found that significant barriers prevented the Department from modernizing and providing marine navigational services cost-effectively, including
  - a failure to ensure that there was one national program;
  - a failure of headquarters to hold regional operations accountable for implementing national policies and meeting international obligations; and
  - an absence of critical elements to ensure accountability, such as clear and concrete targets, the alignment of budgets with resources to meet those targets, and accountability for results.

#### **Events since 2002**

- 4.5 In 2002, the Coast Guard began assessing its maritime safety activities, including its marine navigational services. Later in 2002, this assessment was merged into a wider departmental review, the Departmental Assessment and Alignment Project. The Project's goals were to address significant challenges facing the Department by restoring financial stability, modernizing management practices and renewing policies and programs. The final Project report, in 2004, recommended changes that would affect the way that the Coast Guard operates, including
  - modernizing maritime services—placing more reliance on technology-based productivity improvements and making greater use of partnerships;
  - rationalizing shore support—implementing measures to reduce the cost of shore-based support; and
  - revitalizing the fleet—ensuring that the fleet is the right size to address both the immediate and long-term needs of government.
- **4.6** In 2003, the government selected Fisheries and Oceans Canada to be reviewed as part of a government-wide expenditure review.

The expenditure reductions expected from the Department, including the Coast Guard, were announced in the February 2005 Budget.

- 4.7 In June 2003, the Department's Deputy Minister delegated direct responsibility for all of the Coast Guard, including regional operations, to the Commissioner of the Coast Guard. Previously, the Commissioner had set national policy and direction, and the Department's regional directors general, who reported to the Deputy Minister, had been responsible for the management of Coast Guard operations.
- **4.8** In December 2003, the government transferred the Coast Guard's responsibilities for regulatory policy for marine safety, boating safety and navigable waters protection to Transport Canada.
- 4.9 On 1 April 2005, the direct reporting relationship between the Commissioner and the Coast Guard's regional operations was further enhanced when the Coast Guard became a special operating agency (SOA) within the Department. The Commissioner remains responsible to the Deputy Minister of Fisheries and Oceans, and the Coast Guard continues to rely on departmental administrative services such as finance, human resources, and real property management. Designating the Coast Guard an SOA was intended to
  - affirm the Coast Guard as a national institution,
  - ensure that the Coast Guard's fleet provides services to the government, and
  - give the Coast Guard more autonomy and operational flexibility.
- **4.10** The Department's 2005–2006 Report on Plans and Priorities affirmed the Coast Guard's rejuvenation strategy "to secure a sustainable service delivery model." This strategy examined options for renewing the Coast Guard's fleet and other shore-based infrastructure. The strategy also looks at transforming the Coast Guard's marine navigational services through
  - technology-based productivity improvements,
  - client service innovations, and
  - alternative service delivery.
- **4.11** Since our previous audits, the Coast Guard's contribution to maritime security has increased. Coast Guard vessels are expected to be more visible, and its Marine Communication and Traffic Service (MCTS) centres gather information about vessels in Canadian waters

and provides it to the National Defence and Royal Canadian Mounted Police Marine Security Operations Centres.

**4.12** The estimated cost of the areas examined in this audit—marine navigational and fleet services—are based on information reported in the Public Accounts of Canada. In the 2005–06 fiscal year, the cost of fleet services was \$344 million (unaudited) and the cost of marine navigational services was \$245 million (unaudited).

#### Focus of the audit

- 4.13 This follow-up audit focused on whether Fisheries and Oceans Canada has made satisfactory progress in implementing the recommendations of our December 2000 Report, Chapter 31, Fleet Management and our December 2002 Report, Chapter 2, Contributing to Safe and Efficient Marine Navigation. The recommendations focused on the need for the Coast Guard to improve the
  - cost-effectiveness of service delivery,
  - consistency of national program design and delivery,
  - performance reporting and accountability,
  - integration of services,
  - use of life-cycle management, and
  - management of human resources.
- **4.14** We also examined the Coast Guard's emerging role in support of maritime security, which we did not examine in the previous two audits.
- **4.15** We did not examine two areas from the 2002 report, boating safety and navigable waters protection, as the responsibility for those two areas has been transferred from the Coast Guard to Transport Canada.
- **4.16** More details on the audit objective, scope, approach, and criteria are in **About the Audit** at the end of this chapter.

### **Observations and Recommendation**

#### **Coast Guard progress**

#### Progress has been unsatisfactory

- 4.17 While our recommendations from the previous two reports were made to Fisheries and Oceans Canada, they largely focused on matters relating to the Coast Guard. In this follow-up audit, we found that the Coast Guard has not made satisfactory progress addressing our recommendations. The Department agreed with all of the recommendations included in our 2000 and 2002 reports. The government also agreed with the recommendations of Parliamentary committees that reviewed our reports and supported our recommendations. In Exhibit 4.1, we summarize our assessment of the progress made against the recommendations from each report.
- 4.18 In its response to the 22nd Report of the Standing Committee on Public Accounts, dated 21 October 2002, the government responded to the Committee's recommendations and reported on the progress the Coast Guard had made on specific initiatives we addressed in our 2000 report. We found that the Coast Guard had begun to act on initiatives in the government's response. However, it had not completed them. For example, the Coast Guard has not implemented life-cycle management or service agreements with users, nor has it standardized its data collection.
- **4.19** We are concerned that the Coast Guard has a history of failing to complete corrective action on issues raised in our reports and the reports of parliamentary committees. A 1983 Auditor General's report raised a number of the same issues we raised in our 2000 and 2002 reports. At that time, we reported on the
  - lack of appropriate service levels to justify the requirement for vessels and navigational aids,
  - lack of a systematic assessment and response to risks, and
  - Coast Guard's inability to shed old technology as it introduced new technology.
- **4.20** In the remainder of this report, we focus on what we have found to be the underlying causes for the Coast Guard's unsatisfactory progress.

Exhibit 4.1 Assessment of progress in implementing our recommendations

Auditor General's 2000 Report, Chapter 31			
Recommendation	Progress		
The Department should review how the fleet fits into its current organizational and accountability structure and take measures to ensure that the fleet can operate in a cost-effective manner. (paragraph 31.72)	0		
The Department should address the weaknesses associated with its key fleet management processes, including:			
<ul> <li>establishing clear, concrete and realistic program performance expectations that include a long-term perspective;</li> </ul>			
establishing a long-term fleet planning and funding horizon;			
developing service accords between the programs and the fleet;			
<ul> <li>establishing budgetary processes that support accountability;</li> </ul>			
<ul> <li>setting up integrated information systems to enable the Department to monitor and account for the actual performance of the fleet in terms of service and cost; and</li> </ul>			
<ul> <li>implementing costing policies that support the use of the lowest-cost alternative in acquiring service while meeting departmental objectives. (paragraph 31.73)</li> </ul>			
The Department should consider a longer-term strategy to renew its aging fleet. Such a strategy should take into consideration the changing nature of program requirements, the impact of technological change and the potential for alternative means of acquiring the service needed. (paragraph 31.106)	0		
The Department should complete the development and implementation of life cycle management policies and procedures for its fleet. (paragraph 31.107)	0		
The Department should ensure that the fleet activity is supported by information systems that produce integrated, timely, reliable and relevant information. (paragraph 31.108)	0		
The Department should develop a human resource strategy for the fleet to address the need to maintain the skills and knowledge of ship-based personnel and to ensure that a sufficient number of qualified officers and crew are available in the future. The strategy should consider a long-term approach to the collective agreements with ships' personnel so that they can be administered in an efficient and economical manner and can support the fleet's operational requirements. (paragraph 31.137)	0		
The Department should regularly analyze payroll costs related to the fleet and take action to control such costs, where necessary. (paragraph 31.138)	0		

Exhibit 4.1 Assessment of progress in implementing our recommendations (continued)

Auditor General's December 2002 Report, Chapter 2			
Recommendation	Progress		
The Canadian Coast Guard should ensure that there are up-to-date national policies, standards, and levels of service expectations for its navigational support services. It should also develop the capability to monitor the implementation of these policies, standards, and expectations. (paragraph 2.53)	0		
For its navigational support services and boating safety activities, Fisheries and Oceans Canada should do the following:			
<ul> <li>complete the implementation of its results-based management and accountability frameworks;</li> </ul>			
<ul> <li>establish clear, measurable, concrete targets for the identified outputs and immediate outcomes for each framework;</li> </ul>			
<ul> <li>identify who is accountable for achieving targets and managing resources;</li> </ul>			
<ul> <li>align budgeting and resource allocation with the frameworks; and</li> </ul>			
<ul> <li>develop or identify sources of information to measure results. (paragraph 2.68)</li> </ul>			
The Coast Guard should complete and implement its draft guidance on risk management. (paragraph 2.73)	0		
Fisheries and Oceans Canada should develop and implement strategies to modernize and integrate the delivery of its navigational support services to meet user needs. (paragraph 2.77)	0		
Fisheries and Oceans Canada should develop and implement an overall strategy for the future of its light stations, considering maritime safety and heritage objectives. (paragraph 2.90)	0		
Fisheries and Oceans Canada should gather and monitor information on boating safety to assess the adequacy of third-party delivery, determine the extent of compliance with regulations, and review the adequacy of the resources provided to this program. (paragraph 2.98)	Not Assessed		

Satisfactory—Progress is satisfactory, given the significance and complexity of the issue, and the time that has elapsed since the recommendation was made.

## The building of a strong national institution

#### Progress in developing a national approach has been limited

**4.21 Five Coast Guards still an issue.** The Departmental Assessment and Alignment Project recognized that the Coast Guard "needs to be one national institution, instead of a loose amalgamation of different

Unsatisfactory—Progress is unsatisfactory, given the significance and complexity of the issue, and the time that has elapsed since the recommendation was made.

- regions." The Coast Guard has found it challenging to move from five regionally based organizations to one national institution.
- 4.22 In our previous two reports on the Coast Guard, we highlighted the fact that its five regions operate differently, and we concluded that five regional coast guards existed. During this follow-up audit, we found that there continue to be inconsistencies in regional procedures, practices, and organizational structure. We also found that the Coast Guard's headquarters still does not hold the regions accountable for their operational results or for the Coast Guard's service to its clients. Regions deliver all Coast Guard services. The Coast Guard has yet to strike the right balance between appropriate national direction and guidance and responsive, accountable regional delivery.
- **4.23 Limited progress in updating national guidance.** Guidance from headquarters (national guidance) to regional operations, when it does exist, is often out of date or too general. Since 2002, the Coast Guard has revised only one of nineteen operational directives for the provision of navigational aids. In our 2002 report, we observed that these directives were not current and needed to be updated, and contributed to services being provided differently across the country.
- 4.24 In addition, the Coast Guard has not yet developed standardized maintenance procedures and manuals for its fleet and electronic equipment. In spring 2006, the Coast Guard had the potable water tanks of two vessels recoated. The original estimated cost of this work was \$53,000. After the work was completed, serious problems were found with the water tanks. Coast Guard officials concluded that insufficient guidance on refit procedures lead to unexpected repairs and lost operational time costing over \$1.6 million. The case study on page 11 shows other instances where out-of-date or missing maintenance documents have been linked to maintenance failures on Coast Guard vessels.
- **4.25** The Coast Guard's information systems are unreliable, partly because different regions have different practices for entering data into their systems. The regions have not been given sufficient guidance to ensure that they follow a common approach.
- **4.26** In our 2000 report, we noted that in one region, Coast Guard vessels on standby for offshore search and rescue operations maintained navigational aids. In the other regions, however, when

vessels were on standby for offshore search and rescue, they were not allowed to maintain navigational aids. We found that this inconsistent practice continues.

**4.27 Failure to ensure that regions follow guidance.** Where national guidance is well-established, we observed that the Coast Guard has not been able to ensure that its regional operations always follow that guidance. For example, it is Coast Guard policy to review systems of navigational aids on a cyclical basis, every five years, to systematically assess changes to safety risks in particular waterways and ensure an appropriate response. We noted that only one region has met this requirement.

#### Case Study: Maintenance failures and the need for current manuals

#### Damage to the CCGS Louis S. St-Laurent, No. 1 main engine

The CCGS Louis S. St-Laurent is a large icebreaker powered by five 16-cylinder diesel engines. To address corrosion problems that developed on the engines' fuel pumps, the Coast Guard had been replacing components in the fuel pumps. This required maintenance workers to remove and dismantle each of the 16 fuel pumps on each engine, and re-assemble them with modified parts. In February and March 2001, the workers modified the fuel pumps on three engines (Nos. 3, 4, and 5) and subsequently modified one fuel pump on engine No. 1. In November 2001, just prior to the vessel's winter lay-up period, they began modifying the remaining 15 fuel pumps on engine No. 1. The fuel pumps were removed, dismantled, and stored in individual boxes to await re-assembly following the lay-up period.

After the two-month lay-up period, the 15 fuel pumps were re-assembled with the modified parts and re-installed on the No. 1 engine. When the engine was fired up on 4 March 2002, it appeared to start normally, but then accelerated beyond its operating range. During this uncontrolled acceleration, several engine components broke or sustained significant damage, which contributed to the generator being damaged. The Coast Guard's investigation found that the reason for the uncontrolled acceleration of the engine was incorrect re-assembly of the fuel pumps. It also found that the documentation and instructions on how to assemble the fuel pumps was inadequate. The Coast Guard has reported that the cost to repair the engine and generator was almost \$6 million.

#### Engine room fire on the CCGS Alfred Needler

On 30 August 2003, the CCGS Alfred Needler was travelling to Nova Scotia from Quebec to pick up science staff for its next mission. During the voyage, the turbocharger on the main engine broke. The crew made an emergency repair by removing part of the turbocharger assembly. However, they had to repair the turbocharger without consulting the manufacturer's instruction manual, because they could not find it.

As a result, they did not perform some of the procedures specified in the instruction manual, and a significant quantity of lubricating oil was discharged into the main engine exhaust stack. The oil eventually ignited, causing a fire that lasted several hours and spread to other sections of the ship. The direct cost of repairing the damage was about \$1.3 million. The Coast Guard's investigation concluded that not being able to locate the manufacturer's instruction manual contributed to the fire.

#### Failure of the CCGS W.E. Ricker engine

On 27 April 2005, the CCGS W.E. Ricker was travelling to a science mission when its engine failed. The failure occurred when internal engine components loosened and eventually came apart. The damage to the engine was significant, costing about \$350,000 to repair. In addition, it cost about \$1.6 million to charter replacement vessels.

The Coast Guard's investigation found that certain engine components were not tightened according to the manufacturer's recommendations, and that subsequent periodic inspections should have been more thorough. In addition, the main engine instruction manual provided little information and was poorly written. The investigation report included recommendations to document instructions clearly for the performance of critical tasks on the main engine.

- **4.28** A national Marine Communications and Traffic Service (MCTS) policy permits MCTS centres to use fewer staff during periods of low activity. This limits the need to replace sick workers and helps to reduce overtime and scheduling problems. We noted that two regions do not take advantage of this policy to help reduce ongoing scheduling problems in MCTS centres.
- **4.29** Coast Guard lack of comprehensive performance information. In 2002, we reported that the Coast Guard had limited performance information to show how it contributed to its strategic objective to ensure safe and efficient navigation, which is now—to ensure safe and accessible waterways. We reported that the Coast Guard had draft results-based management and accountability frameworks for its program areas. The Coast Guard made a commitment to complete these frameworks, but it failed to do so.
- **4.30** In June 2004, as part of its Fleet Management Renewal Initiative, the Coast Guard approved a results-based management accountability framework for the fleet. However, the Coast Guard has not made significant progress in implementing this framework.
- **4.31** These frameworks are important, because they are intended to establish the way the Coast Guard manages for results and ensures accountability. The Coast Guard continues to need comprehensive tools to measure and report results.
- 4.32 Need for standardized regional organizational structures. Since at least 2000, the Coast Guard headquarters has been undergoing constant reorganization. As part of the process in which the Coast Guard was designated a special operating agency, a standard organization structure was approved in principle. This structure has largely been in place at headquarters since mid-2006. However, implementing a standard organizational structure in the regional offices has been prevented by delays in classifying positions, a lack of funding for new positions, unique regional activities, and resistance to change.
- **4.33** Consequently, the regions continue to operate according to existing disparate organizational structures. Standardizing the organizational structure is an important initiative for building the Coast Guard as a national institution.
- **4.34 Variations found in Coast Guard review.** In early 2006, the Coast Guard started a review of its activities and the related costs and funding. The review found a wide range of operational practices, and variations in recording performance information and related costs. The

variation in management practices across the country is an organizational legacy that will be difficult to overcome.

#### Coast Guard has difficulty meeting client needs

- **4.35** The Coast Guard has recognized the need to change its focus to be client-driven and accountable to users. We found that the Coast Guard is having difficulty meeting some of its clients' needs.
- 4.36 The fleet's unreliability. One of the Coast Guard's most important clients is Fisheries and Oceans Canada's Science Sector. However, unexpected equipment failures for significant periods of time have forced vessels that support the Science Sector's programs out of service and have left the fleet unable to meet the client's requirements. Faulty maintenance practices and the age of many of these vessels have contributed to these equipment failures. Overall, the cost of providing the service to the Science Sector has risen sharply, while the number of days at sea and the reliability of that service have lessened. The Science Sector funds the fixed costs of science vessels, whether the vessels are operational or not.
- 4.37 Due to the vessels' unreliability, the Department has had to cancel some fish stock surveys. This affects the quality of the information and advice that the Department's officials give their minister. The case study on page 14 illustrates this problem. The rising cost of operating the Coast Guard fleet and the unreliability of its vessels, will likely continue to negatively affect the quality of scientific advice that the Minister receives.
- **4.38** In the February 2005 Budget, the government announced its intention to purchase two new science vessels. When these vessels were initially approved, they were supposed to be delivered in January and July 2010. The Coast Guard has recently informed us that these vessels will not be available until 2011. The Coast Guard plans to address vessel unreliability, until the replacement vessels are available, by maintaining three fisheries research trawlers on the Atlantic Coast but with only two operating at any one time.
- **4.39** Coast Guard accountability to clients. The fundamental elements that are necessary to hold the Coast Guard accountable to the users of its fleet service are still not in place. The Fleet Management Renewal Initiative was supposed to bring about changes required to make the fleet more accountable (see paragraph 4.44).

#### Case Study: Unreliability of science vessels

Fisheries and Oceans Canada's Science Sector uses two main offshore fisheries research vessels to conduct fish surveys in the Newfoundland Region—the CCGS *Wilfred Templeman* and the *CCGS Teleost*. Since 2000, the Science Sector has been unable to complete many of its multi-species surveys because of problems with these vessels.

For example, mechanical breakdowns of the winch systems and main engine have occurred regularly on the *CCGS Teleost*. Longerthan-expected refit and lay-up periods delayed the *CCGS Wilfred Templeman's* return to operational status by several weeks, in April and September 2004, and again in April 2005. In April 2006, problems with potable water tanks took both vessels out of service for several weeks.

The mechanical, refit, and lay-up problems delayed surveys and rendered them incomplete in 2001, 2003, 2004, and 2005. The problems also delayed completion of a survey in 2002. In 2004–05, numerous problems resulted in the vessels being operational for 80 days less than what the Coast Guard had planned.

In 2006, the potable water problems forced the cancellation of the 2006 spring survey. On 8 June 2006, the Minister of Fisheries and Oceans announced a limited fishery in an area that had been closed to fishing and that would have been included in the cancelled survey.

The vessel problems have significantly affected ongoing research programs, primarily by making it impossible to complete surveys. Long-term fish surveys of the same area at the same time are vital to determining the abundance and size of the biomass of individual fish stocks. This information is critical for the Department when it makes recommendations to the Minister about the size of the harvest of a broad range of groundfish and invertebrate species, including many of those supporting major fisheries in the Newfoundland Region.

#### **Completion of initiatives**

#### Coast Guard track record for completing initiatives is poor

- **4.40** We have observed that the Coast Guard has started numerous management initiatives, including some that respond to our recommendations. However, the Coast Guard's track record for completing these initiatives is poor. In the remainder of this section, we will discuss the status of some of the Coast Guard's most significant initiatives since our 2000 audit.
- 4.41 Special operating agency. On 12 December 2003, the government announced that the Coast Guard would become a special operating agency (SOA) within Fisheries and Oceans Canada. The rationale for establishing the Coast Guard as an SOA was not part of the government's announcement. Subsequently, the Coast Guard was tasked with clarifying how the SOA would be implemented, including new governance arrangements and accountability relationships, spending and other authorities, and strengthened management practices, such as performance measurement and reporting. On 21 March 2005, the government approved the Coast Guard's implementation plan and the designation of the Coast Guard as an SOA effective 1 April 2005.
- 4.42 As of 30 June 2006, the Coast Guard had completed fewer than 40 percent of the tasks within the SOA implementation plan's deadlines. The implementation was supposed to be largely complete by 30 September 2006. Many tasks remain outstanding in planning,

management information, and performance measurement and reporting—all issues addressed in our 2000 and 2002 reports.

- **4.43** The Coast Guard's SOA implementation plan has proven to be overly optimistic given that no additional funding was provided for implementation, and it depended on significant human resource and informatics support from the Department.
- 4.44 Fleet Management Renewal Initiative. The Coast Guard carried out its Fleet Management Renewal Initiative in response to our recommendations in 2000. It produced a project report in December 2002 and an action plan, to be implemented by 31 March 2005, that included
  - proposed changes to the fleet governance structure;
  - a coordinated approach to program delivery in the Atlantic region;
  - stronger direction from headquarters to the regions (based on the organization that existed at the time);
  - an integrated planning process to maximize vessel usage; and
  - a clear financial framework for the fleet's funding and accountability.
- **4.45** We found that the Coast Guard has not yet fully implemented many items in the action plan:
  - A standard regional fleet organization has been approved in principle but has not been implemented.
  - Fleet operational planning is still short-term.
  - Client service agreements have not been finalized.
  - A fleet pricing policy has not been approved.
  - Information systems are not integrated.
  - Reporting to clients on the fleet's performance, including its cost, is poor.
  - Opportunities still exist for increased regional cooperation.
- 4.46 As we noted in our 2000 report, these fundamental elements need to be in place to hold the fleet accountable for delivering efficient and effective services to its clients. We have also noted that when it reported to us on the status of recommendations, the Coast Guard indicated that it considers this initiative complete, despite our conclusion that many items remain outstanding.

- 4.47 Integrated Technical Services Strategy Project. In April 2000, the Coast Guard launched its Integrated Technical Services (ITS) Strategy Project. Its purpose was to develop and implement a national life-cycle materiel management system, which would ensure that Coast Guard assets are available, reliable, safe, and are provided at the lowest life-cycle cost. The main components of the ITS Strategy Project involve implementing
  - a nationally consistent organizational structure with the appropriate capacity for delivering technical services,
  - materiel management information systems to support life-cycle management processes and procedures, and
  - life-cycle management processes and procedures to ensure the delivery of nationally consistent technical services.
- 4.48 The ITS Strategy Project is about two years behind schedule and the completion date has been changed to 31 March 2007. When the project is complete, it is expected that
  - practices, processes, procedures, and information systems will be developed and deployed;
  - accountability for delivery of technical services will be defined;
     and
  - managers will be able to make informed decisions about managing and delivering technical services to the fleet and marine navigational services.
- **4.49** However, considerable work remains to be done. For example, as of 30 June 2006, standard engineering and maintenance manuals were only in the early stages of development, and a standard organizational structure was planned for November 2007.
- **4.50** In addition, the Maintenance Information Management System—which the Department originally approved in 1997, at a total estimated cost of \$7.9 million—is not yet fully implemented. It was to be completed by February 2000. In June 2001, the Department approved additional funding of \$5.37 million for its completion.
- **4.51** A 2006 external review of the System found that less than 30 percent of the maintenance work that the system was supposed to control was actually being recorded and the accuracy of its inventory information was less than 50 percent. The review estimated that the System would not be fully implemented before 2011, and the additional cost would be more than \$7 million.

**4.52** The Director General, Integrated Technical Services recently reported the following to the Commissioner of the Coast Guard about the importance of life-cycle management:

The need to introduce national life cycle materiel management is underscored by the condition of, and the current cost of, owning and operating CCG's ships, shore-based systems and equipment, and fixed and floating aids to navigation. Many of the catastrophic failures that have occurred over the past several years were avoidable. And while the recapitalization of any asset base is critical, the various failures have not been caused by age alone, but by the lack of even the most fundamental materiel management system.

**4.53** We are concerned that the Coast Guard is being overly optimistic about implementing its ITS Strategy Project by 31 March 2007.

#### Efforts to modernize

#### Coast Guard recognizes the need to modernize

**4.54** In our previous reports, we observed that the Coast Guard needed to respond to rapid and accelerating technological change that was having a significant impact on marine navigation. We also observed that the fleet was aging and that the organization needed to improve the way it manages human resources.

#### Modernization of marine navigational services has been slow

- 4.55 Increasingly, navigational services provided to mariners are moving towards modern electronic and information-based services. Traditional physical aids, such as buoys, are still necessary, but the number and the type of navigational aids are changing as mariners adopt modern technology. The Coast Guard is moving in this direction; however, we found it has not managed the transformation well, and change is slow.
- **4.56** A modern marine navigation system has the following potential benefits:
  - Electronic positioning and monitoring can improve safety, by giving mariners a high level of assurance about their position and the position of other nearby vessels.
  - The new technology requires less support, which saves money. Maintaining physical infrastructure is costly and requires helicopters, technicians, and large vessels.

- Systems such as the Automatic Identification System can contribute to maritime security by providing Canada's security establishment and other programs with information about who is using Canada's waterways.
- 4.57 Need for an integrated plan. The 2004 Departmental Assessment and Alignment Project's final report concluded that the Coast Guard needed to modernize marine navigational services, through technology-based productivity improvements and greater use of partnerships. This modernization is now a cornerstone of the Coast Guard's rejuvenation strategy. However, the organization has not clearly articulated how it will achieve this broad modernization objective.
- **4.58** Each of the Coast Guard's marine navigational program areas, such as aids to navigation and marine communications and traffic services, has its own approach to managing and modernizing its activities. However, these program areas are linked and depend on each other. In addition, the Coast Guard's fleet and technicians deliver and support these program areas and they represent the largest cost of the marine navigational system. The Coast Guard marine navigational services are still not planned for or delivered in an integrated fashion and this is a barrier to achieving the modernization objective.
- 4.59 Marine Aids Modernization project. Since 1996, the Coast Guard has undertaken an ongoing Marine Aids Modernization project. In 2002, we reported that "the Coast Guard is making progress but is not moving as quickly as anticipated . . . ." In this audit, we examined the progress the Coast Guard had made on the third phase of the project. Again, we observed some progress, but we also found that the Coast Guard had not met any of the modernization project's targets. We found that the modernization project's strategies and targets were not realistic, because they did not address four major barriers to change.
- **4.60** Firstly, many of the modernization project's desired results require regulatory or operational policy changes. However, the Coast Guard is still developing a plan that sets out what changes need to be made in both areas.
- **4.61** Implementing these new technologies depends on mariners having modern electronic equipment, but not all mariners are currently required to have such equipment. Regulations require small and mid-sized fishing vessels to carry limited navigational equipment, such as a compass and sounding line. Recreational boaters operate

under similar requirements. The Coast Guard's policies for providing navigational aids (marine aids) largely reflect these minimal regulatory requirements. While the Coast Guard continues to deliver services designed to meet the needs of these users, through traditional navigational aids, it is also investing in new technologies to support mariners that have adopted the new technology.

- **4.62** The Coast Guard has stated that it will reduce the number of traditional navigational aids. However, the actual number of aids deployed now is about the same as it was in 2002. The transfer of all marine safety regulatory policy responsibilities to Transport Canada will require the Coast Guard to work with that department to ensure that future modernization initiatives are realistic and achievable.
- 4.63 Secondly, the Coast Guard has not developed adequate strategies for gaining the support of stakeholders or communities affected by the removal or reduction of existing outdated services. Stakeholders or communities have few reasons to support changing these services even if they do not contribute significantly to marine safety. The new electronic and information-based services require less physical infrastructure and fewer people. Therefore, the Coast Guard faces the challenge of winning support to replace outdated services while, at the same time, requesting funding to implement new technologies.
- 4.64 Thirdly, the financial savings the Coast Guard proposed were not realistic. For example, as part of the government's expenditure review process from 2003 to 2005, the Coast Guard estimated that the modernization project would produce savings of \$15 million. The Coast Guard could not provide us with support for this estimate, except to say that \$7.5 million would come from each of its fleet and technical services. It had not developed a plan to eliminate or reduce activities and, therefore, achieve the proposed savings. Coast Guard officials believe that eliminating staffed light stations was to have been the single, largest source of savings. The February 2005 Budget announced a gradual reduction of funding for navigational aids that would begin in the 2005–06 fiscal year and would grow to \$14.5 million in ongoing savings by the 2008–09 fiscal year. But the Budget also stated that this reduction would not be achieved by the elimination of light stations and foghorns.
- **4.65** Finally, the modernization project did not take into account the complexity, inter-relationships, and vested interests of the regional operations that deliver these services. There are no client service agreements, which are a form of accountability arrangement, between the aids to navigation program area that is responsible for carrying out

the modernization project and the regional operations that deliver the service. In the end, no one is held accountable when the modernization project's desired results are not achieved.

- **4.66** The Coast Guard's information systems do not give it the performance and cost information it needs to track the costs and savings of the modernization project. Fisheries and Oceans Canada and the Coast Guard are aware that there will be significant costs to ensure that remote sites, such as staffed light stations, meet health, safety, and environmental requirements. However, they have not planned or budgeted for this requirement.
- **4.67** While the modernization project fundamentally concerns modernizing the way navigational aids are provided, there is no national, coordinated research and development program to ensure that decisions about adopting new technology are based on a systematic approach designed to ensure national acceptance. Certain regions refuse to use some new technology because they believe it has not been proven that it will be reliable or that it will save money for their individual operations.
- **4.68** Recognizing that it failed to achieve its goals in the modernization project's third phase, the Coast Guard has recently developed a new initiative (AtoN 21) to refocus its modernization efforts, including the introduction of modern technologies.
- **4.69 Introducing new technology.** The Coast Guard is introducing new technology to support marine navigation. However, overall progress is slow and the organization is not following an integrated approach.
- 4.70 For example, the Coast Guard is developing a national Automatic Identification System, an international safety requirement that will contribute to maritime security. The System is expected to cost \$29 million, including \$1.5 million in preliminary studies and testing. The Coast Guard began developing it in 2002, anticipating its completion in the 2007–08 fiscal year. The St. Lawrence Seaway and many international jurisdictions already have fully operational automatic identification systems in place.
- **4.71** At the time of our audit, the Coast Guard had not yet worked out how to integrate the System's output with the existing vessel traffic management information system that it used to monitor vessel traffic. The Coast Guard identified integration issues in 2005, but had not resolved them, largely because of internal disputes between the Coast Guard technical teams responsible for the two systems. The Coast

Guard has recently informed us that it intends to resolve the issue by modifying its vessel traffic management information system to interface with the System. The Coast Guard expects the project will be providing information to marine security operations centres by the 2008 deadline.

- 4.72 As it considers and introduces new navigational systems and technological improvements, the Coast Guard needs to assess the navigational risks these systems address. It also needs to weigh their anticipated performance against existing systems, and assess the way the technologies will work together as well as with future systems. We found that the Coast Guard has still not implemented an approach to ensure regular risk assessments are conducted for major waterways.
- 4.73 Any integrated plan for introducing new technology has to include ways to reduce or eliminate obsolete or redundant technologies. As noted in previous sections of this report, the Coast Guard has had great difficulty reducing redundant infrastructure, such as light stations, that provided traditional services. Consequently, new technologies that are expected to improve effectiveness, while reducing costs, are added to existing services; and, rather than saving money, they end up costing more.

#### Coast Guard aging fleet needs to be renewed

- **4.74** The Coast Guard's fleet is aging. In our 2000 report, we observed that the Department's Long-Term Capital Plan did not present a realistic picture of the fleet's long-term capital needs.
- 4.75 Many of the challenges that existed for the fleet in 2000 still exist today—and the vessels are six years older. About 28 percent of the vessels are beyond their estimated useful lives of 30 years, and about 18 percent are between 25 and 29 years old. The Coast Guard has reported that the advancing age of its vessels is affecting their reliability and ability to meet program demands cost-effectively. The following examples of fleet performance support this contention:
  - From 2002–03 to 2005–06, vessels operated for 87 percent of the days the fleet had planned to have them at sea.
  - From 2002–03 to 2005–06, unplanned maintenance, as a percentage of planned service delivery, increased from 3.7 percent to 5.5 percent; about 166 extra operating days were lost.

- From 2000–01 to 2005–06, annual vessel maintenance expenditures increased from about \$26 million to \$39 million—an increase of 50 percent.
- 4.76 In 2003, the Coast Guard completed a long-term fleet requirements analysis that included recommendations for reinvestment in the Coast Guard fleet until 2020; one of the recommendations was to reduce the number and types of vessels. Subsequently, the Coast Guard assessed vessel conditions to prioritize replacements. It developed a vessel replacement schedule that, if followed, would cut the overall size of the fleet from 108 vessels to 95 and reduce the number of vessel types from 30 to 14.
- 4.77 The Coast Guard sought approval from the government to procure the first 10 of the replacement vessels it requires between 2005–06 and 2010–11. The February 2005 Budget allocated a total of \$276 million to procure six new vessels to be delivered by the 2009–10 fiscal year—two vessels for offshore fishery research and four mid-shore patrol vessels to support fisheries enforcement. The first of these new vessels is now scheduled to arrive in the 2010–11 fiscal year.
- **4.78** As of June 2006, the Coast Guard's vessel replacement plan is called Fleet Renewal Plan 2006 to 2030. We are concerned that the vessel replacement schedule in that plan is already outdated and unrealistic:
  - Given a typical lead time of at least five years to obtain approval and acquire or construct a vessel, the Coast Guard is quickly falling behind its replacement schedule. The plan proposes replacing ten vessels by 31 March 2011, four of which have not been approved by the government.
  - The existing schedule indicates most vessels will be replaced long after they have exceeded their estimated useful lives. For example, although the estimated useful life of an icebreaker is 30 years, the current plan shows the Coast Guard will replace icebreakers when they are between 40 and 48 years old.
  - The Coast Guard has not clearly articulated its modernization plans for marine navigational services, based on using new technologies and contracting out services. As this plan is fleshed out, the number and design of vessels servicing navigational aids could change significantly.
  - The plan calls for the replacement of mid-shore patrol vessels that enforce fisheries regulations with larger vessels that have more crew. While the new vessels will also support maritime security

and search and rescue activities, their overall operating and maintenance costs will be substantially higher. It is not clear whether fisheries enforcement will be able to finance the higher operating and maintenance costs of the new vessels.

#### Human resource management remains a problem

- **4.79** The Coast Guard's biggest single expense is in human resources. As the organization changes, the number of people it employs, and their skills, will also change. A comprehensive plan for human resources is expected to be a major component of the strategy to modernize marine navigational services and renew the fleet.
- **4.80** Most of our original observations about the management of human resources come from our 2000 audit of the Coast Guard's fleet of large vessels. Therefore, we expected to find that the Coast Guard had either implemented improvements or made substantial progress. Instead, we found the following about issues we raised in 2000:
  - There still is no integrated human resource plan. Fisheries and Oceans Canada is currently developing just such a plan for the whole Department, including the Coast Guard, in response to the Public Service Modernization Act and the Management Accountability Framework.
  - The Coast Guard has been working for several years on a human resources plan for seagoing fleet personnel to ensure that the organization has enough qualified officers and crew to meet future needs. The plan is not finished. The Coast Guard has identified its long-term requirements for officers and admissions levels required at the Coast Guard College.
  - Collective agreements continue to be complex. A 2000
     arbitration award doubled the leave entitlement of ships officers,
     thus increasing costs and scheduling complexity. In 2003, the
     Coast Guard issued detailed administrative guidelines to ensure
     consistent administration and interpretation of the ships officers'
     collective agreement.
  - Vessel crewing practices have remained largely the same.
     Managers want to make changes, but implementing them would require the union and members to accept them. The Coast Guard has not yet developed a strategy aimed at ensuring that employees understand and accept the reasons for changes in vessel crew complements.

- The amount of shore-based support to the fleet has not changed significantly since 2000.
- The Coast Guard's past executive staff performance agreements were not structured to ensure that managers were accountable for achieving the organization's objectives, plans, and priorities. By 30 June 2006, three months after the start of the fiscal year, the Coast Guard had not finalized 2006–07 performance agreements.
- The fleet has made progress in creating competency profiles for shore and seagoing personnel. However, the exercise is not expected to be complete until April 2007.

#### Coast Guard role in maritime security

#### Coast Guard role is evolving

- **4.81** Since the September 11, 2001 terrorist attacks on the United States, the Canadian government has enhanced maritime security in Canada. The Coast Guard's role in maritime security is to support other government departments. It does so by making its vessels available and providing information to other government departments.
- 4.82 The fleet's role in supporting maritime security is evolving and has not yet been clearly defined by government. Between 2001–02 and 2005–06, the Coast Guard received \$27 million in increased operational funding to increase surveillance and reconnaissance capabilities through an "on–water" presence. This funding has been absorbed by the regular fleet operations without direction from headquarters on what is to be achieved by increasing the on-water presence.
- 4.83 We found that information that the government reported—on the number of days of fleet activity that resulted from the Coast Guard's maritime security funding—does not agree with the Coast Guard's information system. In addition, the collected information did not make it clear whether the vessels were at sea or were tied to the wharf. One region was not recording fleet maritime security activities at all.
- **4.84** In addition to the funding described above, the government is allocating other resources to the Coast Guard for maritime security initiatives. For example, the Coast Guard has received authority to acquire four new mid-shore patrol vessels to improve security in the St. Lawrence Seaway—Great Lakes system in addition to the four mid-shore fisheries patrol vessels discussed in paragraph 4.77. Also, the Automatic Identification System will provide information to the government for maritime security purposes.

**4.85** It is not yet clear what results the government expects from the maritime security funding for the fleet. As the Coast Guard invests in new information technologies and renews its aging fleet, it needs to continue to work with other departments and clarify those expectations, so that it can make appropriate capital investment and operating decisions, and account for how the funds are spent.

## Reasons for unsatisfactory progress

**4.86** We believe there are a number of fundamental reasons for the Coast Guard's unsatisfactory progress:

- The Coast Guard's "can do" philosophy leads it to accept assigned duties even though there is no realistic way it can successfully deliver. This can be seen in the special operating agency (SOA) implementation, where an already stretched management team took on more responsibility without extra resources. As a result, many elements of the SOA implementation plan are still unfinished, well after the expected completion date.
- The organization does not prioritize. In our 2000 report, we commented that the Coast Guard would have to prioritize when it addressed the many issues we raised. Instead, the Coast Guard set up project teams to address all of our recommendations at once.
   Because of the large number of issues and limited management capacity, the initiatives stalled at various stages of completion.
- There is a lack of organizational and individual accountability. The Coast Guard has made commitments to deliver or complete initiatives. But it has not assigned clear organizational and individual roles and responsibilities, established performance expectations, ensured those expectations are balanced with the capacity to deliver, and reported the results, internally and externally, in a credible fashion.

#### **New Coast Guard initiatives**

- **4.87** Towards the end of this audit, the Coast Guard began several initiatives designed to help it manage more effectively. Changes included
  - restructuring management committees to emphasize national policies and encourage a corporate culture,
  - establishing draft priorities for the 2006–07 fiscal year,
  - conducting a comprehensive review of the Coast Guard's activities, costs and funding,
  - establishing a 2006–07 business planning process with a three-year horizon, and

- completing individual performance agreements that reflect the organization's priorities.
- **4.88** In addition, the Coast Guard renewed its focus on completing its designation as a special operating agency (SOA), according to the SOA implementation plan. It is too early to see results from these initiatives.
- **4.89** Recommendation. The Coast Guard should establish priorities for improvement, set clear achievable goals for those priority areas, allocate sufficient, appropriate resources, and plan and implement the changes by holding managers and organizational units accountable for results.

Fisheries and Oceans Canada's response. Fisheries and Oceans Canada accepts both the analysis and overall observations of the Auditor General in this report. In particular, we agree with the recommendation that the Canadian Coast Guard would achieve greater success in its effort to resolve issues by developing realistic plans with achievable goals, sufficient resources, and clear management accountabilities.

Prior to learning the findings of the Auditor General's report, the Department recognized that the Coast Guard's progress in becoming an effective special operating agency was slow and that management improvements were required. In this context, the Coast Guard completed an internal review earlier this year, which identified many of the same issues raised in this report. A realistic and incremental approach is now being developed to address these matters over the longer term, beginning with a manageable number of key priorities as identified in our Business Plan. Expectations and accountability for results will be clearly articulated to ensure success.

Efforts to establish the Coast Guard as an effective national institution are well under way, with progress on fleet renewal, the re-introduction of its external national advisory board, and the modernization initiative to identify the right mix of aids to navigation for users.

The Canadian Coast Guard is proud of its long record of providing quality service to Canadians. Each and every day, the Coast Guard's search and rescue efforts save lives; aids to navigation, icebreaking, and maritime communications and traffic services ensure that goods arrive safely at their destination; effective marine environmental response efforts protect our waters; and partnerships with other agencies ensure ongoing maritime security in Canada.

### **Conclusion**

- 4.90 The Coast Guard has not made satisfactory progress in implementing the recommendations of our December 2000 Report, Chapter 31, Fleet Management, and our December 2002 Report, Chapter 2, Contributing to Safe and Efficient Marine Navigation. We have identified a number of factors that have contributed to this lack of progress in making necessary changes in the management and delivery of the Coast Guard's marine navigational and fleet services.
- **4.91** In addition, the Coast Guard has not made adequate improvements in its:
  - cost-effectiveness of service delivery,
  - consistency of national program design and delivery,
  - performance reporting and accountability,
  - integration of services,
  - use of life cycle management, and
  - management of human resources.
- **4.92** The Coast Guard's role in supporting maritime security is becoming clear for its marine navigational system, but it is not yet clear what results the government expects from additional funding for the fleet.
- **4.93** In the February 2006 Budget, the government approved \$99 million in supplemental funding to the Department, \$39 million of which was designated for the Coast Guard. While the supplementary funding will help the Coast Guard deal with increases in fuel costs and funding shortfalls in the short-term, the organization's inability to understand and control its costs does not provide us with confidence that this is a permanent solution.

### **About the Audit**

#### **Objectives**

Our objectives were to determine if the Canadian Coast Guard has implemented or made satisfactory progress in implementing the recommendations of our December 2000 Report, Chapter 31, Fleet Management, and our December 2002 Report, Chapter 2, Contributing to Safe and Efficient Marine Navigation. In particular, the audit focused on the extent to which the Coast Guard improved in the following areas:

- cost-effectiveness of service delivery,
- consistency of national program design and delivery,
- performance reporting and accountability,
- integration of services,
- use of life cycle management, and
- management of human resources.

We also assessed the clarity of the Coast Guard's new role in support of maritime security and the extent that operational and capital planning for the fleet and marine navigational services reflect this new role.

#### Scope, approach, and criteria

Our scope included all recommendations made in our December 2000 Report, Chapter 31 and our December 2002 Report, Chapter 2, except for those related to the Office of Boating Safety and responsibility for the *Navigable Waters Protection Act*. The government transferred these functions to Transport Canada in December 2003.

Our approach focused on auditing the Coast Guard's self-assessments of its progress in addressing our recommendations. We also assessed the extent to which the Coast Guard implemented or made progress in implementing the actions it identified in response to our 2000 and 2002 recommendations.

We also examined the government's responses to recommendations from reports of the House of Commons standing committees on Public Accounts and Fisheries and Oceans as they related to our reports and recommendations. We focussed on progress made in implementing the actions the government identified in its responses.

We used criteria from the original audits as they remained relevant to the follow-up audit. These criteria were relevant for assessing the Coast Guard's role in maritime security because the Department's "safe and accessible waterways" strategy encompasses this role.

We expected the Coast Guard to

• clearly define its mandate, including role and responsibilities, within Canada's marine transportation system, as it relates to safe and accessible waterways;

- specify the nature of the activities and levels of service, for both fleet and marine navigational services, that fulfill its mandate, meet client needs, and comply with Canada's laws and international agreements;
- establish strategic outcomes to meet its major responsibility for ensuring safe and accessible waterways;
- report to Parliament on its results, including its financial performance;
- develop and implement appropriate management systems and strategies and establish accountability measures to manage its fleet and navigational support services in a cost-effective manner;
- specify, in quantifiable terms, the short- and long-term needs government departments have for fleet services;
- obtain the funding necessary to deliver these services; and
- employ the appropriate number and type of people required to staff the fleet and marine navigational services in a cost-effective manner.

#### **Audit work completed**

Audit work for this chapter was substantially completed on 30 June 2006.

#### **Audit team**

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For information, please contact Communications at 613-995-3708 or 1-888-761-5953 (toll-free).

## **Appendix** List of recommendations

The following is a list of recommendations found in Chapter 4. The number in front of the recommendation indicates the paragraph where it appears in the chapter. The numbers in parentheses indicate the paragraphs where the topic is discussed.

#### Recommendation

**4.89** The Coast Guard should establish priorities for improvement, set clear achievable goals for those priority areas, allocate sufficient, appropriate resources, and plan and implement the changes by holding managers and organizational units accountable for results. **(4.17–4.88)** 

#### Response

Fisheries and Oceans Canada accepts both the analysis and overall observations of the Auditor General in this report. In particular, we agree with the recommendation that the Canadian Coast Guard would achieve greater success in its effort to resolve issues by developing realistic plans with achievable goals, sufficient resources, and clear management accountabilities.

Prior to learning the findings of the Auditor General's report, the Department recognized that the Coast Guard's progress in becoming an effective special operating agency was slow and that management improvements were required. In this context, the Coast Guard completed an internal review earlier this year, which identified many of the same issues raised in this report. A realistic and incremental approach is now being developed to address these matters over the longer term, beginning with a manageable number of key priorities as identified in our Business plan. Expectations and accountability for results will be clearly articulated to ensure success.

Efforts to establish the Coast Guard as an effective national institution are well under way, with progress on fleet renewal, the re-introduction of its external national advisory board, and the modernization initiative to identify the right mix of aids to navigation for users.

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