



Fisheries and Oceans  
Canada

Pêches et Océans  
Canada

Canadian  
Coast Guard

Garde côtière  
canadienne



# Canadian Coast Guard

Safety First, Service Always

## BUSINESS PLAN

# 2008 2011



Canada 

Published by:

Integrated Business Management Services  
Fisheries and Oceans Canada  
Canadian Coast Guard  
Ottawa, Ontario  
K1A 0E6

CCG Business Plan 2008-2011  
1st Edition - June 2008  
Available on the CCG Internet site:  
[www.ccg-gcc.gc.ca](http://www.ccg-gcc.gc.ca)

Cat. No Fs151-12/2008  
978-0-662-05518-1

Cat. No Fs151-12/2008E-PDF  
978-0-662-48011-2

© Her Majesty the Queen in Right of Canada 2008

Printed on recycled paper

# TABLE OF CONTENTS

Message from the Commissioner.....	4
Introduction.....	5
<b>Section 1: WHO WE ARE AND WHAT WE DO .....</b>	<b>7</b>
What We Do.....	7
Who We Serve.....	8
Where We Fit: Coast Guard, Clients and Stakeholders, and the Government of Canada.....	8
<b>Section 2: WHERE WE ARE NOW .....</b>	<b>10</b>
<b>Section 3: WHAT ARE WE FOCUSING ON .....</b>	<b>12</b>
FOCUS ON CLIENT SERVICE	
<b>Priority 1: Strengthening CCG as a Client-Focused National Agency .....</b>	<b>13</b>
Levels of Service Review .....	13
Marine Services Fees Strategy.....	14
Stronger Canadian Coast Guard Identity.....	14
Strengthening Management .....	16
FOCUS ON EFFICIENCY AND EFFECTIVENESS	
<b>Priority 2: Support for Canada’s Maritime Security Agenda .....</b>	<b>18</b>
Improving CCG Support of the Federal Maritime Security Agenda.....	18
<b>Priority 3: Fleet Renewal.....</b>	<b>19</b>
Procurement of New Vessels.....	19
Improved Maintenance of the Existing Fleet .....	20
Fleet Operational Readiness .....	20
<b>Priority 4: Continued Implementation of Modernization Initiatives .....</b>	<b>22</b>
Aids to Navigation of the 21 <sup>st</sup> Century .....	22
Vessel Maintenance Review.....	24
FOCUS ON PEOPLE	
<b>Priority 5: Effective Management of Our Workforce and Workplace.....</b>	<b>25</b>
Attract and Retain a Skilled Workforce.....	25
Improve the Diversity of Our Workforce.....	26
Focus on Training, Learning, and Career Development.....	26
Improve National Consistency in Human Resources Management.....	27
<b>Section 4: WHAT WE DO EVERY DAY.....</b>	<b>29</b>
Overview of Financial and Human Resources.....	30
Services by PAA Sub-Activity.....	32
Aids to Navigation .....	32
Reinvestment in the Asset Base.....	33
Waterways Management .....	33
Key Initiative.....	34
Marine Communications and Traffic Services.....	35
Key Initiatives.....	37
Human Resources Initiative.....	38
Reinvestment in the Asset Base.....	38



Icebreaking Services .....	39
Search and Rescue .....	41
Key Initiatives .....	42
Human Resources Initiative .....	43
Environmental Response Services .....	45
Key Initiatives .....	47
Environmental Response Services Technical Training .....	49
Reinvestment in the Asset Base .....	49
Maritime Security .....	50
Key Initiatives .....	51
Reinvestment in the Asset Base .....	52
Coast Guard Fleet Operational Readiness .....	53
Science .....	56
Fisheries and Aquaculture Management — Conservation and Protection .....	56
Key Initiatives .....	57
Improved Maintenance of the Existing Fleet .....	58
Human Resources Initiatives .....	59
Reinvestment in the Fleet Asset Base .....	60
Lifecycle Asset Management .....	62
Key Initiatives .....	64
Reinvestment in the Asset Base .....	66
Canadian Coast Guard College .....	67
Key Initiative .....	68
CCG'S Role in the Arctic .....	70
How we Help Protect our Environment .....	72
Providing Services That Help to Protect the Environment .....	72
Greening Operations through Better Environmental Management .....	72
Green Procurement to Advance Future Environmental Performance .....	73
CCG's Environmental Commitments under DFO's Sustainable Development Strategy 2007-2009 ...	74
International Activities .....	75
<b>Section 5: FINANCIAL INFORMATION.....</b>	<b>76</b>
Status of the Initiatives Undertaken in the 2007-2008 Business Plan.....	76
Overview of the Funding Provided in Recent Federal Budgets .....	76
Increasing Demand versus Capacity.....	77
Price Increases .....	77
Assets and Liabilities.....	78
Conclusion.....	78
Annex A: Workforce .....	82
National Employment Distribution .....	82
Language and Diversity .....	82
Employment Tenure .....	83
Distribution by Occupational Group .....	83
Eligibility for Retirement .....	83
Projected Departures .....	84
Bargaining Agents .....	85
Annex B: CCG Capital Expenditures.....	86
Annex C: CCG Program Activity Architecture .....	94

Annex D: Auditor General’s Recommendations (2000 and 2002): ..... 95  
 Annex E: Management Agenda..... 101  
 List of Acronyms ..... 102  
 Index..... 102

*List of Tables*

Table 1: CCG Budget Allocation Planned Spending by PAA Sub-activity, 2008-2009 (thousands of dollars)..... 30  
 Table 2: CCG Service Costs by PAA Sub-activity, 2008-2009 (thousands of dollars) ..... 30  
 Table 3: Total Number of CCG Full-time Equivalents (FTEs) Utilization by PAA Sub-activity .....31  
 Table 4: Aids to Navigation Services Resource Profile, 2008-2009(thousands of dollars) ..... 33  
 Table 5: Waterways Management Services Resource Profile, 2008-2009 (thousands of dollars)..... 34  
 Table 6: Marine Communications and Traffic Services Resource Profile, 2008-2009 (thousands of dollars).....37  
 Table 7: Icebreaking Services Resource Profile, 2008-2009 (thousands of dollars)..... 40  
 Table 8: Search and Rescue Services Resource Profile, 2008-2009(thousands of dollars) ..... 43  
 Table 9: Environmental Response Services Resource Profile, 2008-2009 (thousands of dollars) .....47  
 Table 10: Maritime Security Resource Profile, 2008-2009 (thousands of dollars) .....51  
 Table 11: Coast Guard Fleet Operational Readiness Resource Profile, 2008-2009 (thousands of dollars)..... 55  
 Table 12: Lifecycle Asset Management Services Resource Profile, 2008-2009 (thousands of dollars)..... 64  
 Table 13: Number of Candidates at Canadian Coast Guard College..... 67  
 Table 14: Canadian Coast Guard College Resource Profile, 2008-2009 (thousands of dollars)..... 68  
 Table 15: Derivation of 2008-2009 Budget Allocation ..... 79  
 Table 16: Budget Allocations by Sub-activity, 2008-2009 (thousands of dollars) ..... 80  
 Table 17: Budget Allocations by Region, 2008-2009 (thousands of dollars)..... 80  
 Table 18: 2008-2009 Financial Allocations by Sub-Activity by Region (thousands of dollars) .....81  
 Table 19: 2008-2009 National Programs by Sub-Activity (thousands of dollars) .....81  
 Table 20: Projected Departures ..... 84

*List of Figures*

Figure 1: CCG Budget Allocations by Region .....31  
 Figure 2: Planned Service by Program, 2008-2009 (in operational days)..... 53  
 Figure 3: Planned Vessel Costs by Program, 2008-2009..... 55  
 Figure 4: National Employment Distribution..... 82  
 Figure 5: Representation of the Four Employment Equity Groups at CCG..... 82  
 Figure 6: Distribution by Age Group ..... 83  
 Figure 7: Employee Representation by Bargaining Agent ..... 85

# MESSAGE FROM THE COMMISSIONER

4



The Canadian Coast Guard (CCG) made solid progress in the past year in becoming a strong national institution dedicated to service and safety. As always, it was very effective in delivering its programs and services to Canadians and it

has seen much needed investments that will help it do its job better now, and into the future.

Some of its work received widespread public attention. A few examples include: conducting over 300 vessel escorts in the ice off the northeast coast of Newfoundland which included freeing over 100 fishing vessels that were beset in ice; the ongoing work of our icebreakers in the Arctic to support the various activities related to the International Polar Year; and several high profile environmental response operations. However, I am most proud of the memorial that we dedicated last fall at the CCG College to commemorate the men and women of the Coast Guard who lost their lives in the course of carrying out their duties.

The way we touch people's lives is evident. In an average year, about 2,900 lives at risk are saved through the Coast Guard search and rescue operations. While we are not successful in all cases, we have one of the most effective search and rescue systems in the world. The reason that it is so effective is due to the teamwork from both shore and fleet side of the Coast Guard and with partners such as the Department of National Defence and the CCG Auxiliary.

Finally, none of our programs and services would be possible without the dedicated and professional staff that work behind the scene to maintain our equipment and to provide the administrative and planning support that enables front line staff to do their jobs.

This business plan sets out our overall priorities and what we intend to do. As in past years, its primary focus is to respond to the needs of our clients, to maintain and replace our equipment and, most of all, to support the dedicated and professional people that work for the Coast Guard. Considerable effort has gone into developing strategic and forward looking human resource and training strategies. This year, the outcome of that work has been incorporated more clearly into this document.

Finally, the CCG Business Plan also sets out our efforts to improve our internal management and decision making process and how we intend to allocate our budget.

We believe that we have a realistic and achievable plan consistent with the people, budget and assets that we have to deliver our programs and services. The Coast Guard has sought widespread input in developing this plan and would welcome any suggestions from clients and its own staff on how to improve it for future years.

A handwritten signature in blue ink that reads "George Da Pont".

George Da Pont  
Commissioner, Canadian Coast Guard

# INTRODUCTION

This document is the Canadian Coast Guard's Business Plan for the years 2008 through 2011.

The document has two distinct purposes:

- First, this document is the Coast Guard's blueprint for action for the next three years. It brings together information from a number of sources, including our 2006 A-Base Review, the 2007 Report of the Auditor General, our 2008 environmental scan, and our recent risk-identification exercise. Overall, the Plan presents the steps that we will be taking to serve our clients and to become a true national Agency.
- Second, the Plan is a communications vehicle designed to convey the CCG message and commitments to our employees, stakeholders, and the Canadian public. To achieve its goals over the 2008-2011 planning period, we will continue to focus on selected priorities while continuing to serve our clients.

In the first section of this document, "Who We Are and What We Do," you will find information on our mandate, mission, and motto; the results we seek to achieve; our clients; and our history. This section also summarizes the linkages among our activities and those of other government departments.

Section 2, "Where We Are Now," summarizes the key risks and strategic challenges we face in our business. Our priorities and key initiatives are in large part, the CCG's response to dealing with these internal and external influences and they form the basis of a number of our key commitments over the next three years.

Coast Guard has five priorities, and Section 3, "What We Are Focusing On," discusses in detail the commitments we are making to address each of these priorities over the next three years. Section 4, "What We Do Every Day," does the same for our ongoing services but discusses the commitments in terms of our Program Activity Architecture sub-activities. Sections 3 and 4 form the bulk of the Business Plan.

Section 5 discusses CCG's financial situation and presents supporting financial tables. The focus is on the progress made in strengthening our financial management practices, the funding provided in recent federal budgets, our capacity to meet growing demands for our services and an overview of our assets and liabilities.

There are five annexes to this document: Annex A describes Coast Guard's workforce, Annex B provides detailed information on our capital expenditures, Annex C presents our Program Activity Architecture, Annex D cross-references our 2008/09 commitments with the Auditor General's 2000 and 2002 recommendations, and Annex E presents our management agenda.

A number of the initiatives and commitments described in this Business Plan are responses to recent reviews and reports. For this reason, we have highlighted with acronyms the commitments related to our 2006 A-Base Review (A-Base), the February 2007 Report of the Auditor General (AG), and the findings of the Public Service Employee Survey (PSES) conducted in late 2005.



## COAST GUARD HISTORY

The first lifeboat and lighthouses in Canada were established on the east coast during the 1700s. In response to an urgent need for protection and regulation of fishing and shipping vessels, patrol vessels appeared along the eastern seaboard and in the Great Lakes region during the 1800s.

At Confederation, in 1867, the federal government assumed responsibility for various elements of marine infrastructure, including:

- Aid systems;
- Lifesaving stations;
- Canals and waterways;
- Regulatory bodies and vessels; and
- Supporting shore infrastructure.

The Department of Marine and Fisheries, established in 1868, was given responsibility for this marine infrastructure. Marine and Fisheries became two separate departments in 1930. Responsibility for marine transportation shifted to the Department of Transport (DOT) in 1936.

The DOT maintained a fleet of 241 vessels. This fleet became the basis of the CCG. This fleet had several uses that now fall under the CCG mandate, including maintaining navigation aids and icebreaking.

Starting in the 1940s, many organizations and communities pressed the government to form a national coast guard. CCG was officially created on January 26, 1962. The Canadian Coast Guard College (CCGC) was established in 1965. Located on Cape Breton Island, Nova Scotia, the College trains young men and women for service in CCG.

The federal government has restructured CCG twice since 1962:

- In 1995, CCG amalgamated with DFO.
- In 2005, CCG became a special operating agency (SOA) within DFO.

# (1) WHO WE ARE AND WHAT WE DO

7

The Canadian Coast Guard (CCG) has a direct and important impact on the lives of Canadians. We help ensure the safe use of Canadian waterways, and we facilitate the smooth functioning of the Canadian economy.

A nationally recognized symbol of safety, Coast Guard serves on three oceans, the St. Lawrence River and Great Lakes, and other major waterways. Often it is the only federal presence in many remote, Aboriginal, and Arctic communities. Operating along the longest coastline in the world and in some of its most difficult weather conditions, CCG operates 24/7 every day of the year.

## What We Do

Coast Guard's mandate derives from the *Constitution Act, 1867*, which gives the federal government exclusive legislative authority over navigation, shipping, beacons, buoys, lighthouses, and Sable Island. The *Oceans Act* and the *Canada Shipping Act* give the Coast Guard its specific mandate.

**Our mission:**  
*Excellence in maritime services.*

**Our motto:**  
*Safety First, Service Always*

The *Oceans Act* gives the Minister of Fisheries and Oceans responsibility for services for the safe, economical, and efficient movement of ships in Canadian waters, through the provision of:

- Aids to navigation;
- Marine communications and traffic management services;
- Icebreaking and ice management services; and
- Channel maintenance.

The Act also gives the Minister responsibility for:

- Marine search and rescue;
- Marine pollution response; and
- The support of other government departments, boards, and agencies through the provision of ships, aircraft, and other services.

The *Canada Shipping Act* gives the Minister of Fisheries and Oceans responsibilities, powers, and obligations with respect to aids to navigation, Sable Island, St. Paul Island, search and rescue, pollution response, and vessel traffic services.

CCG became a Special Operating Agency (SOA) within the Department of Fisheries and Oceans in April 2005. Approval of SOA status affirmed CCG as a national institution and confirmed it as the owner and operator of the government's civilian fleet in support of its programs and those of DFO and other government departments. SOA status allows us to focus on service delivery and provides us with the operational and financial flexibilities necessary to do so.

On an average day, CCG:

- Saves eight lives;
- Assists 55 people in 19 search and rescue cases;
- Services 55 aids to navigation;
- Handles 1,127 marine radio contacts;
- Manages 2,346 commercial ship movements;
- Escorts four commercial ships through ice;
- Carries out 12 fisheries patrols;
- Supports three hydrographic missions;
- Supports eight scientific surveys;
- Deals with three reported pollution events; and
- Surveys five kilometres of navigation channel bottom.

## Who We Serve

We serve clients in all sectors of the Canadian economy: the general public, commercial shippers, ferry operators, fishers, recreational boaters, coastal communities, and other government departments and agencies.

For example,

- We provide services related to aids to navigation, icebreaking, search and rescue, maritime security, pollution response, and marine communications and traffic services to commercial fishers, commercial shippers, port authorities, and recreational boaters.
- We respond to federal maritime priorities and natural or man-made emergencies. We are key players in various activities mandated under the Federal Emergency Response Plan and are involved both nationally and internationally in planning and exercises related to environmental response and search and rescue.
- We support Fisheries and Oceans Canada (DFO) programs by providing vessels and maritime professionals to support the Department's science activities and to help manage and protect fisheries resources. Internal clients include DFO Fisheries Management, DFO Oceans Management, DFO Science, and DFO Small Craft Harbours.
- We support the non-military activities of other government departments and agencies by providing vessels, aircraft, marine expertise, and other maritime services. Clients for these services include the following:
  - Department of National Defence;
  - Department of Foreign Affairs and International Trade;
  - Environment Canada;
  - Health Canada;
  - Natural Resources Canada;
  - Natural Sciences and Engineering Research Council;
  - Public Safety Canada (RCMP, CSIS, and Canada Border Services Agency); and
  - Transport Canada.

## Where We Fit: Coast Guard, Clients and Stakeholders, and the Government of Canada

CCG does not operate alone. We work with many clients and stakeholders within and outside DFO, and our activities support the results those clients and stakeholders are seeking to achieve, as well as certain government-wide objectives. These activities, linkages, and desired results are shown in the figure found on the next page.

# WHERE WE FIT:

## Coast Guard, Clients and Stakeholders, and the Government of Canada

**Coast Guard provides these services:**

- Aids to Navigation
- Waterways Management
- Marine Communications and Traffic Services
- Icebreaking Services
- Search and Rescue
- Environment Response Services
- Maritime Security
- Coast Guard Fleet Operational Readiness
- Lifecycle Asset Management Services
- Canadian Coast Guard College



**To achieve these four results for Canadians:**

- Safe, economical and efficient movement of maritime traffic in Canadian waters
- Minimized loss of life or injury resulting from marine incidents
- Minimized impacts of ship source oil spills in Canadian waters
- Civilian fleet operationally ready to deliver Government of Canada programs and maintain a federal presence



**To help our clients and stakeholders achieve their own results and objectives:**

<p><i>For DFO, its three strategic outcomes:</i></p> <ul style="list-style-type: none"> <li>Safe and Accessible Waterways (directly)</li> <li>Healthy and Productive Aquatic Ecosystems (indirectly)</li> <li>Sustainable Fisheries and Aquaculture (indirectly)</li> </ul> <p><i>For the Government of Canada, these two government-wide outcomes:</i></p> <ul style="list-style-type: none"> <li>Sustainable Economic Growth</li> <li>Safe and Secure Communities</li> </ul>	<p><i>For other government departments and agencies, the Commercial Shipping Industry, Commercial Fishers, Port Authorities, Recreational boaters</i></p> <p>Their own results and objectives</p>
--	---

# (2) WHERE WE ARE NOW

Our ability to achieve our four main results (see page 9) depends on how well we identify and manage our key challenges and risks.

The challenges and risks we face today have been identified in several reviews and reports, including:

- Our 2006 A-Base Review;
- The 2007 Report of the Auditor General;

- The environmental scan we conducted in late 2007; and
- Our recent risk-identification exercises.

The following table summarizes our key challenges and risks (Column 1), cites the strategies or key initiatives we will respond with (Column 2), and cross-references an in-depth discussion later in this document of the strategy or key initiative (Column 3).

We will respond to this challenge/risk...	With these strategies or key initiatives...	Which are described in detail...
<p><b>Securing the Next Generation of Human Resources *</b> By 2012, almost 24% of our seagoing personnel will be eligible to retire. Similar attrition rates exist for other critical occupations such as Marine Communications and Traffic Services Officers, and engineers. Our challenge over the next several years will be to sustain a representative workforce in a highly competitive market for skilled, qualified, and certificated mariners.</p>	• Attract and retain a skilled workforce	On page 25
	• Improve the diversity of our workforce	On page 26
	• Improve national consistency in human resources management	On page 27
	• Focus on training, learning, and career development	On page 26
	• Canadian Coast Guard College transformation	On page 26 and page 68
<p><b>Increased Demand for Coast Guard Services</b> Rising maritime traffic, technological changes, climate change impacts such as fluctuating water levels, and extended shipping seasons are among the factors expected to continue to place increased demands on our services. We will need to determine how best to meet the needs and expectations of Canadians, mariners, clients, and stakeholders with available resources.</p>	• Improve client engagement	On page 13
	• Levels of Service (LOS) review	On page 13
	• Review of the National Environmental Response Strategy	On page 47
	• Post-Panamax Study, St. Lawrence River	On page 34
	• Search and Rescue needs analysis	On page 42
<p><b>Evolving Role in Maritime Security</b> Our support role in maritime security continues to evolve and is becoming better defined. This evolving and potentially expanding role raises issues with respect to the policy framework and training required for us to effectively perform our operational support role in maritime security.</p>	• Marine Services Fees Strategy	On page 14
	• Improving CCG support of the federal maritime security agenda	On page 18
	• Marine Security Enforcement Team (joint program with the RCMP on the Great Lakes and the St. Lawrence)	On page 51

We will respond to this challenge/risk...	With these strategies or key initiatives...	Which are described in detail...
<p><b>Aging Infrastructure *</b></p> <p>Despite significant investments in the past few years, our fleet is aging, affecting the reliability of the fleet and its ability to meet program demands. As vessels age, their maintenance costs increase, but funding allocated to vessels refits is being eroded by increasing shipyard costs. Shore-based infrastructure is also continuing to deteriorate and will require significant investments. At the same time, we need to respond to rapid and accelerating technological change as navigational services move away from traditional physical aids toward modern electronic and information-based services.</p>	<ul style="list-style-type: none"> <li>• Procurement of new vessels</li> <li>• Improved maintenance of the fleet and existing shore-based infrastructure</li> <li>• Fleet Operational Readiness</li> <li>• Aids to Navigation of the 21<sup>st</sup> Century</li> <li>• Vessel Maintenance Review</li> </ul>	<p>On page 19</p> <p>On page 58 and page 65</p> <p>On page 20</p> <p>On page 22</p> <p>On page 24</p>
<p><b>Functioning as a Truly National Institution</b></p> <p>Both the Auditor General and our own internal A-Base Review indicated that we need greater consistency in the design and delivery of our national program while safeguarding regional operational authority and responsibilities.</p>	<ul style="list-style-type: none"> <li>• Strengthening management (Program Activity Architecture, Performance Measurement Framework, protocols for entry of salary data)</li> <li>• Stronger Canadian Coast Guard identity</li> <li>• Ongoing improvements in fleet management</li> <li>• Continued improvement in lifecycle management practices for all CCG assets</li> </ul>	<p>On page 15</p> <p>On page 14</p> <p>On page 57</p> <p>On page 64</p>
<p><b>Managing Information *</b></p> <p>A number of reports, reviews, and exercises have highlighted the need for us to improve our ability to produce, access, apply, and manage the information needed for critical business and operational decision-making and performance measurement. Such information is critical to supporting day-to-day operations, as well as to strategic decision-making.</p>	<ul style="list-style-type: none"> <li>• Refinement of performance measurement framework through consultation with clients and stakeholders</li> <li>• Ongoing improvements in fleet management (Fleet Activity Information System) (FAIS)</li> <li>• Continued improvement in lifecycle management practices for all CCG assets (Asset Management System)</li> </ul>	<p>On page 16</p> <p>On page 57</p> <p>On page 64</p>
<p><b>Managing Key Relationships*</b></p> <p>We rely on third parties for our corporate services, acquisitions, and procurement. We also need to work with other government departments, volunteers such as the Canadian Coast Guard Auxiliary (CCGA), and a variety of other stakeholders to deliver on our mandate to Canadians. Proactively managing these relationships is an ongoing challenge for the Agency.</p>	<ul style="list-style-type: none"> <li>• Improve client engagement</li> <li>• Strengthening management (Service Level Agreement)</li> <li>• Renewal of the CCGA contribution agreements</li> </ul>	<p>On page 13</p> <p>On page 16</p> <p>On page 43</p>

\* Identified as a key risk in the CCG Corporate Risk Profile 2006.

# (3) WHAT WE ARE FOCUSING ON

Coast Guard has five priorities, and each priority is associated with one or more strategies. All of these strategies are discussed in detail in this section, and all are grouped in terms of CCG's three focus areas: Focus on Client Services, Focus on Efficiency and Effectiveness, and Focus on People.

12

*Focus on  
Client Service*

## **Priority 1: Strengthening CCG as a Client-Focused National Agency**

Levels of Service Review  
Marine Services Fees Strategy  
Stronger Canadian Coast Guard Identity  
Strengthening Management

*Focus on  
Efficiency and Effectiveness*

## **Priority 2: Support for Canada's Maritime Security Agenda**

Improving CCG Support of the Federal Maritime Security Agenda

## **Priority 3: Fleet Renewal**

Procurement of New Vessels  
Fleet Operational Readiness

## **Priority 4: Continued Implementation of Modernization Initiatives**

Aids to Navigation of the 21<sup>st</sup> Century  
Vessel Maintenance Review

*Focus on  
People*

## **Priority 5: Effective Management of Our Workforce and Workplace**

Attract and Retain a Skilled Workforce  
Improve the Diversity of Our Workforce  
Focus on Training, Learning, and Career Development  
Improve National Consistency in Human Resources Management

In addition to the priorities discussed in this section, CCG manages a wide range of day-to-day operations. For detailed information on these activities, see Section 4.

# PRIORITY I: STRENGTHENING CCG AS A CLIENT-FOCUSED NATIONAL AGENCY

Over the past few years, we have taken a more structured approach to consulting with industry and other government departments and agencies in the planning and management of our services and priorities. For example, we re-established national and regional marine advisory boards as a way to communicate with the commercial shipping industry, and in early 2007-2008, we established a deputy-minister-level advisory council made up of our key clients within government. In 2008-2009, we will continue to refine our engagement framework and search for ways to better involve recreational boaters and fishers.

Commitment	Lead
<b>2008-2009</b>	
Refine our engagement framework to find ways to better involve recreational boaters and fishers.	DG, IBMS

## Levels of Service Review

Both the 2007 Report of the Auditor General and our own 2006 A-Base Review noted that progress in achieving up-to-date national policies, standards, and levels of service has been slow. Both also noted that existing Levels of Services (LOS) were being interpreted inconsistently throughout Coast Guard and that their application varied from region to region.

In response to these concerns, we reissued the document *Levels of Service and Service Standards* in 2007-2008 with a view to making it more accessible and easier for clients, employees, and interested Canadians to understand the document. In addition, we sought feedback

## 2007-2008 Accomplishments

### Levels of Service Review

- Reissued *Levels of Service and Services Standards*
- Held 32 sessions with clients across the country to discuss the service they received from CCG.
- Completed the report on the SAR Needs Analysis.

### Marine Service Fees Strategy

- Developed options for the future of the Marine Services Fees through a joint industry-government working group.

### Stronger Canadian Coast Guard Identity

- Dedicated a memorial at the CCG College, in Sydney, NS, to employees who lost their lives in the course of carrying their duties.
- Reinstated the CCG national newsletter.
- Restructured the CCG Internet site to improve client access to information and services.

### Strengthening Management

- Had a new Program Activity Architecture (PAA) approved by Treasury Board.
- Developed a performance measurement and reporting framework for CCG.

from clients across the country on the service they receive from CCG.

In 2008-2009, we will assess how to respond to this feedback to the extent possible with the resources available. We will revise *Levels of Service and Service Standards* accordingly and reissue the revised document in 2009-2010.

We recognize that consultations with clients at all stages of the process are essential for this exercise to succeed.

Commitment		Lead
<b>2008-2009</b>		
Develop a report that reflects input received and validate information with clients.	AG	DG, MS
Develop options, and implement those changes that are feasible, within current resource levels, which consider the outcomes of the consultations on LOS Review.	AG A-Base	DG, MS
<b>2009-2010</b>		
Develop and implement an ongoing LOS engagement process, by program.		DG, MS
Reissue <i>Levels of Service and Service Standards</i> document.	AG A-Base	DG, MS

We have completed, as committed, a cyclical review of the Canadian Coast Guard portions of the Search and Rescue (SAR) system. The next step is to implement those changes that can be accomplished within current resources and to assess options for the rest with SAR partners. (see Section 4, page 42, for details).

### Marine Services Fees Strategy

The aim of our Marine Services Fees Strategy is to collaborate with the commercial shipping industry to develop options for the future of Marine Services Fees and to provide a common recommendation on these fees to the federal government. Over the past year, through a joint working group, we met several times with the marine transportation industry to develop and discuss options for the future direction of these fees, including fees in the Arctic. To advance the options under consideration, we have broadened

the discussion to include additional government departments where appropriate.

Drawing on this collaboration, we will continue to work with industry and other federal government departments to recommend to the federal government an overall approach to Marine Services Fees. We will ensure that the overall approach towards the fees is consistent with the DFO External Charging Framework and Action Plan.

Commitment		Lead
<b>2008-2009</b>		
Implement government direction.	AG	DG, MS

### Stronger Canadian Coast Guard Identity

The Canadian Coast Guard takes pride in its unique identity. Since becoming an SOA, we have sought opportunities to strengthen our identity and reinforce the traditions, values, and culture that make CCG a national institution. In this regard, a significant event during the past year was the dedication of the Coast Guard Memorial at the Canadian Coast Guard College in Sydney, Nova Scotia, to honour those who lost their lives while carrying out their duties (see page 17).

When we became an SOA in 2005, we developed vision, mission, and values statements, which are reflected in our operational framework. Now, with several years of experience as an SOA, we will review our mission, vision, and values with a view to consolidating the foundation of a truly national Institution.

Commitment	Lead
<b>2008-2009</b>	
Refresh the CCG operational framework (vision, mission, and values).	AC, Québec

The Coast Guard uniform is an important symbol of our identity. In 2007-2008, we developed guidelines to ensure that the uniform is worn appropriately and in a consistent fashion. We will work with staff and bargaining agents to promote awareness and a common understanding of these guidelines, which will be published in 2008-2009.

Commitment	Lead
<b>2008-2009</b>	
Publish and promote a common understanding of uniform guidelines.	AC, C&A

In 2007-2008, we reinstated our internal newsletter to improve communication with employees, a need identified in the Public Service Employee Survey (PSES) of late 2005. A subsequent employee survey revealed that the newsletter was very well received by staff. The newsletter was also shared with clients, partners, and stakeholders through our advisory boards.

A new CCG website architecture was developed and implemented in 2007-2008. A survey about content and consultations with internal clients guided the creation of the new site design.

In 2007-2008, we developed a communications strategy that will lay the groundwork for a

nationally consistent, comprehensive, and co-ordinated approach to communications activities. Over the next few years, we will build on our established identity by developing co-ordinated outreach, publication, and branding activities. We will continue to improve our online presence and other communication products to better support our ongoing commitment to client consultation and excellence in service delivery. These activities will be critical to current employees and stakeholders, and they will help us attract and retain the workforce of the future.

Commitment	Lead	
<b>2008-2009</b>		
Develop Internet governance, publishing processes, and needs analysis for continuous improvement.	A-Base	DG, IBMS

### Strengthening Management

As stressed in the 2007 Report of the Auditor General and our own 2006 A-Base Review, we must work toward national consistency in our planning, reporting, and management practices.

In 2007-2008, we started to address this need. For example, we requested and received approval of a new Program Activity Architecture (PAA) in 2007-2008. The new PAA will enhance our transparency and accountability by making it clearer to clients, stakeholders, Parliamentarians, and the Canadian public what programs and services we deliver and what resources are allocated to those programs and services. In 2008-2009, key business practices, processes,

and coding will be put in place to ensure that the revised PAA is used in all applicable internal and external planning, management and reporting documents and systems. (Annex C shows the revised PAA.)

Commitment	Lead	
<b>2008-2009</b>		
Implement activity based management and budgeting based on the approved PAA: <ul style="list-style-type: none"> <li>• Train all users on the new coding structure.</li> <li>• Verify the usage of the coding developed in 2007-2008 for its alignment with the new PAA.</li> </ul>	AG A-Base	DG, IBMS

We have also developed a Performance Measurement Framework based on the new PAA to improve the reporting of results to Canadians. The framework is set out for each of the programs and services presented in Section 4. To ensure that this framework is relevant and meaningful to key stakeholders, we intend to consult with clients and stakeholders on the framework. Preliminary feedback from some stakeholders indicated that they would like measurements of effectiveness and efficiency in program and service delivery to include a greater number of industry-related performance indicators.

Commitment	Lead	
<b>2008-2009</b>		
Consult with clients and stakeholders and adjust the Performance Measurement Framework where required.	AG	DG, IBMS

Our A-Base Review identified the need to develop common data-entry protocols for our Salary Management Information System (SMIS), as well as common definitions of key CCG assets and infrastructure. We have already developed the common definitions required. A working group has established the data-entry protocols, and it has prepared a detailed report that recommends a number of procedures to ensure that the protocols are applied consistently.

Some adjustments have already been made. In 2008-2009, a national implementation team will develop a full implementation strategy, which will include the development of a procedures manual and a training schedule and related material. This work will position CCG to fully implement the new SMIS procedures in 2009-2010.

Commitment	Lead	
<b>2008-2009</b>		
Develop national SMIS procedures to ensure consistent salary data entry into SMIS.	AG A-Base	AC, Maritimes
<b>2009-2010</b>		
Implement the new SMIS procedures.	AG A-Base	DGs & ACs

The 2006 A-Base Review recommended that we review our relationship with DFO's Human Resources and Corporate Services (HRCS) to ensure that consistent levels of support are provided to CCG across the regions. In 2007-2008, we worked closely with HRCS

to identify both the service levels provided to the Agency in each CCG region and best practices in this regard.

In 2008-2009, CCG and HRCS will determine the minimum levels of service to be provided to CCG, and a new multi-year Service Level Agreement (SLA) that describes the services HRCS will provide will be finalized.

Commitment	Lead	
<p><b>2008-2009</b></p> <p>Sign a new SLA with HRCS that specifies levels of service and related performance measures.</p>	A-Base	AC, NL & HRCS

**The Canadian Coast Guard Dedicates a Memorial to Fallen Colleagues**

On Saturday, October 20, 2007, some 150 people gathered in the courtyard of the Canadian Coast Guard College in Sydney, Nova Scotia, to dedicate a memorial to those who lost their lives while serving with the Canadian Coast Guard. Since the Coast Guard was founded, in 1962, 34 men and women have died serving CCG and all Canadians.

Family members, the Honourable Loyola Hearn, Minister of Fisheries and Oceans, Deputy Minister Michelle d'Auray, Senior Associate Deputy Minister Lucie McClung, Commissioner George Da Pont, Coast Guard Management Board, local College employees, and others were present. Also on hand to pay their respects were representatives from public service unions and a wide range of services and community organizations, such as the fire department, the police, the Legion, and National Defence.



# PRIORITY 2: SUPPORT FOR CANADA'S MARITIME SECURITY AGENDA

The Canadian Coast Guard does not have a direct mandate for maritime security. We do, however, play an increasingly important role in

supporting departments that do have a direct mandate, such as the Royal Canadian Mounted Police (RCMP), the Canada Border Services Agency, Transport Canada, and Public Safety Canada.

## 2007-2008 Accomplishments

### Continued Support for the Federal Maritime Security Agenda

- Enhanced training for CCG employees involved in the Marine Security Enforcement Team (MSET) program has taken place.
- Continued to implement the DND-led coastal Marine Security Operations Centres (MSOCs).

We are committed to:

- Contributing significantly to maritime domain awareness through our Marine Communications and Traffic Services and through our on-water presence on all coasts;
- Supporting on-water enforcement and responsiveness by providing appropriate training and well-equipped crews and vessels;
- Collaborating with other agencies and departments in support of maritime security;
- Participating, as requested, with the RCMP as lead agency, in security planning and preparedness for the 2010 Olympic Games, particularly the marine component; and
- Participating extensively in interdepartmental exercises and follow-up activities relating to security and emergency events involving application of the Federal Emergency Response Plan (FERP).

## Improving CCG Support of the Federal Maritime Security Agenda

We continue to be an active participant in the broader federal maritime security agenda, and our support role has grown steadily in recent years. Including a Maritime Security activity in our new PAA clearly reflects this evolving role, as does the establishment of a dedicated on-water maritime security capacity and a vessel tracking security initiative.

In the past few years, we have received funding for our expanding support role in maritime security. Our support for this agenda does not come at the expense of other programs and services.

We will continue to participate in Government of Canada security agenda discussions and develop options for CCG support as required. For more information on this topic, including the implementation of the Automatic Identification System (AIS)/Long Range Identification and Tracking System (LRIT), see page 52, in the section on Maritime Security.

Commitment	Lead
<b>2008-2009</b>	
Continue to provide expertise in the delivery of on-water support to security as part of the Government of Canada security agenda.	Deputy Commissioner & DG, Fleet

## PRIORITY 3: FLEET RENEWAL

The goals of the Fleet Renewal priority are to:

- Procure new vessels to replace those that are beyond their useful life;
- Better maintain existing vessels through lifecycle management; and
- Manage the fleet more effectively through better operational planning and the development of clear policies for charging for services.

Our 25-year Fleet Renewal Plan provides a solid foundation for building the Government of Canada’s civilian fleet of the future. This plan takes into account evolving government priorities and service demands and allows for flexibility in responding to clients’ needs in a complex and changing environment.

### Procurement of New Vessels

The overall objective of the Fleet Renewal Plan is to have fewer, but more capable, multitaskable vessels built in a class structure<sup>1</sup> so as to allow greater flexibility to respond to changing program demands.

Since 2005, CCG has been authorized to acquire 17 new vessels at a cost of \$1.4 billion: 12 Mid-Shore Patrol Vessels, 3 Offshore Fisheries Science Vessels; 1 Offshore Oceanographic Science Vessel and 1 polar icebreaker. Twelve of these 17 vessels replace vessels that are at or near the end of their useful lives; four Mid-Shore Patrol Vessels are additions to the fleet to support enhanced maritime security activities on the Great Lakes and St. Lawrence River and 1 additional

MSPV is to support fisheries enforcement on the East Coast.

CCG’s most capable Arctic icebreaker, CCGS *Louis S. St-Laurent*, is scheduled to be decommissioned in 2017. To help strengthen Arctic sovereignty, the Government provided \$720 million in Budget 2008 to procure a new polar-class icebreaker. Compared to CCGS *Louis S. St-Laurent*, the new icebreaker will be able to operate for longer in the Arctic — three full seasons versus two — and in more difficult ice conditions. In 2008, we will focus on project planning and the development of a procurement strategy for this icebreaker.

A replacement Air Cushion Vehicle (ACV) is being acquired for Québec region. It is scheduled to be delivered by December 2008.

Commitment	Lead
<b>2008-2009</b>	
Deliver the Air Cushion Vehicle to Québec region.	DG, MCP

Despite some difficulties in the procurement process in 2007-2008, a new Request for Proposal was issued in December 2007 for the detailed design, construction, and delivery of 12 Mid-Shore Patrol Vessels. The contract for

<sup>1</sup> There are 16 CCG vessel types based on function and size. For more information on the fleet and its vessels, visit [www.ccg-gcc.gc.ca](http://www.ccg-gcc.gc.ca).

the supply of all 12 Mid-Shore Patrol Vessels is targeted to be awarded in 2008.

The target date for the delivery of the first Mid-Shore Patrol Vessel is 2009.

Commitment		Lead
<b>2008-2009</b>		
Issue contract for 12 Mid-Shore Patrol Vessels (MSPVs).	AG A-Base	DG, MCP
<b>2009-2010</b>		
Deliver the first Mid-Shore Patrol Vessel (MSPV).	AG A-Base	DG, MCP

The competitive process to acquire three Offshore Fisheries Science Vessels is to be conducted in 2008-2009. The first new Offshore Fisheries Science Vessel is targeted for delivery in 2011.

Commitment		Lead
<b>2008-2009</b>		
Issue competitive RFP for 3 Offshore Fisheries Science Vessels (OFSVs).	AG A-Base	DG, MCP

In 2008-2009, we will carry out the project-definition phase activities to develop the Offshore Oceanographic Science Vessel conceptual design and we will also develop the procurement strategy.

Commitment		Lead
<b>2008-2009</b>		
Conduct project-definition activities and establish the procurement strategy for the Offshore Oceanographic Science Vessel (OOSV).	AG A-Base	DG, MCP
<b>2009-2010</b>		
Issue a competitive RFP for the Offshore Oceanographic Science Vessel (OOSV).	AG A-Base	DG, MCP

### Improved Maintenance of the Existing Fleet

See page 58, in the section Improved Maintenance of the Existing Fleet, for detailed information on improving the maintenance of the existing fleet.

### Fleet Operational Readiness

The Fleet Operational Readiness concept was developed in 2006 to provide a framework to resolve several issues raised by the Auditor General in past reports, such as:

- Allowing for a long-term planning and funding horizon for the fleet; and
- Service accords with Government of Canada clients and the corresponding business model.

The Fleet Operational Readiness concept centres on ensuring that CCG has the means and the ability to respond to the on-water and marine-related needs of Canadians and the Government of Canada. This not only includes Fleet capacity requirements *but also* the resources and decision-making support necessary to respond to on-water and marine-related needs now and in the future.

### Fleet Operational Readiness

- Amended the PAA to replace Fleet Services with a new activity, Coast Guard Fleet Operational Readiness.
- Developed Service Level Agreements with clients external to DFO.
- Developed the concept of fleet mission readiness.
- Developed an enhanced planning process that includes improved integration of operational, technical, and investment (major capital) planning to ensure alignment with the business planning cycle.
- Published the first *Fleet Annual Report* in November 2007.

Some costs of having a fleet ready and able to go to sea were previously distributed among different Coast Guard programs, as well as DFO's Science and Conservation and Protection programs. As a result, the operational cost of the CCG fleet was not apparent. With the introduction of the readiness concept and the development of the corresponding business framework (including charging and business rules), the financial resources required to support an operationally ready fleet will be much clearer to program clients. In 2008-2009, we will work with our clients to finalize the business framework to implement improved Service Level Agreements with internal clients.

We also plan to implement a Mission Readiness framework which will define a more systematic approach to preparing to carry out missions and respond to un-forecasted events will facilitate a more readiness-oriented tasking environment in line with requirements and expectations of a “whole of government” approach.

Commitment		Lead
<b>2008-2009</b>		
Implement mission readiness for fleet.		DG, Fleet
Implement an improved Service Level Agreement with internal non Coast Guard clients based on new funding and charging models.	AG	DG, Fleet

## PRIORITY 4: CONTINUED IMPLEMENTATION OF MODERNIZATION INITIATIVES

22

It will always be a CCG priority to investigate and implement new ways of doing business that allows us to realize greater efficiencies and bolster our results for Canadians. In this regard, specific initiatives over the next few years will include Aids to Navigation of the 21<sup>st</sup> Century (AToN21) and the improved maintenance of existing shore-based infrastructure.

- We drafted eight business cases assessing various alternatives for providing our aids to navigation services.
- We completed an initial study on the status of our paint facilities. The paint facilities business case is not yet complete.
- We updated our national directives governing the contracting out of floating and fixed aids; this will guide further work in this area.

### 2007-2008 Accomplishments

#### Aids to Navigation of the 21<sup>st</sup> Century

- Converted an additional 248 lighted buoys to Light Emitting Diode (LED) technology; 89% are now converted.
- Converted an additional 95 buoys to plastic material; 74.2% of all buoys are now made of plastic.
- Developed a business case to analyze the conversion of medium-size steel buoys to plastic- buoys.
- Completed a draft e-Navigation vision for CCG that is consistent with international definitions.

#### Integrated Technical Services

##### Strategy Project

- Completed the Integrated Technical Services Strategy Project.

#### Vessel Maintenance Management Review

- Completed the Vessel Maintenance Management Review.

### Aids to Navigation of the 21<sup>st</sup> Century

The AToN21 initiative reaffirms our commitment to innovation and continuous improvement, while maintaining our strong tradition of service and safety.

The AToN21 initiative considers the changing navigational needs of users in Canadian

waterways, ensures the right mix of aids to navigation in those waterways, and lays the foundation for an efficient and effective aids to navigation service.

AToN21 also commits us to continue to reassess service-delivery options for aids to navigation with the specific view of providing Canadians with an effective and efficient service. We realized considerable progress on this front in 2007-2008:

In 2007-2008, we also completed the development of national maintenance standards and technical specifications in several areas, specifically for towers, fixed aids equipment, and floating aids. This will provide for an orderly implementation of any new and innovative technologies and will go a long way to improving the reliability of Canada's aids to navigation.

We have converted as many of our steel buoys to plastic and our lighted buoys to LED technology as current technology permits. Continued conversion therefore depends on the ability of new technologies to convert more challenging aids, such as larger aids and those in harsh climates. Promising technology such as four-season lighted ice spars is being tested in the St. Lawrence River.

It is now standard practice within CCG to consider new technologies in support of our aids to navigation service. To that end, we are modernizing our aids to navigation standards and directives to ensure new technologies are introduced to meet our operational requirements.

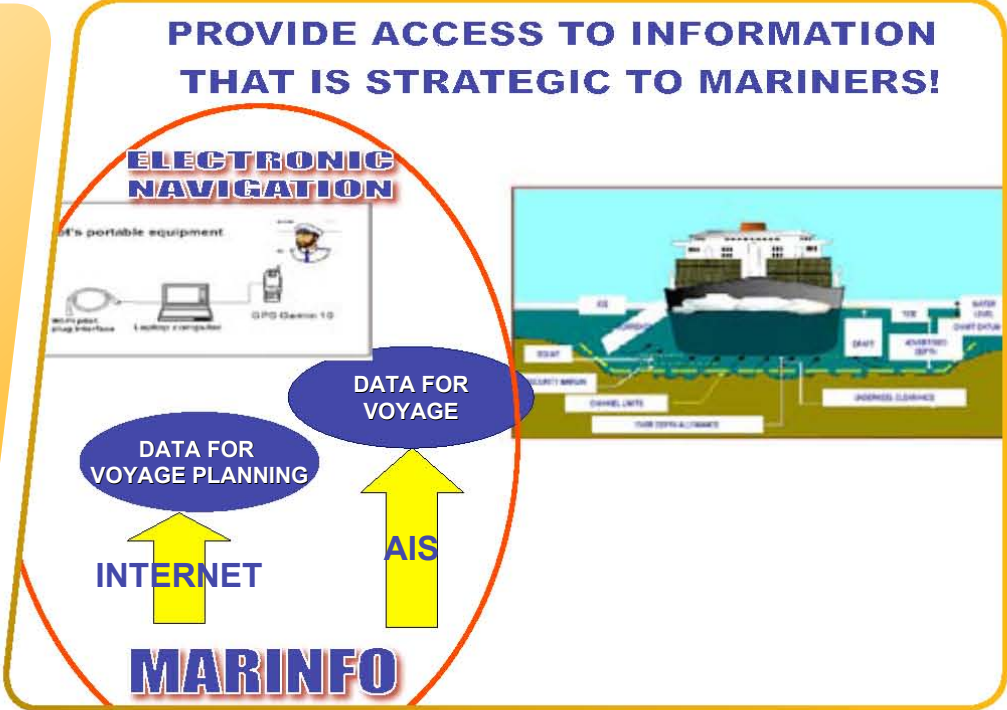
As we modernize our aids to navigation directives, we will consider significant change initiatives that could affect the provision of aids to navigation. Among such change initiatives are the use of daybeacons on minor lighted aids and the redefinition of the guiding principles of sound signal, to name a few. We will simultaneously initiate a review of the methodology that guides the selection of the mix of aids to use in specific circumstances. Consultations with affected mariners will take place before we make any changes.

As ATon21 efforts continue, we will initiate work in response to increased demands for e-Navigation services. The concept of

e-Navigation is not new, but technological advances, coupled with the success of pilot projects, clearly demonstrate the potential and the need for this service.

Implementing e-Navigation in a coordinated and organized manner in Canada could significantly enhance safety, have positive economic effects, and increase environmental protection. As the agency responsible for the delivery of maritime services, we are well positioned to play a leadership role for Canada on this front. Integral to the success of e-Navigation will be the ability to meet client demands, modernize our services, and adapt our business to the new reality of better informed mariners.

**Success of e-Navigation Pilot Project on the St. Lawrence River**  
 With our shipping industry partners, we have successfully implemented an e-Navigation pilot project that resulted in the provision of key navigational information through portable computers to pilots operating on the St. Lawrence River. This new system provides CCG clients operating on the St. Lawrence River with an innovative tool by providing them with important information. This innovative tool could significantly increase safety, have positive economic effects, as well as increase environmental protection. In conducting this pilot project, Canada has become a world-leader in the implementation of the e-Navigation concept.



We have prepared a draft vision and strategy for e-Navigation, and we will be in a position to share it with clients and stakeholders in 2008-2009.

As for the LORAN-C navigation system, we will continue to actively monitor the international community about its future before making any decisions in this area.

Commitment	Lead	
<b>2008-2009</b>		
Complete the modernization of five additional aids to navigation directives for a total of 10.	AG	DG, MS
Develop a business case on the effectiveness and efficiency of CCG paint facilities.	AG	DG, ITS
Engage the shipping industry through the advisory bodies about e-Navigation vision, strategy, and next steps.	AG	DG, MS
Develop guidelines for synthetic moorings and related equipment standardization (for anchors exceeding 272 kg but not more than 1136kg) in preparation for the introduction of Life Cycle Management of these assets.	AG	DG, ITS
<b>2009-2010</b>		
Complete the modernization of the nine remaining aids to navigation directives.	AG	DG, MS

### Vessel Maintenance Review

The Vessel Maintenance Management Review (VMMR) Project was established as a key deliverable in response to findings in the February 2007 Report of the Auditor General. The report identified weaknesses in our approach to maintenance, such as the absence of documentation on maintenance practices and procedures. The Auditor General noted that these weaknesses contributed to equipment failure on vessels and led to both costly repairs and lengthy periods when vessels were out of service.

The VMMR project, which was completed in 2007-2008, provides options and recommendations to assist in the transition to and implementation of a corporate-wide maintenance management system, and a practical evaluation of the Coast Guard’s organizational, structural and cultural capacity to achieve this transition.

Commitment	Lead	
<b>2008-2009</b>		
Begin to address the findings of the Vessel Maintenance Management Review. The initial focus is on:		
• Clarifying roles, responsibilities, and accountability;	AG	DG, ITS
• Creating an accessible bank of current maintenance policies and procedures;	AG	DG, ITS
• Assessing options for increasing the number of marine engineers both on vessels and on-shore; and	AG	DG, Fleet
• Beginning to develop a program management framework for maintenance activities.	AG	DG, ITS

## PRIORITY 5: EFFECTIVE MANAGEMENT OF OUR WORKFORCE AND WORKPLACE

In 2008, we introduced our first-ever, multi-year Strategic Human Resources Plan ([www.ccg-gcc.gc.ca](http://www.ccg-gcc.gc.ca)). The purpose of this plan is to provide managers with a national-level analysis of our workforce and to ensure we have the staff we need to meet our evolving requirements.

In line with government-wide priorities and the efforts of the Clerk of the Privy Council to renew the Public Service of Canada, our plan focuses on four human resources strategies:

- Attract and retain a skilled workforce.
- Improve the diversity of our workforce.
- Focus on training, learning, and career development.
- Improve national consistency in human resources management.

All four strategies will be undertaken with a view to addressing the recommendations of the Public Service Employee Survey (PSES), the 2007 Report of the Auditor General, and our 2006 A-Base Review. PSES is particularly vital, because it reflects the views and needs of our employees. We will also continue to build collaborative working relationships with relevant bargaining agents to ensure that ongoing management discussions consider employee perspectives and interests.

### Attract and Retain a Skilled Workforce

CCG has a professional, dedicated workforce. But high departure rates are anticipated because of retirements, and today's labour market is extraordinarily competitive. It is therefore essential that we focus on recruitment and the transfer of knowledge. Targeted measures will begin for at-

#### 2007-2008 Accomplishments

##### HR and Succession Planning

- Published a strategic human resources plan, including national priorities, accountabilities, employment equity commitments, and succession planning strategies for at-risk groups.
- Established national Coast Guard Human Resources and Coast Guard Employment Equity working groups; the Employment Equity group held a two-day national workshop to support planning activities.

##### Standard Organizational Structure

- Developed a standard regional organizational structure.

##### Development of People

- Published Coast Guard Educational Leave Guidelines.
- Achieved a completion rate of 70% for employees' personal learning plans.
- Launched the Leadership Development Pilot Program, which includes developmental positions in each of the five regions.

##### Operational Issues

- Developed a national performance review system.
- Developed strategic frameworks for collective bargaining.

risk groups: Ships' Officers, Ships' Crew, Marine Communications and Traffic Services Officers, Engineers and Electronics Technologists.

Here are some of the key steps we are taking:

- We will continue to adjust our intake of officer cadets at the Canadian Coast Guard College to offset the expected attrition rate among Ships' Officers.
- We will launch a pilot Seagoing Personnel Career Development Initiative for Ships' Officers in 2008-2009. If this pilot is effective, it may become a permanent Coast Guard program.
- We are investigating opportunities to re-establish the Ships' Crew Officer Training Program.

- The Director General of Maritime Services and the Executive Director of the Canadian Coast Guard College will lead a project to develop a refresher course and an implementation training strategy for existing MCTS Officers in 2009-2010.
- We will develop and implement an Engineering Professional Development Program to attract needed experts.
- We will be reviewing the Marine Electronics Development (MELDEV) Program<sup>2</sup> to ensure its ongoing success.

Commitment		Lead
<b>2008-2009</b>		
Implement a pilot Seagoing Personnel Career Development Initiative	AG	DG, Fleet
<b>2009-2010</b>		
Develop an Engineering Professional Development Program.	AG	DG, ITS & DG, MCP

### Improve the Diversity of Our Workforce

Coast Guard is committed to being a more representative organization. Employment equity initiatives help us meet business needs while ensuring that we employ the best talent available. Thanks to recruitment and retention efforts, the composition of our workforce, while not yet representative, is improving relative to labour market availability. There are, however, still some significant gaps, and management commitment is the key to closing them.

We will also be implementing qualitative and quantitative commitments under the Department of Fisheries and Oceans Employment Equity Management Action Plan.

Commitment	Lead
<b>2008-2009</b>	
Launch a network of women who represent Ships' Officers and Ships' Crew.	DG, Fleet
<b>2009-2010</b>	
Expand CCG's participation in the Partners for Workplace Inclusion Program in cities where it has offices (Vancouver, Winnipeg, and St John's).	ACs
Develop Bona Fide Occupational Requirements for vision for seagoing positions.	DG, Fleet

### Focus on Training, Learning, and Career Development

To mitigate the risks associated with pending retirements and an increasingly competitive labour market, we will launch a national training strategy in 2008. The strategy will ensure consistent educational standards, maximize the use of common national training resources and leverage best practices across the country.

The Canadian Coast Guard College will also be taking steps to ensure that its curriculum meets current and future requirements and supports national interests. The Leadership Development Pilot Program will be offered in five regions between 2008 and 2010. If the program is successful, it may be expanded to include the College and national headquarters.

<sup>2</sup> This is an on-the-job training and development opportunity to help participants achieve technical proficiency.

We will continue our efforts to ensure that all employees develop individual learning plans in consultation with their supervisors.

Commitment		Lead
<b>2008-2009</b>		
Consult with managers, employees and bargaining agents on the draft Learning and Development framework, vision, and proposed action plan.	PSES	AC, Pacific
All CCG employees will have an individual learning plan		DGs and ACs
<b>2009-2010</b>		
Evaluate the Canadian Coast Guard Leadership Development Pilot Program and determine next steps.		AC, NL

## Improve National Consistency in Human Resources Management

We have taken two key steps to improve the national consistency of human resources management — we developed a standard regional organizational structure, and we introduced a national performance review system we developed in 2007-2008.

We will release the standardized regional organizational structure in 2008, after information sessions with the bargaining agents, and we will implement the new structure in phases over the next two or three years. It is important to note that developing this structure is *not* about reducing the number of employees.

### Commissioner's Commendation Awarded to Patrick Fraser

Patrick Fraser received a Commissioner's Commendation in the Values and Ethics category for his generous donation of time over many years to aid and benefit others. From leading the United Way campaign in the National Capital Region to organizing National Public Service Week, he is always willing to lend a helping hand. By doing so, he has demonstrated devotion to CCG and the public service, and he has promoted both CCG values and public service values. Patrick demonstrates the highest standards of teamwork, collegiality, collaboration, and professionalism in all he does.



Rather, it is about standardizing our organization across the country where it makes sense. Parts of the organization may in fact expand over the next few years.

The continued development of national model work descriptions will support this organizational consistency across regions by standardizing core competencies.

We started the implementation of our national performance review system in April 2008. The system will ensure consistency in the completion of annual employee performance reviews and personal learning plans.

Commitment		Lead
<b>2008-2009</b>		
Begin the migration to standard regional organizational structures.	AG A-Base PSES	DGs & ACs
Complete the development of National Model Work Descriptions for technical and seagoing positions.	AG A-Base PSES	DG, Fleet & DG, ITS
Implement the CCG Performance Review System.		DGs & ACs
<b>2009-2010</b>		
Continue the migration to standard regional organizational structures.	AG A-Base PSES	DGs & ACs

### Farewell, Charles

After some 40 years of public service — all of it with this organization — Charles Gadula is retiring. To be sure, we are happy to know that he and his family will enjoy some well-deserved time for new pursuits. But we will miss him sorely.

Charles Joseph Gadula enrolled in the Coast Guard College in 1966, graduating four years later as a Navigational Officer. Over the course of his impressive career, Charles has served both ashore and afloat in a multitude of postings in virtually every region of Canada. His vessel experience was earned on buoy tenders, search and rescue vessels, icebreakers and hovercraft. His shore-based assignments appear to have mirrored the breadth of his on-water career, and run the gamut from Director of Search and Rescue, Regional Director of Coast Guard's Central and Arctic Region, and Director General of both Fleet and Maritime Services, to Acting Deputy Commissioner.

Many people throughout the organization have sought and valued his counsel on countless issues. He epitomizes the character of so many in the Coast Guard: fierce loyalty, refreshing honesty, and a wealth of corporate knowledge. Known to many simply as 'Charlie', he is always approachable, always optimistic, always ... there.

The Coast Guard will miss you, Charles.



# (4) WHAT WE DO EVERY DAY

This section describes the day-to-day activities related to the programs and services Coast Guard provides to Canadians. It also highlights areas where significant investment is occurring and notes key initiatives aimed at improving the delivery of programs and services.

The section starts with some key information about our financial and human resources. Two financial tables show the estimated cost by Program Activity Architecture (PAA) sub-activity<sup>3</sup> of providing CCG services to Canadians, and they provide a snapshot of each sub-activity's cost structure. This establishes a financial context for the information that follows. A third table presents summary information on the number of CCG employees.

**On an average day, the Canadian Coast Guard:**

- Saves eight lives;
- Assists 55 people in 19 search and rescue cases;
- Services 55 aids to navigation;
- Handles 1,127 marine radio contacts;
- Manages 2,346 commercial ship movements;
- Escorts four commercial ships through ice;
- Carries out 12 fisheries patrols;
- Supports three hydrographic missions;
- Supports eight scientific surveys;
- Deals with three reported pollution events; and
- Surveys five kilometres of navigation channel bottom.

The rest of Section 4 describes, for each PAA sub-activity:

- The programs and services we provide every day. The focus is on the services we provide and the results we seek to achieve. The indicators and targets are all drawn from our Performance Measurement Framework.
- The costs of providing our programs and services to Canadians. This information is a more detailed version of the financial data presented at the start of this section.
- The key initiatives we are undertaking. This includes year-by-year commitments for each initiative, and it specifies the lead for each initiative.

In addition to the day-to-day operations discussed in this section, CCG manages five key priorities. For information on these priorities, see Section 3.

<sup>3</sup> See Annex C for an overview of the PAA

## OVERVIEW OF FINANCIAL AND HUMAN RESOURCES

30

Table 1 presents estimates of planned spending on salary, other operations and maintenance, and capital to provide CCG services to Canadians in 2008-2009. These costs are provided for our 10 PAA sub-activities.

*Table 1: CCG Budget Allocation Planned Spending by PAA Sub-activity, 2008-2009 (thousands of dollars)*

PAA Sub-activity	Salary	Other Operations and Maintenance (O&M)	Total Operating	Major Capital
Aids to Navigation Services	12,284.6	10,182.6	<b>22,467.2</b>	-
Waterways Management Services	2,902.3	10,139.7	<b>13,042.0</b>	-
Marine Communications and Traffic Services	32,893.5	7,734.7	<b>40,628.2</b>	-
Icebreaking Services	950.9	17,553.1	<b>18,504.0</b>	-
Search and Rescue Services	10,724.8	15,419.6	<b>26,144.4</b>	-
Environmental Response Services	5,853.8	3,950.5	<b>9,804.3</b>	-
Maritime Security	4,155.5	5,291.0	<b>9,446.5</b>	-
Coast Guard Fleet Operational Readiness	167,744.7	65,327.0	<b>233,071.7</b>	147,945.8
Lifecycle Asset Management Services	59,191.9	28,009.0	<b>87,200.9</b>	50,426.7
Canadian Coast Guard College	6,488.9	6,476.5	<b>12,965.4</b>	-
<b>Total</b>	<b>303,191.0</b>	<b>170,083.7</b>	<b>473,274.6</b>	198,372.5

Like Table 1, Table 2 presents estimates of the cost of delivering CCG programs and services, but with the operating costs of fleet operational readiness and lifecycle asset management allocated to the other eight PAA sub-activities. Also included in this table is the cost of providing services to non-CCG clients such as DFO Science and the Northwest Atlantic Fisheries Organization.

*Table 2: CCG Service Costs by PAA Sub-activity, 2008-2009 (thousands of dollars)*

PAA Sub-activity	Direct Program Operating	Allocation of Operating From:		Total Service Cost (Operating)
		Coast Guard Fleet Operational Readiness	Lifecycle Asset Management Services	
Aids to Navigation Services	22,467.2	37,200.4	36,774.6	<b>96,442.2</b>
Waterways Management Services	13,042.0	946.6	750.8	<b>14,739.4</b>
Marine Communications and Traffic Services	40,628.2	1,290.2	17,612.3	<b>59,530.7</b>
Icebreaking Services	18,504.0	38,645.6	10,282.7	<b>67,432.4</b>
Search and Rescue Services	26,144.4	84,568.2	18,002.2	<b>128,714.8</b>
Environmental Response Services	9,804.3	825.7	750.6	<b>11,380.5</b>

PAA Sub-activity	Direct Program Operating	Allocation of Operating From:		
		Coast Guard Fleet Operational Readiness	Lifecycle Asset Management Services	Total Service Cost (Operating)
Maritime Security	9,446.5	14,308.3	2,831.6	<b>26,586.4</b>
Canadian Coast Guard College	12,965.4	-	196.1	<b>13,161.5</b>
<b>Total Coast Guard Program</b>	<b>153,002.0</b>	<b>177,785.0</b>	<b>87,200.9</b>	<b>417,987.9</b>
Science	N/A*	32,776.7	-	<b>N/A</b>
Conservation and Protection	N/A	15,544.5	-	<b>N/A</b>
Northwest Atlantic Fisheries Organization	N/A	6,965.6	-	<b>N/A</b>
<b>Total</b>	<b>153,002.0</b>	<b>233,071.7</b>	<b>87,200.9</b>	<b>473,274.6</b>

\* Not applicable.

For more financial information on CCG, see Section 5.

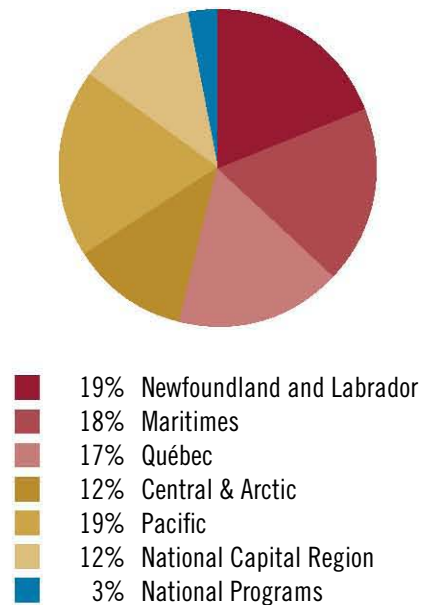
Table 3 presents summary information on the total number of CCG Full-time Equivalents (FTE's).

**Table 3: Total Number of CCG Full-time Equivalents (FTEs) Utilization by PAA Sub-activity**

Service*	O&M FTEs	Major Capital FTEs	Total FTEs
Aids to Navigation Services	249.5	-	<b>249.5</b>
Waterways Management Services	35.1	-	<b>35.1</b>
Marine Communications and Traffic Services	413.8	-	<b>413.8</b>
Icebreaking Services	11.6	-	<b>11.6</b>
Search and Rescue Services	125.8	-	<b>125.8</b>
Environmental Response Services	91.7	-	<b>91.7</b>
Maritime Security	11.4	-	<b>11.4</b>
CG Fleet Operational Readiness	2,658.1	43.9	<b>2,702.0</b>
Lifecycle Asset Management Services Allocation	863.6	61.7	<b>925.3</b>
Coast Guard College	176.1		<b>176.1</b>
<b>Total</b>	<b>4,636.7</b>	<b>105.6</b>	<b>4,742.3</b>

\* The total number of FTEs for the Coast Guard was allocated to the sub-activities based on the total distribution of salary. This total differs from the figures reported in Annex A because it is a measure of employee utilization during the year that accounts for differences in tenure; by contrast, the total number of employees in Annex A is a count of employees at a given point in time.

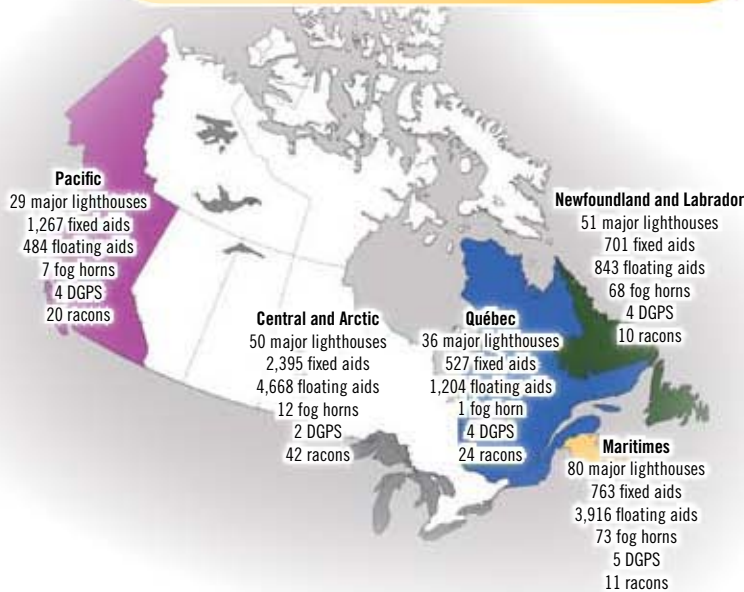
**Figure 1: CCG Budget Allocations by Region**



# SERVICES BY PAA SUB-ACTIVITY

## In 2007-2008, Aids to Navigation Services...

- Conducted levels of service reviews of the aids to navigation system in consultation with marine users.
- Continued the development of four-season lighted buoys that can operate year-round between Montreal and Traverse Nord.



## Aids to Navigation

The Aids to Navigation Services program involves the provision of short-range marine aids numbering 17,000-plus, including visual aids (lighthouses and buoys) and sound aids (fog horns), as well as radar aids (reflectors and beacons) and long-range marine aids, including electronic aids such as the Differential Global Positioning System (DGPS). The benefit to mariners is safe, accessible and effective vessel transit in Canadian waters. This program is delivered, in part, with the support of CCG's operationally capable and ready fleet.

### Aids to Navigation Services

Provides these services...	Measured this way...*	With these targets...
<ul style="list-style-type: none"> <li>• Operational aids to navigation systems**</li> </ul>	<ul style="list-style-type: none"> <li>• Reliability of short -range aids to navigation</li> <li>• Reliability of long-range aids to navigation (Signal availability of DGPS)</li> </ul>	<ul style="list-style-type: none"> <li>• 99% (over a three-year average)</li> <li>• Signal availability of at least 99%</li> </ul>
<ul style="list-style-type: none"> <li>• Navigation safety information**</li> </ul>	<ul style="list-style-type: none"> <li>• Timely publication of Notices to Mariners (NOTMAR)</li> </ul>	<ul style="list-style-type: none"> <li>• 100% of the 12 NOTMARs published at the end of each month</li> </ul>



To achieve this result...	Measured this way...*	With these targets...
<ul style="list-style-type: none"> <li>• Aids to Navigation systems and information facilitate safe and expeditious movement of maritime traffic</li> </ul>	<ul style="list-style-type: none"> <li>• Number of ships other than pleasure crafts involved in a marine accident due to striking</li> </ul>	<ul style="list-style-type: none"> <li>• Maintain a five-year annual average; 2001-2005 average for strikings = 80</li> </ul>

\* These are the performance indicators in the CCG Performance Measurement Framework.

\*\* In accordance with Levels of Service and Service Standards ([www.ccg-gcc.gc.ca](http://www.ccg-gcc.gc.ca)).

**Table 4: Aids to Navigation Services Resource Profile, 2008-2009**  
(thousands of dollars)

Region	Salary	O&M	Total
Newfoundland and Labrador*	3291.9	1,766.8	<b>5,058.7</b>
Maritimes	1033.9	2,425.9	<b>3,459.8</b>
Québec	651.7	801.3	<b>1,453.0</b>
Central and Arctic	969.7	1,814.6	<b>2,784.3</b>
Pacific*	3972.2	2,198.1	<b>6,170.3</b>
National Programs**	-	124.4	<b>124.4</b>
National Capital Region (NCR)	2,365.2	1,051.5	<b>3,416.7</b>
<b>Direct Program Total</b>	<b>12,284.6</b>	<b>10,182.6</b>	<b>22,467.2</b>
Coast Guard Fleet Operational Readiness Allocation	26,773.6	10,426.8	<b>37,200.4</b>
Lifecycle Asset Management Services Allocation	24,962.6	11,812.0	<b>36,774.6</b>
<b>Total Service Cost</b>	<b>64,020.8</b>	<b>32,421.4</b>	<b>96,442.2</b>

\* Salary differences between regions are largely due to variations in activities related to lighthouses. Of 246 Canadian major lighthouses, 51 are staffed. CCG maintains 23 staffed lighthouses in the Newfoundland and Labrador Region, 27 in the Pacific Region, and, for sovereignty reasons, 1 in the Maritimes Region. Canada is one of the few countries that continue to staff lighthouses.

\*\* National Programs consists of \$124.4K in research and development.

### Reinvestment in the Asset Base

Aids to Navigation Services capital projects focus on the following:

- Ensuring CCG compliance with various codes and standards, including health and safety codes and Canadian Standards Association (CSA) standards;
- Addressing potential liability issues and general mariner safety; and

- Facilitating safe access and navigation in Canadian waters.

We expect to spend \$13.6 million in 2008-2009 on capital projects related to these services. For a full description of these capital expenditures, see Annex B.

### Waterways Management

The Waterways Management program enables CCG to help ensure safety and accessibility of waterways by: providing channel dredging in the Great Lakes

connecting channels under a Canada-U.S. agreement; managing dredging of the St. Lawrence River on a cost-recovery basis; monitoring channel bathymetry; contributing

to international control of water levels in the St. Lawrence River; and operating the Canso Canal. The program also enables CCG to help ensure safe passage by providing users with marine safety information, including water-depth forecasts. Waterways Management sustains navigable channels, reduces marine navigation risks and supports environmental protection. This program is delivered, in part, with the support of CCG's operationally capable and ready fleet.

#### In 2007-2008, Waterways Management Services...

- Monitored bottom conditions in 760 kilometres of Canada's main shipping channels.
- Provided users with information on bottom conditions, water levels, and forecasts of water levels for four of Canada's busiest waterways.

### Waterways Management Services

Provides these services...	Measured this way...*	With these targets...
<ul style="list-style-type: none"> <li>Dredging of the Canadian portions of the Great Lakes connecting Channels and St. Lawrence River maintained and managed **</li> </ul>	<ul style="list-style-type: none"> <li>Percentage and actual number of kilometers of channel dredged vs planned</li> </ul>	<ul style="list-style-type: none"> <li>100%</li> </ul>
<ul style="list-style-type: none"> <li>Main commercial shipping channel bottoms surveyed**</li> </ul>	<ul style="list-style-type: none"> <li>Actual number of kilometers of channels surveyed vs planned</li> </ul>	<ul style="list-style-type: none"> <li>100%</li> </ul>
<ul style="list-style-type: none"> <li>Water Level Forecasts **</li> </ul>	<ul style="list-style-type: none"> <li>Timely provision of water level forecast</li> </ul>	<ul style="list-style-type: none"> <li>Forecasts 100% on time</li> </ul>



To achieve this result...	Measured this way...*	With these targets...
<ul style="list-style-type: none"> <li>Waterways management and information help ensure accessibility of main commercial shipping channels and contribute to their safe use**</li> </ul>	<ul style="list-style-type: none"> <li>Number of ships other than pleasure crafts involved in a marine accident due to a grounding</li> </ul>	<ul style="list-style-type: none"> <li>Maintain a five year annual average; 2001-2005 average for groundings = 111</li> </ul>

\* These are the performance indicators in the CCG Performance Measurement Framework.

\*\* In accordance with Levels of Service and Service Standards ([www.ccg-gcc.gc.ca](http://www.ccg-gcc.gc.ca)).

**Table 5: Waterways Management Services Resource Profile, 2008-2009 (thousands of dollars)**

Region	Salary	O&M	Total
Newfoundland and Labrador	-	23.8	<b>23.8</b>
Maritimes	831.7	970.3	<b>1,802.0</b>
Québec*	1,089.0	3,705.4	<b>4,794.4</b>
Central and Arctic	82.6	1,348.3	<b>1,430.9</b>
Pacific	250.2	914.7	<b>1,164.9</b>
National Programs	-	-	-
NCR	648.9	3,177.2	<b>3,826.1</b>
<b>Direct Program Total</b>	<b>2,902.3</b>	<b>10,139.7</b>	<b>13,042.0</b>
Coast Guard Fleet Operational Readiness Allocation	681.3	265.3	<b>946.6</b>
Lifecycle Asset Management Services Allocation	509.6	241.1	<b>750.8</b>
<b>Total Service Cost</b>	<b>4,093.2</b>	<b>10,646.2</b>	<b>14,739.4</b>

\* Includes \$4,600.0K for dredging that is fully recovered through vote-netted revenue.

### Key Initiative

#### Post-Panamax Study, St. Lawrence River

Given the increase in marine traffic that is widely expected to occur in the near future, Canadian ports are seeking ways to increase their competitiveness. Shipping industry representatives have informed us of their plans to use new-generation post-Panamax<sup>4</sup> vessels, especially on the restricted channel of the St. Lawrence River between Québec City and Montreal. Post-Panamax vessels do not meet current CCG guidelines for allowing vessels to travel in both directions in some sections of the shipping channel.

<sup>4</sup> Panamax vessels are those whose dimensions are such that they can fit through the locks of the Panama Canal. Post-Panamax vessels are larger than Panamax vessels, and they therefore cannot fit through the locks of the Panama Canal.

In partnership with Transport Canada (TC), the Laurentian Pilotage Authority and shipping industry representatives, we are conducting a risk assessment to determine the minimum conditions that must be met for post-Panamax vessels to be allowed to travel in both directions in the St. Lawrence between Québec City and Montreal. The purpose of the study is to identify any additional conditions and restrictions (maximum width, meeting speed, one-ways, etc.) that are required to ensure safe navigation and environmental protection, while limiting the impact on waterway users and riverside communities.

Commitment	Lead
<b>2008-2009</b>	
Participate with Transport Canada, Laurentian Pilotage Authority and Industry in a risk analysis to aid in decision to authorize wide-beam vessels to navigate the St. Lawrence River and develop recommended operational conditions and restrictions for the vessels	DG, MS

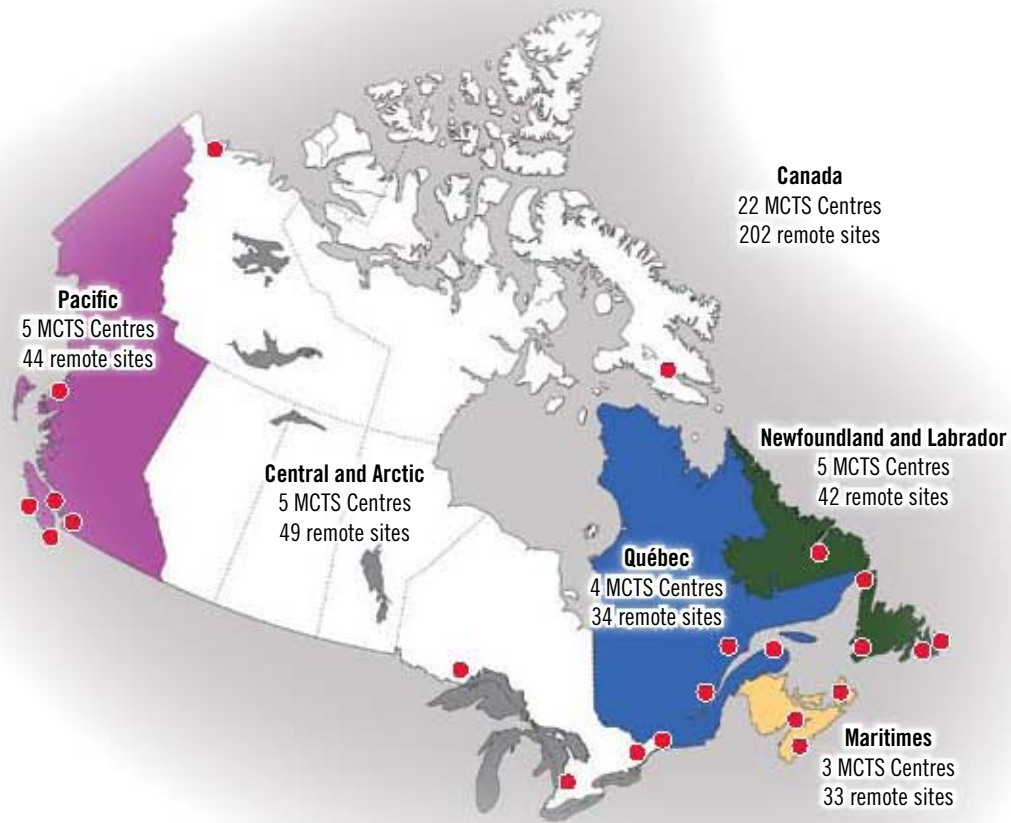
## Marine Communications and Traffic Services

The Marine Communications and Traffic Services (MCTS) program provides marine distress and safety communications, conducts vessel screenings, regulates vessel traffic in selected Canadian waters, provides pertinent information and public correspondence service on a 24/7 basis. Through the MCTS program, search and rescue responders have increased knowledge of persons or vessels in distress, mariners in distress have a means to request assistance, mariners have relevant accurate and timely information and CCG has enhanced information on vessel transit for maritime security domain awareness. MCTS contributes to the safety of life at sea, the protection of the marine environment, the efficient movement of shipping in waterways and the provision of essential information to mariners.

The MCTS is delivered through a network of 22 MCTS Centres and supporting remote sites (radio towers, radar sites, etc.).

### In 2007-2008, MCTS...

- Implemented a Very High Frequency/Digital Selective Calling (VHF/DSC) safety service on the Great Lakes.
- Completed the first steps in the national recruitment campaign for MCTS trainees.
- Implemented Coast Guard responsibilities for vessel traffic services as required by the *Canada Shipping Act, 2001*.



### Marine Communications and Traffic Services

Provides these services...	Measured this way...*	With these targets...
<ul style="list-style-type: none"> <li>• Responses to distress and safety communications**</li> </ul>	<ul style="list-style-type: none"> <li>• MCTS Centres operations availability <i>NOTE: radio channels are continuously monitored</i></li> </ul>	<ul style="list-style-type: none"> <li>• 24/7 availability for MCTS Centres and operators; 100 %</li> </ul>
<ul style="list-style-type: none"> <li>• Screening and issuance of Vessel / traffic clearances to ships of 500 tons - gross tonnage or more entering Canadian waters (Great Lakes not included)**</li> </ul>	<ul style="list-style-type: none"> <li>• Number of clearances</li> </ul>	<ul style="list-style-type: none"> <li>• Benchmark = 15,200</li> </ul>
<ul style="list-style-type: none"> <li>• Marine safety information**</li> </ul>	<ul style="list-style-type: none"> <li>• Number of Notships issued</li> </ul>	<ul style="list-style-type: none"> <li>• Benchmark = 13,000</li> </ul>



To achieve this result...	Measured this way...*	With these targets...
<ul style="list-style-type: none"> <li>• Safety of life at sea, efficient movement of shipping, and provision of essential information to mariners</li> </ul>	<ul style="list-style-type: none"> <li>• Number of ships other than pleasure crafts involved in a marine accident due to a collision</li> </ul>	<ul style="list-style-type: none"> <li>• Maintain a five year annual average; 2001-2005 average = 17</li> </ul>

\* These are the performance indicators in the CCG Performance Measurement Framework.

\*\* In accordance with Levels of Service and Service Standards ([www.ccg-gcc.gc.ca](http://www.ccg-gcc.gc.ca)).

**Table 6: Marine Communications and Traffic Services Resource Profile, 2008-2009 (thousands of dollars)**

Region	Salary	O&M	Total
Newfoundland and Labrador	5,230.7	830.4	<b>6,061.1</b>
Maritimes	5,525.6	613.3	<b>6,138.9</b>
Québec	5,947.8	416.3	<b>6,364.1</b>
Central and Arctic*	4,425.4	1,743.3	<b>6,168.7</b>
Pacific**	8,917.5	1,943.8	<b>10,861.3</b>
National Programs***	343.0	1,080.0	<b>1,423.0</b>
NCR	2,503.5	1,107.6	<b>3,611.1</b>
<b>Direct Program Total</b>	<b>32,893.5</b>	<b>7,734.7</b>	<b>40,628.2</b>
Coast Guard Fleet Operational Readiness Allocation	928.6	361.6	<b>1,290.2</b>
Lifecycle Asset Management Services Allocation	11,955.2	5657.1	<b>17,612.3</b>
<b>Total Service Cost</b>	<b>45,777.3</b>	<b>13,753.4</b>	<b>59,530.7</b>

\* Central and Arctic Region O&M resources are higher than those in the other regions because of the Northern housing allowance and travel costs to the North.

\*\* Pacific Region salary dollars are higher because of the need to staff more MCTSOs in response to the region's marine traffic volume.

\*\*\* National Programs consists of \$1,423.0K in the Automatic Identification System project.

## Key Initiatives

### NAVAREAs

NAVAREAs are geographical sea areas established by the International Maritime Organization (IMO) to co-ordinate the transmission of navigational warnings to mariners. In October 2007, the IMO confirmed Canada in its role as international co-ordinator and issuing service for navigational warnings for two NAVAREAs in the Arctic.

We will work with domestic and international partners to commission this new international service. During the upcoming planning year, we will finalize implementation issues with IMO, with service delivery following in 2009-2010.

Commitment	Lead
<b>2008-2009</b>	
Finalize implementation plans with IMO.	DG, MS
Project definition phase (implementation, training, acquisition plans).	DG, MS
<b>2009-2010</b>	
Initial testing of operating condition.	DG, MS
Implementation (advertisement and commencement of NAVAREA transmissions).	DG, MS

### Canada Shipping Act, 2001

The *Canada Shipping Act, 2001* affected MCTS in two key ways:

- MCTS Officers (MCTSOs) are now able to direct vessels in a wider range of circumstances than before.
- MCTSOs now have a clearer role to direct only vessels under their authority, not all the vessels in a vessel traffic services (VTS) zone.

We have examined MCTSO positions to ensure that officers have the training, authority, and tools to deliver vessel traffic services as required by *Canada Shipping Act, 2001*. In 2008-2009, we will provide information sessions to MCTSOs, all of our documentation pertinent to *Canada Shipping Act, 2001* will be updated, and an enforcement strategy to ensure compliance with the Act will be developed in collaboration with Transport Canada.

Commitment	Lead
<b>2008-2009</b>	
In collaboration with Transport Canada, develop an enforcement strategy to ensure compliance with the Vessel Traffic Services section of <i>Canada Shipping Act, 2001</i> .	DG, MS
<b>2009-2010</b>	
Support Transport Canada in the development of new Vessel Traffic Services Regulations.	DG, MS
<b>2010-2011</b>	
Implement new Vessel Traffic Services Regulations.	DG, MS

Commitment	Lead
<b>2008-2009</b>	
Finalize the national process for the recruitment of MCTS trainees.	DG, MS
Initiate the development of a training framework to address new technology and related procedures.	DG, MS
<b>2009-2010</b>	
Develop refresher course and implement a training strategy for existing MCTS Officers.	DG, MS & Executive Director, CCGC
Develop an MCTS Officer competency profile.	DG, MS

### Human Resources Initiative

#### *MCTS Technical Training*

Over the next three years, we will strive to address the most pressing operational human resources requirements to ensure the continuity of our services and to respond to the needs of our employees. In 2008-2009, we will initiate the development of a training framework and long-term strategy to meet MCTS technical training requirements for the 21<sup>st</sup> Century.

The development of a training framework for the MCTS sub-activity is critical to CCG operations. The MCTS training framework will include a variety of initiatives to support the MCTS workforce of about 400 certified MCTSOs to ensure professional development and adequate recruitment.

### Reinvestment in the Asset Base

MCTS capital projects focus on the following:

- Improving and modernizing existing communications and information systems;
- Providing enhanced marine security; and
- Contributing to the safety of navigation in Canadian waters.

We are making substantial investments in assets related to MCTS. There are 14 separate projects under way, most of which are multi-year. We expect to spend over \$26 million on these projects in 2008-2009. For a complete list of projects and a description of each, see Annex B.

## Icebreaking Services

The Icebreaking program of CCG provides icebreaking and related services to facilitate the informed, safe and timely movement of maritime traffic through and around ice-covered Canadian waters for the benefit of industry and communities. This program activity includes providing ice information and escorting ships through ice-covered waters, freeing beset vessels in ice, maintaining open tracks through ice that is firmly attached to the shore, conducting harbour breakouts, providing ice routing advice, resupplying isolated northern settlements and reducing the risk of flooding on the St. Lawrence River through monitoring, prevention and breaking up of ice jams.

Seventeen icebreaking vessels are available to CCG for use in winter operations on the east coast of Canada, the St. Lawrence River, and the Great Lakes as required.

Icebreaking Services also contributes to Arctic sovereignty by resupplying Northern communities, providing support to other government agencies and organizations in ice-infested waters, and being a visible federal government marine presence in the Canadian North. Every year, we have six icebreakers in the Arctic between June and November (summer operations).

The Icebreaking Services sub-activity is delivered with the support of CCG's fleet.

Ice information is provided according to the Ice Information Service Partnership Agreement with the Canadian Ice Service of Environment Canada. Four regional offices — in St. John's, NL; Dartmouth, NS; Québec City, QC; and Sarnia, ON — ensure that ice information is disseminated by radio, Internet, fax, etc. The strategic positioning of icebreakers is crucial for the efficient performance of all icebreaking services. A zonal approach is used to task icebreakers to ensure flexibility in responding to requests for assistance, particularly during severe ice conditions.

We respond to about 1,500 requests a year for icebreaking support. About half of these calls are for route assistance, about 300 are for flood prevention, there are about 200 for each of harbour breakouts and ice reconnaissance, and the remainder are for Arctic issues. In partnership with the Canadian Ice Service, we provide over 5,000 ice charts a year to marine shipping.

### In 2007-2008, Icebreaking Services...

- With partners from other government departments, continued to develop, install, and test a high-speed, digitally enhanced marine radar system on CCGS *Henry Larsen*.
- Freed over 100 fishing vessels beset in ice off the northeast coast of Newfoundland.
- Initiated a project to layer ice information on electronic charts.

## Icebreaking Services

Provides these services...	Measured this way...*	With these targets...
<ul style="list-style-type: none"> <li>Icebreaking services**</li> <li>Ice-related information during ice-seasons**</li> </ul>	<ul style="list-style-type: none"> <li>Percentage of icebreaking services provided</li> <li>Number of ice charts produced</li> </ul>	<ul style="list-style-type: none"> <li>100%</li> <li>To meet annual Service Level Agreement</li> </ul>



To achieve this result...	Measured this way...*	With these targets...
<ul style="list-style-type: none"> <li>Informed, safe and timely movement of maritime traffic through and around ice-covered waters is facilitated</li> </ul>	<ul style="list-style-type: none"> <li>Number of ships other than pleasure crafts damaged by ice</li> </ul>	<ul style="list-style-type: none"> <li>Five year average of 12</li> </ul>

\* These are the performance indicators in the CCG Performance Measurement Framework.

\*\* In accordance with *Levels of Service and Service Standards* ([www.ccg-gcc.gc.ca](http://www.ccg-gcc.gc.ca)).

*Table 7: Icebreaking Services Resource Profile, 2008-2009 (thousands of dollars)*

Region	Salary	O&M	Total
Newfoundland and Labrador	62.1	2,664.8	<b>2,726.9</b>
Maritimes	91.7	3,199.0	<b>3,290.7</b>
Québec	159.0	1,742.3	<b>1,901.3</b>
Central and Arctic	82.4	383.9	<b>466.3</b>
Pacific	-	91.7	<b>91.7</b>
National Programs*	-	9,410.4	<b>9,410.4</b>
NCR	555.7	61.0	<b>616.7</b>
<b>Direct Program Total</b>	<b>950.9</b>	<b>17,553.1</b>	<b>18,504.0</b>
Coast Guard Fleet Operational Readiness Allocation	27,813.7	10,831.9	<b>38,645.6</b>
Lifecycle Asset Management Services Allocation	6,979.9	3,302.8	<b>10,282.7</b>
<b>Total Service Cost</b>	<b>35,744.6</b>	<b>31,687.8</b>	<b>67,432.4</b>

\* National Programs consists of \$9,300.0K for the national agreement with Environment Canada to provide the Ice Reconnaissance Service and \$110.4 in research and development.

## Search and Rescue

The federal Search and Rescue (SAR) Program, led by the Minister of National Defence, is a co-operative effort by federal, provincial, and municipal governments. CCG’s SAR program, in conjunction with the Canadian Coast Guard Auxiliary, leads, delivers and maintains preparedness for the 5.3 million square kilometre maritime component of the federal SAR system. Through distress monitoring, communication and search and rescue activities, the CCG SAR program increases the chances of rescue for people caught in dangerous on-water situations. This program is delivered, in part, with the support of CCG’s operationally capable and ready fleet.

**In 2007-2008, SAR Services...**

- Completed the SAR needs analysis.
- Carried out a comprehensive review of partnering arrangements with the Canadian Coast Guard Auxiliary and found a better way to manage that partnership.
- Renewed and approved the CCGA Contribution Agreements.

The SAR sub-activity is delivered through Joint Rescue Co-ordination Centres (JRCCs), which are located in Halifax, Trenton, and

Victoria; the centres operate under the control of the Department of National Defence (DND) and are jointly staffed with DND and CCG personnel. In addition, CCG operates two Marine Rescue Sub-Centres (MRSCs), in St. John’s and Québec City, that report to a JRCC.

In support of SAR operations, we operate a total of 114 multitasked vessels, all with SAR responsibilities. This includes 39 lifeboats, one air cushioned vehicle (ACV), and seven primary large patrol vessels multitasked to other programs. In addition to the fleet of 114 vessels, there are 24 in-shore rescue boats that operate during the summer. Coast Guard is further supported by the Canadian Coast Guard Auxiliary (CCGA), which consists of some 4,300 volunteer members using 1,200 vessels.

We co-ordinate about 6,000 maritime incidents a year. The majority of these incidents involve mechanical breakdowns and other situations where lives are not at risk. In an average year, we save about 2,900 lives; this represents about 97% of the lives at risk, and it is one of the best records in the world. On average, CCGA responds to 25% of total Canadian maritime incidents.

### Search and Rescue Services



To achieve this result...	Measured this way...	With these targets...
<ul style="list-style-type: none"> <li>• Prevention of loss of life and injury</li> </ul>	<ul style="list-style-type: none"> <li>• Percentage of lives saved vs lives at-risk</li> </ul>	<ul style="list-style-type: none"> <li>• 90% overall; this figure represents an operational benchmark, while the target — although operationally unattainable — is that CCG saves 100% of lives at risk</li> </ul>

## Search and Rescue Services – CCG

Provides these services...	Measured this way...*	With these targets...
<ul style="list-style-type: none"> <li>SAR co-ordination and response**</li> </ul>	<ul style="list-style-type: none"> <li>Percentage of primary SAR vessels meeting reaction time of 30 minutes or less for maritime incidents</li> </ul>	<ul style="list-style-type: none"> <li>99%</li> </ul>



To achieve this result...	Measured this way...*	With these targets...
<ul style="list-style-type: none"> <li>Search and rescue alerting, responding and aiding activities using public and private resources**</li> </ul>	<ul style="list-style-type: none"> <li>Number of people assisted by Maritime SAR Program, i.e. people who were not in a distress situation but required assistance</li> </ul>	<ul style="list-style-type: none"> <li>Benchmark of 13,142 based on average of last four years</li> </ul>

## Search and Rescue Services – CCG Auxiliary

Provides these services...	Measured this way...*	With these targets...
<ul style="list-style-type: none"> <li>Capacity to respond to SAR taskings**</li> </ul>	<ul style="list-style-type: none"> <li>Number of CCGA members</li> </ul>	<ul style="list-style-type: none"> <li>Benchmark = 4,266</li> </ul>
	<ul style="list-style-type: none"> <li>Number of CCGA vessels</li> </ul>	<ul style="list-style-type: none"> <li>Benchmark = 1,209</li> </ul>



To achieve this result...	Measured this way...*	With these targets...
<ul style="list-style-type: none"> <li>Support to CCG SAR activities**</li> </ul>	<ul style="list-style-type: none"> <li>Percentage of CCGA participation in Maritime SAR incidents</li> </ul>	<ul style="list-style-type: none"> <li>25%</li> </ul>

\* These are the performance indicators in the CCG Performance Measurement Framework.

\*\* In accordance with *Levels of Service and Service Standards* ([www.ccg-gcc.gc.ca](http://www.ccg-gcc.gc.ca)).

### Key Initiatives

#### *Search and Rescue Needs Analysis*

In 2007-2008, we conducted a needs analysis of the SAR program, held consultations and prepared a report of our findings. The goals of the initiative were to assess the SAR resources needed to respond to incidents in the maritime areas for which Canada has accepted responsibility and to validate the existing levels of service or propose changes.

SAR services are delivered to different service standards across Canada. The SAR needs analysis reviewed, updated, and assessed all factors (e.g., traffic, meteorological, and incident trends) affecting the existing levels of service.

In 2008-2009, in co-operation with our partners in SAR delivery, we will develop an implementation strategy to address the findings of the SAR needs analysis.

Commitment	Lead	
<b>2008-2009</b>		
Validate SAR Needs analysis findings and recommendations with SAR partners.	AG A-Base	DG, MS
Implement the recommendations from the SAR Needs analysis that are feasible, within existing resource levels.	AG A-Base	DG, MS

**Table 8: Search and Rescue Services Resource Profile, 2008-2009**  
(thousands of dollars)

Region	Salary	O&M	Total
Newfoundland and Labrador	1,911.6	5,825.9	<b>7,737.5</b>
Maritimes	2,845.6	3,619.4	<b>6,465.0</b>
Québec*	926.0	1,581.2	<b>2,507.2</b>
Central and Arctic	1,914.9	1,066.6	<b>2,981.5</b>
Pacific	1,736.4	2,094.1	<b>3,830.5</b>
National Programs**	-	276.8	<b>276.8</b>
NCR	1,390.2	955.6	<b>2,345.8</b>
<b>Direct Program Total</b>	<b>10,724.8</b>	<b>15,419.6</b>	<b>26,144.4</b>
Coast Guard Fleet Operational Readiness Allocation	60,864.8	23,703.4	<b>84,568.2</b>
Lifecycle Asset Management Services Allocation	12,219.9	5,782.3	<b>18,002.2</b>
<b>Total Service Cost</b>	<b>83,809.5</b>	<b>44,905.3</b>	<b>128,714.8</b>

\* In the Québec Region, SAR services are co-delivered with Operational Services; the associated salary dollars are under the Fleet Operational Readiness sub-activity.

\*\* National Programs consists of \$276.8K under the New SAR Initiative Fund.

### *Renewal of the CCGA Contribution Agreement*

The Minister of Fisheries and Oceans maintains a formal Contribution Agreement with each of the five regional CCGA Associations, as well

as with the CCGA National Council. Each association has operational boundaries consistent with those of the CCG administrative regions, and each is a legal entity separate from the Government of Canada and CCG.

The five-year Contribution Agreements specify the conditions under which CCGA members are reimbursed when called upon to provide assistance to CCG, as well as the level of administrative and operational support to be provided by CCG.

The CCGA Contribution Agreements were renewed and received approval in November 2007. With this approval, we will be able to finalize and implement a set of guidelines that will set out how the Contribution Agreements will be managed. With these guidelines in place, we will be able to appropriately implement all the terms and conditions of the Contribution Agreements.

### **Human Resources Initiative** *Search and Rescue Technical Training*

Over the next three years, we will strive to address the most pressing operational human resources requirements to ensure the continuity of our services and to respond to the needs of our employees. The 2005 Public Service Employee Survey, the 2006 A Base Review, and the 2007 Report of the Auditor General all highlighted the need to address human resource planning and training.

In 2008-2009, we will initiate the development of a training framework and long-term strategy to meet SAR technical training requirements for the 21<sup>st</sup> Century. The framework and strategy will address regulatory, operational, and maintenance (refresher) requirements in the context of continuous learning and the flexible delivery of training.

Commitment	Lead
<b>2008-2009</b>	
Develop and issue a request for proposal (RFP) to develop a framework and strategy for SAR technical training.	DG, MS
<b>2009-2010</b>	
Finalize and implement the framework and strategy for SAR technical training.	DG, MS

### Commissioner's Commendation Awarded to the Maritime Search and Rescue Group

The Maritime Search and Rescue (SAR) group received a Commissioner's Commendation for excellence in service delivery over the past five years. During this time, the team went above and beyond the call of duty to meet program demands and client requests. For example:

- They personally renovated vacant space at the Dartmouth base to accommodate Rigid Hull Inflatable Operational Training and Fast Rescue Craft Training.
- They revamped their training approach, the code of conduct and accommodation arrangements for the Inshore Rescue Boat (IRB) Program.
- They lowered the cost of the IRB Program to the point where its costs per employee are the lowest in Canada.
- They revised the training syllabus for the IRB Program; it is the only syllabus in Canada approved by Transport Canada.
- They focused on employee equity in the recruitment and development of IRB students.
- They implemented a Small Vessel Committee that represents all users of small vessels.

The members work together as a model team, and each demonstrates the highest standard of professionalism, service and commitment.

*From left to right: Nancy Hurlburt, John Hines, Stephen Harrie, John Drake, Tim Surette. Recipient missing: Phillip Walker*



## Environmental Response Services

The Canadian Coast Guard is the lead federal agency for all ship-source spills of oil and mystery spills into the marine environment in waters under Canadian jurisdiction, and for supporting other countries under international agreement. The objectives of the Environmental Response program of the Canadian Coast Guard are to minimize the environmental, economic and public safety impacts of marine pollution incidents. The CCG monitors and investigates all reports of marine pollution in Canada and in conjunction with commercial partners, uses its own resources, such as vessels and pollution countermeasures equipment as required, to respond. Where the polluter has been identified and is willing and able to respond, the Canadian Coast Guard advises the polluter of

their responsibilities and, once satisfied with the polluter's intentions / plans, assumes the role as the Federal Monitoring Officer (FMO) and monitors the polluter's response and provides advice and guidance as required. However, in those cases where the polluter is unknown, unwilling or unable to respond, the Canadian Coast Guard will assume the overall management of the incident. This program is delivered, in part, with the support of CCG's operationally capable and ready fleet.

### In 2007-2008, Environmental Response Services...

- Designated 29 Pollution Response Officers following the coming into force of the *Canada Shipping Act, 2001* on July 1, 2007.
- Responded to 1,097 reported spills in Canadian waters between April 2006 and December 2007.
- Recovered approximately \$1.2 million of the costs CCG incurred responding to marine pollution incidents.

## Commissioner's Commendation Awarded for the Barge *Houston* Incident

On December 17, 2007, a Fast Rescue Craft landed three crew members of CCGS *Edward Cornwallis* on board the drifting barge *Houston*. In gale-force winds, high seas, and freezing temperatures, the three tried to deploy the barge's emergency towline to prevent the *Houston* from grounding and causing an environmental incident. But the towline could not be connected, and the barge continued to drift dangerously toward shore. Finally, half a mile from shore, the three crew members were able to deploy the anchor and prevent the *Houston* from grounding.

With conditions deteriorating and darkness looming, the three could not be evacuated from the barge. The Senior Engineer was able to start a generator to provide heat and lights. A Cormorant Search and Rescue helicopter was called in, and all three were safely evacuated after spending over seven hours on the *Houston*. The next day, they were returned to their ship by CCG helicopter.

CCGS *Edward Cornwallis* remained on scene until December 19, helping the tug's three-man crew reconnect the towline and get under way.


The three CCGS *Edward Cornwallis* crew members have received a Commissioner's Commendation for their commitment, in dangerous conditions, to preventing an environmental incident.

*From left to right: Nancy Hurlburt, Peter J. Cowan, John A. Seymour, Byron Samson, Anthony Potts. Recipients not in the photo are Anthony Kelly and Paul York.*



Environmental Response Services has approximately 80 personnel and deploys equipment that is strategically located in depots. This sub-activity maintains duty officers 24/7 in all regions and deals on average with over 1,200 reported incidents a year.

Environmental Response Services		
Provides these services...	Measured this way...*	With these targets...
<ul style="list-style-type: none"> <li>• CCG managed spill responses**</li> </ul>	<ul style="list-style-type: none"> <li>• Number of CCG responses to marine pollution incidents as On-scene Commander (OSC) (South of 60)</li> </ul>	<ul style="list-style-type: none"> <li>• Benchmark = 620</li> </ul>
	<ul style="list-style-type: none"> <li>• Number of CCG responses to marine pollution incidents as On-scene Commander (OSC) (Arctic Coverage Area; North of 60)</li> </ul>	<ul style="list-style-type: none"> <li>• Benchmark = 10</li> </ul>
<ul style="list-style-type: none"> <li>• Monitoring of private sector response**</li> </ul>	<ul style="list-style-type: none"> <li>• Number of CCG responses to marine pollution incidents as Federal Monitoring Officer (FMO) posture</li> </ul>	<ul style="list-style-type: none"> <li>• Benchmark = 470</li> </ul>
<ul style="list-style-type: none"> <li>• Provision of expertise and resources to OGD and organizations**</li> </ul>	<ul style="list-style-type: none"> <li>• Number of CCG responses as Resource Agency</li> </ul>	<ul style="list-style-type: none"> <li>• Benchmark = 140</li> </ul>



To achieve this result...	Measured this way...*	With these targets...
<ul style="list-style-type: none"> <li>• Reported cases of ship-source spills are addressed</li> </ul>	<ul style="list-style-type: none"> <li>• Percentage of ship-source spills where CCG acted as On-scene Commander, Federal Monitoring Agency or Resource Agency vs total number of reported ship-source spills</li> </ul>	<ul style="list-style-type: none"> <li>• 100%</li> </ul>

\* These are the performance indicators in the CCG Performance Measurement Framework.

\*\* In accordance with *Levels of Service and Service Standards* ([www.ccg-gcc.gc.ca](http://www.ccg-gcc.gc.ca)).

**Table 9: Environmental Response Services Resource Profile, 2008-2009**  
(thousands of dollars)

Region	Salary	O&M	Total
Newfoundland and Labrador	968.8	444.2	<b>1,413.0</b>
Maritimes	1,017.8	307.9	<b>1,325.7</b>
Québec	793.1	588.0	<b>1,381.1</b>
Central and Arctic*	1,276.7	705.1	<b>1,981.8</b>
Pacific	968.0	388.6	<b>1,356.6</b>
National Programs**	-	31.5	<b>31.5</b>
NCR	829.4	1,485.2	<b>2,314.6</b>
<b>Direct Program Total</b>	<b>5,853.8</b>	<b>3,950.5</b>	<b>9,804.3</b>
Coast Guard Fleet Operational Readiness Allocation	594.3	231.4	<b>825.7</b>
Lifecycle Asset Management Services Allocation	509.5	241.1	<b>750.6</b>
<b>Total Service Cost</b>	<b>6,957.5</b>	<b>4,423.0</b>	<b>11,380.5</b>

\* Central and Arctic Region has a higher salary budget than the other regions because its organization is slightly larger to cover the services provided in the Arctic. This cost also includes isolated post allowances that are not paid in other regions.

\*\* National Programs consists of \$31.5K in research and development.

## Key Initiatives

### Health of the Oceans Study

As part of Canada's commitment to conserve and protect Canadian waters, the Government of Canada, through Budget 2007, is providing \$2.2 million over three years to CCG to ensure Canada has a capacity to respond to oil spills in the Arctic. In carrying out this initiative, we will:

- Assess Canada's ability to respond to oil spills in the Arctic;

- Identify areas in the Arctic at high risk for oil spills;
- Purchase the equipment and first-response systems needed to contain and recover spilled oil; and
- Engage the various communities in the North.

We have drafted an action plan, and implementation will begin in 2008-2009.

Commitment	Lead
<b>2008-2009</b>	
Complete risk assessment, engage the communities and issue equipment request for proposal (RFP) on Canada's spill response capacity in the Arctic.	DG, MS
<b>2009-2010</b>	
Complete deployment of equipment packages.	DG, MS

### Review of the National Environmental Response Strategy

Domestic and international obligations require Canada to maintain considerable preparedness capacity for responses to domestic and potential international pollution incidents, as well as act as a strategic reserve for industry south of 60. However, we must assess our current and future ability to deliver on these statutory obligations, especially where there are multiple spills or clean-up might be prolonged.

To ensure an effective, long-term Environmental Response Services program, we conducted a review of our National Environmental Response Strategy in 2007-2008. This strategy captures all of the elements necessary for Environmental

Response Services to develop, implement, and demonstrate the preparedness, response processes, and response procedures needed to respond to ship-source spills on waters over which Canada has jurisdiction.

During our review of the strategy, we drafted revisions of the National Response Policy and National Response Plan. We are now identifying environmental response equipment systems using current inventory and determining what components are required to ensure meeting capacity requirements. Our review of the strategy pointed to the need to revise the National Contingency Plan, which is an element of the strategy.

To advance our review of the National Environmental Response Strategy in the coming year, we will take a number of actions with respect to policy, plans, equipment holdings, training strategies, and competency profiles. We will also consult with our partners, including Environment Canada, Transport Canada, other government departments, provincial environmental ministries, members of marine advisory groups such as the Canadian Marine Advisory Council (CMAC), and the Regional Advisory Council (RAC).

Commitment	Lead
<b>2008-2009</b>	
Complete revision of National Environmental Response Strategy, consulting with partners on the document.	DG, MS
Develop competency profiles and training strategy for ER management.	DG, MS
Develop senior managers training course.	DG, MS

### *Brigadier General M.G. Zalinski*

CCG is playing a key role in addressing an oil-pollution threat posed by the wreck of the US vessel *Brigadier General M.G. Zalinski*. This vessel sank in the Grenville Channel in British Columbia in September 1946, entombing a cargo of munitions and an estimated 700 tonnes of fuel. The wreck, which lay largely forgotten, began leaking the fuel in 2003.

In 2007-2008, we assessed the situation and developed an action plan. This in turn led to processing a Price and Availability request to remove the oil from the sunken vessel. Should funding be identified, the bids received will form the basis for a request for proposal (RFP) for the removal of oil from the vessel, with a view to completing the operation in 2010.

Commitment	Lead
<b>2008-2009</b>	
Develop and cost all components of the action plan.	DG, MS
<b>2009-2010</b>	
Implement the action plan, subject to funding availability.	DG, MS

### *Canada Shipping Act (CSA) 2001*

Further to the formal promulgation of the *Canada Shipping Act (CSA) 2001*, specific positions within Environmental Response have been examined to ensure that functional specialists have the appropriate training, powers and tools to deliver pollution prevention and response services.

In 2007, the Minister of Fisheries & Oceans delegated his authority to designate Pollution Response Officers to the Director General, Maritime Services. Following this, Environmental Response personnel previously designated as Pollution Prevention Officers under the old CSA received the new designation of Pollution Response Officers (PRO) CSA 2001.

In 2008-09, CCG will develop and deliver Pollution Response Officers training courses to all ER personnel.

Commitment	Lead
<b>2008-2009</b>	
Deliver PRO training course to CCG ER personnel	DG, MS

### Environmental Response Services Technical Training

Over the next three years, we will strive to address the most pressing operational human resources requirements to ensure the continuity of our services and to respond to the needs of our employees. The 2005 Public Service Employee Survey, the 2006 A-Base Review, and the 2007

Report of the Auditor General all highlighted the need to address human resource planning and training.

In 2008-2009, we will initiate the development of a training framework and long-term strategy to meet Environmental Response Services technical training requirements for the 21<sup>st</sup> Century. The framework and strategy will address regulatory, operational, and maintenance (refresher) requirements in the context of continuous learning and the flexible delivery of training.

Commitment	Lead
<b>2008-2009</b>	
Develop and issue a request for proposal (RFP) to develop the framework and strategy.	DG, MS
<b>2009-2010</b>	
Finalize and implement framework and strategy.	DG, MS

### Reinvestment in the Asset Base

Environmental Response Services capital projects for 2008-2009 focus on investing in environmental response equipment for the Arctic. We expect to spend \$1.25 million on these projects in 2008-2009.

For a full description and a complete list of projects, see Annex B.

## Maritime Security

Although the Coast Guard does not have a direct mandate for maritime security, it supports the Government of Canada’s maritime security priorities by providing an on-water platform capacity and maritime expertise to national security and law enforcement agencies, as well as maritime traffic information. In

conjunction with interdepartmental partners, CCG contributes to the analysis and creation of actionable intelligence in support of enhanced maritime and national security. The Coast Guard Maritime Security program leverages safety-related CCG programs and services to provide a collateral benefit to the Canadian and international maritime security community.

Maritime Security		
Provides these services...	Measured this way...*	With these targets...
<ul style="list-style-type: none"> <li>Provision of CCG maritime traffic information to Maritime Security Operations Centres</li> </ul>	<ul style="list-style-type: none"> <li>Reliability of CCG maritime vessel traffic information for usage at Marine Security Operations Centres (Proportion of year information is fully available)</li> </ul>	<ul style="list-style-type: none"> <li>99.7%</li> </ul>
<ul style="list-style-type: none"> <li>Effective and efficient provision of CCG fleet services for security purposes</li> </ul>	<ul style="list-style-type: none"> <li>Percentage of service delivered versus service planned (active vessels).</li> </ul>	<ul style="list-style-type: none"> <li>100%</li> </ul>



To achieve this result...	Measured this way...*	With these targets...
<ul style="list-style-type: none"> <li>Enhanced maritime domain awareness</li> </ul>	<ul style="list-style-type: none"> <li>To be determined (The Interdepartmental Marine Security Working Group is developing indicators as part of a new horizontal performance framework.)</li> </ul>	<ul style="list-style-type: none"> <li>TBD</li> </ul>
<ul style="list-style-type: none"> <li>Enhanced security-related presence on Canadian waters</li> </ul>	<ul style="list-style-type: none"> <li>TBD Horizontal Initiative: Being developed with RCMP</li> </ul>	<ul style="list-style-type: none"> <li>TBD</li> </ul>

\* These are the performance indicators in the CCG Performance Measurement Framework.

**Table 10: Maritime Security Resource Profile, 2008-2009 (thousands of dollars)**

Region	Salary	O&M	Total
Newfoundland and Labrador	-	605.8	<b>605.8</b>
Maritimes	-	5.2	<b>5.2</b>
Québec	1,032.9	933.6	<b>1,966.5</b>
Central and Arctic	1,527.7	2,067.0	<b>3,594.7</b>
Pacific	-	175.6	<b>175.6</b>
National Programs*	898.6	1,170.9	<b>2,069.5</b>
NCR**	696.3	332.9	<b>1,029.2</b>
<b>Direct Program Total</b>	<b>4,155.5</b>	<b>5,291.0</b>	<b>9,446.5</b>
Coast Guard Fleet Operational Readiness Allocation	10,297.9	4,010.4	<b>14,308.3</b>
Lifecycle Asset Management Services Allocation	1,922.1	909.5	<b>2,831.6</b>
<b>Total Service Cost</b>	<b>16,375.5</b>	<b>10,210.9</b>	<b>26,586.4</b>

\* National Programs consists of \$2,069.5K for Marine Security Operations Centres (MSOCs).

\*\* The Maritimes Security Program is managed nationally from the NCR Region.

## Key Initiatives

### Marine Security Enforcement Team

A key aspect of our increased role in supporting the federal maritime security agenda is the ongoing development of the joint RCMP/CCG Marine Security Enforcement Team (MSET) program in the St. Lawrence – Great Lakes region. We will critically assess our MSET role and undertake the planning needed to efficiently address any personnel or infrastructure issues.

We will also continue to work with RCMP and DFO Conservation and Protection personnel to identify the hazards inherent in on-water enforcement operations. This will allow us to review and adjust our procedures and practices to ensure the greatest safety possible for CCG personnel and partner agencies.

Commitment	Lead
<b>2008-2009</b>	
Perform an in-depth analysis of the Task and Hazard Assessments associated with CCG support to on-water law-enforcement operations and, in co-operation with RCMP and Conservation and Protection partners, <ul style="list-style-type: none"> <li>• Modify current practices and/or develop new ones as appropriate;</li> <li>• Develop and provide enhanced training for support to law enforcement operations; and</li> <li>• Identify the appropriate personal protective equipment to enhance maritime security capacity in the safest way possible.</li> </ul>	DG, Fleet
Deliver the MSET program including the provision of enhanced training for support to law-enforcement operations and a gap analysis and plans to further support personnel and infrastructure.	DG, Fleet

### Marine Security Operations Centres

We will continue to participate in the multi-departmental Marine Security Operations Centres (MSOCs) initiatives. DND leads these initiatives on the coasts, and the RCMP leads it in the St. Lawrence Seaway – Great Lakes area. We contribute both our extensive databases on maritime traffic and our analysis of this data to support the development of actionable maritime intelligence by MSOC partners.

The RCMP-led St. Lawrence Seaway – Great Lakes MSOC initiative completed its development phase on March 31, 2008. Budget 2008 provided funding for the establishment of a permanent MSOC in the Seaway – Great Lakes region.

Commitment	Lead
<b>2008-2009</b>	
Support the establishment of a permanent RCMP-led MSOC in the Seaway – Great Lakes region.	Deputy Commissioner

### *Automatic Identification System/Long Range Identification and Tracking System*

The Automatic Identification System (AIS) is part of CCG's contribution to enhanced maritime security. The system will enhance vessel surveillance, including near-real-time identification of vessels approaching and operating up to 40 nautical miles from Canada's shores. AIS will be implemented in sites that allow maximum coverage of the coasts and entrances to Canada, the St. Lawrence River, and the Great Lakes.

The Long Range Identification and Tracking (LRIT) system is an integral part of the IMO's efforts to further enhance maritime security. LRIT will provide for the tracking of Safety of Life at Sea Convention (SOLAS) class vessels entering Canada and of Canadian SOLAS-class vessels operating internationally. This system uses satellite technology to obtain positional data on vessels.

Implementation of AIS and LRIT is on track. We are still planning to deliver the project in 2008-2009 and to have it operational by the end of fiscal year 2009-2010. Meeting this schedule requires that time lost to delays in 2007-2008 be made up in 2008-2009.

Commitment	Lead
<b>2008-2009</b>	
Implement AIS and LRIT according to schedule: <ul style="list-style-type: none"> <li>• LRIT: Implement the Canadian portion of the international LRIT system by the end of the year.</li> <li>• AIS: Complete procurement of the AIS system, and start to install the system by the end of the fiscal year.</li> </ul>	DG, ITS

### **Reinvestment in the Asset Base**

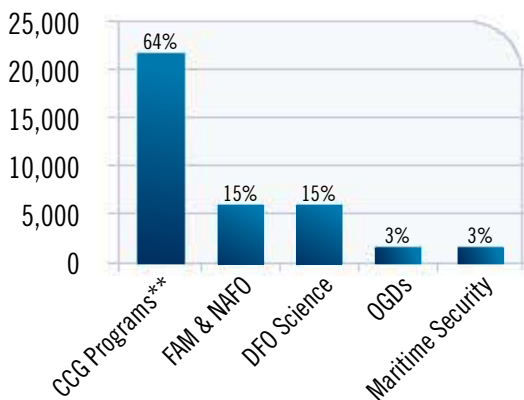
We are investing in critical surveillance and tracking systems in support of enhanced maritime security. We expect to spend \$12.5 million on the AIS/LRIT project in 2008-2009, \$25 million over the life of the project.

For a full description and a complete list of projects, see Annex B.

## Coast Guard Fleet Operational Readiness

The Coast Guard Fleet Operational Readiness program involves the provision of safe, reliable, available and operationally capable ships and helicopters with competent and professional crews ready to respond to on-water and marine-related needs. This program activity involves fleet management, fleet acquisition, refit and maintenance, and the provision of fleet personnel. Through the Coast Guard Fleet Operational Readiness program, the CCG Agency will ensure that the Government of Canada's civilian fleet meets the current and future needs of Canadians and the Government of Canada.

Figure 2: Planned Service by Client, 2008-2009 (in operational days\*)



\* This table represents planned service provided to clients by the entire CCG fleet. Operational days are calendar days of programming assigned to an individual client.

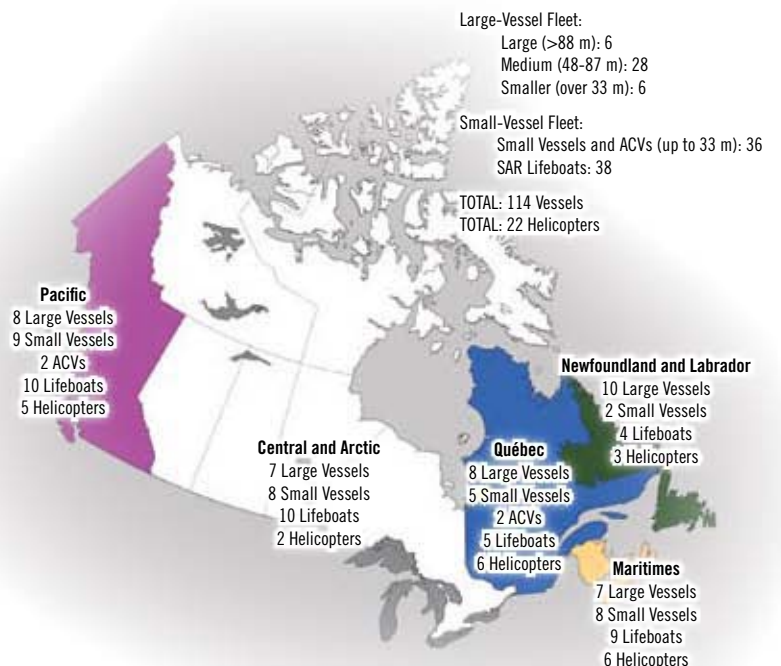
\*\* CCG programs include: Icebreaking Services, Marine Communications and Traffic Services, Aids to Navigation Services, and Search and Rescue.

In addition to supporting most Coast Guard programs, as well as the Science and Fisheries Enforcement programs of DFO, the CCG fleet delivers civilian marine services on behalf of other federal government departments or in support of the maritime priorities of other federal agencies and organizations. Such clients include DND, Environment Canada, the RCMP, the Department of Foreign Affairs, Transport Canada, Natural Resources Canada, and the Natural Sciences and Engineering Research Council of Canada.

### In 2007-2008, Fleet Services...

- Completed the Fleet Financial Plan and Framework in support of Fleet Operational Readiness and 2007-2008 commitments to enhance fleet planning and business management processes.
- Improved competency profiles for seagoing personnel.
- Developed a national training plan for all seagoing personnel.

## Distribution of Vessels and Helicopters in Operation by Region, 2008-2009



We track the level of service delivered to our clients against what was planned for a given fiscal year. However, because of the complexities inherent in running a multi-faceted fleet along all three coasts, performance information for all vessels could not be compiled in time for inclusion in this plan. This information will be available in the 2007-2008 *Fleet Annual Report*, planned for completion by October 31, 2008.

Coast Guard Fleet Operational Readiness		
Provides these services...	Measured this way...*	With these targets...
Operational Fleet Days delivered for: <ul style="list-style-type: none"> <li>• delivery of CCG marine services;</li> <li>• DFO Science and Conservation and Protection Programs;</li> <li>• Other federal government needs</li> </ul>	• Total number of fleet operational days	<ul style="list-style-type: none"> <li>• As set out in the Service Level Agreements</li> </ul>
	• Total number of fleet operational days for CCG	
	• Total number of fleet operational days for DFO Science	
	• Total number of fleet operational days for DFO Conservation and Protection	
	• Total number of fleet operational days for OGDs	
	• Total number of fleet operational days for the vessels supporting the joint RCMP / CCG Marine Security Enforcement Teams program and any other vessels delivering maritime security support	



To achieve this result...	Measured this way...*	With these targets...
<ul style="list-style-type: none"> <li>• Safe and secure, effective and efficient provision of CCG fleet services for the Government of Canada</li> </ul>	• Percentage of service delivered vs service planned for all programs	<ul style="list-style-type: none"> <li>• 100% (with a tolerance zone of 10%) for 2008</li> </ul>
	• Percentage of service delivered vs service planned for CCG Programs	
	• Percentage of service delivered vs service planned for DFO Science	
	• Percentage of service delivered vs service planned for DFO Conservation and Protection	
	• Percentage of service delivered vs service planned for GOC Programs	
	• Number of hazardous occurrences	• N/A
<ul style="list-style-type: none"> <li>• Re-supply of Northern communities for which there is no commercial service</li> </ul>	<ul style="list-style-type: none"> <li>• Percentage of CCG northern re-supply cargo (in metric tonnes) delivered compared to plan</li> </ul>	<ul style="list-style-type: none"> <li>• Deliver 100% of requested cargo as per agreements with Nunavut and Environment Canada</li> </ul>

\* These are the performance indicators in the CCG Performance Measurement Framework.

## The Exemplary Service Medal Recipients

The CCG Exemplary Service Medal recognizes Coast Guard employees who, in the course of their duties, provide service in difficult or critical situations. Individuals who have worked with Coast Guard for a minimum of 20 years and have spent at least 10 of those years in a risk environment are eligible for the award, provided their service is marked by exemplary conduct, industry, and efficiency.

*Medal: Reginald Ash, Peter Buffett, Peter Corbett, Duncan Costello, Merrill Durnford, Derek Frye, Raymond Greening, Geoffrey Legge, Derek LeRiche, Wayne Pope, Randy Roberts, Melvin Rodway, Walter Seward, Ernest Smith, Captain Herbert Spurrell, Captain E. Wade Spurrell Ronald Tobin and Michael Tuck.*

*First Bar: Roy Galameau and Michael O'Brien.*



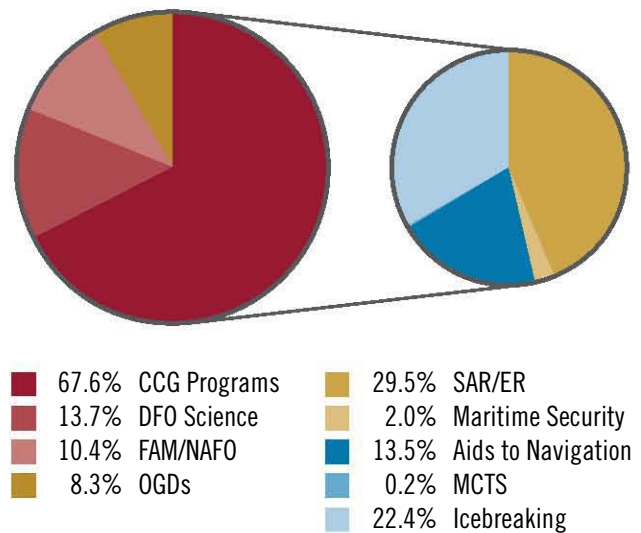
**Table 11: Coast Guard Fleet Operational Readiness Resource Profile, 2008-2009 (thousands of dollars)**

Region	Salary	O&M	Total*
Newfoundland and Labrador	39,620.5	14,844.3	<b>54,464.8</b>
Maritimes	35,370.0	12,443.4	<b>47,813.4</b>
Québec	29,929.9	11,501.5	<b>41,431.4</b>
Central and Arctic	18,948.7	4,979.2	<b>23,927.9</b>
Pacific	35,978.8	14,445.4	<b>50,424.2</b>
National Programs**	-	1,835.0	<b>1,835.0</b>
NCR	7,896.9	5,278.2	<b>13,175.1</b>
<b>Direct Program Total</b>	<b>167,744.7</b>	<b>65,327.0</b>	<b>233,071.7</b>

\* Includes all ship costs, excluding fuel.

\*\* National Programs consists of \$1,835.0K for national expenditures related to the helicopter program.

**Figure 3: Planned Vessel Costs by Program, 2008-2009**



The bulk of vessel time goes to programs for which Coast Guard is responsible. However, the fleet provides direct service to programs related to Science, to Fishery and Aquaculture Management, and to the Northwest Atlantic Fisheries Organization (NAFO). The fleet also provides support to various other government departments.

## Science

In 2008-2009, we plan to provide 4,313 operational days in vessel time and over 230 hours in helicopter time to DFO Science. However, our fleet also services the broader government science agenda, and an additional 649 operational days are planned for allocation among various clients and special initiatives.

The fleet's science clients include:

- DFO Science Program
- Canadian Hydrographic Service (CHS)
- Environment Canada
- Natural Resources Canada (NRCan)
- Research supported by the Natural Sciences and Engineering Research Council of Canada (NSERC)

While science-related activities are conducted on board many of our multitaskable vessels, 17 vessels in the fleet are dedicated solely to the scientific endeavours of DFO and other organizations.

### *United Nations Convention on the Law of the Sea and International Polar Year*

Over the next two years, we will provide icebreaker support to governmental science priorities related to Canada's obligations regarding seabed mapping associated with the United Nations Convention on the Law of the Sea (UNCLOS) and International Polar Year (IPY). These are both rare opportunities for international co-operation in scientific research in the Arctic and Antarctic regions. Canadian IPY research will focus on the effects of climate

change in the areas, on the areas' adaptations to the changes, and on the health and quality of life of Northern Canadians.

## Fisheries and Aquaculture Management — Conservation and Protection

### *Northwest Atlantic Fisheries Organization (NAFO)*

Canada has the right and responsibility to monitor and inspect the vessels of other state parties to ensure compliance with the rules of fisheries conventions of which we are a member, such as NAFO. Operating mainly from CCG vessels, fishery officers acting as NAFO inspectors carry out inspections of fishing activities in the NAFO Regulatory Area.

### *Seal Harvest*

While CCG has in the past provided services in support of the annual seal harvest, this fiscal year marks the second year this requirement has been incorporated into the National Fleet Operations Plan. Dedicated support has been planned for April 2008 and March 2009. Monitoring of the annual seal harvest is normally supported by CCG icebreakers and helicopters in fishing zones 4S/4T/4R (Gulf), as well as southwestern 2J and northwestern 3K (the Front).

### *Fisheries Enforcement*

Conservation and protection activities are designed to ensure compliance with the legislation, policies, and fishing plans relating to the conservation and sustainable use of the fisheries resource. Patrol vessels are required to patrol closed and boundary areas, as well as to

conduct inspections at sea to ensure compliance with the regulations designed to ensure an orderly fishery.

### Key Initiatives

#### *L'Acadien II*

On April 4, 2008, The Honourable Loyola Hearn, Minister of Fisheries and Oceans, appointed Retired Rear Admiral Roger Girouard to lead a review of the events and circumstances leading to and following the capsizing of *L'Acadien II* on March 29, 2008. Rear Admiral Roger Girouard will investigate CCG policies and practices and will make recommendations to prevent similar incidents from occurring in the future. Rear Admiral Girouard has been asked to present his final report to Minister Hearn and the Commissioner of the Canadian Coast Guard in the fall of 2008.

The Transportation Safety Board of Canada and the RCMP are also conducting investigations into this incident. We will provide any assistance or information requested as these investigations move forward.

#### *Redeployment of Heavy Icebreakers*

On 12 April 2007, CCG announced it was redeploying two of its heavy icebreakers, CCGS *Terry Fox* and CCGS *Louis S. St-Laurent*, from the Dartmouth Base in the Maritimes Region to, respectively, St. John's and Argentinia in Newfoundland and Labrador. As of April 1, 2008, CCGS *Terry Fox* was redeployed to St. John's, and work continues to ensure that CCGS *Louis S. St-Laurent* is redeployed on April 1,

2009. Planning and delivery of technical and logistics support during the redeployment is being carried out without affecting the ships' service-delivery. It is expected that this level of support will continue during 2008-2009.

On the people side, regular interregional meetings started shortly after the announcement of the redeployment and will continue throughout the transition period (2007-2012). Unions are fully integrated into the planning process, which has contributed to getting many issues and questions answered quickly. Each affected employee has been given an individually tailored briefing on the transition, with ample opportunity to present his or her needs and views. Follow-ups with each employee will continue throughout the transition period until all individual situations are resolved.

Commitment	Lead
<b>2008-2009</b>	
Complete the redeployment of the heavy icebreakers.	DG, Fleet

#### *Ongoing Improvements in Fleet Management*

Improvements in fleet management will continue to address long-standing issues regarding organizational effectiveness and connections with regions and clients. With this in mind, the Coast Guard fleet will continue to examine how it conducts business and make the improvements needed to enhance service. We will renew both our Long Term Capital Plan (LTCP) and our Fleet Renewal Plan and align them with a new *Fleet Management Manual*, to be developed in 2008-2009.

Over the next three years, we will invest in the improvement of our Fleet Activity Information System (FAIS) and enhance our business rules to ensure the effective use of FAIS. FAIS captures the actual activities of fleet vessels on an hourly basis and provides information to all levels of management. The system is therefore critical for decision-making and planning.

Commitment		Lead
<b>2008-2009</b>		
Continue to enhance and improve Fleet business management through a variety of activities. This will include: <ul style="list-style-type: none"> <li>• Further development of the elements of the Fleet Financial Framework.</li> <li>• Continued implementation of the Fleet fuel management process.</li> </ul>	AG	DG, Fleet
Develop a <i>Fleet Management Manual</i> .	AG	DG, Fleet
Complete the requirements analysis for the FAIS upgrade project, and continue to improve the existing FAIS system.	AG	DG, Fleet
<b>2009-2010</b>		
Complete architecture design for FAIS upgrade project.	AG	DG, Fleet
Revise the Long Term Capital Plan and Fleet Renewal Plan.		DG, Fleet

### Improved Maintenance of the Existing Fleet

Acquiring new vessels will take a number of years. In the meantime, the existing fleet must be kept as operationally ready as possible.

The 2007 Report of the Auditor General noted that progress in implementing lifecycle management has been slow and raised a number of issues regarding maintenance systems and procedures. The Auditor General also noted that maintenance failures on vessels were linked to a lack of maintenance documents.

In 2007-2008, we sought and obtained two key approvals from Treasury Board that will assist in the lifecycle management of CCG vessels:

- We received approval to consolidate resources within a single refit budget. This will facilitate planning, scheduling, and management of fleet refits (including helicopters).
- We received approval to participate in a pilot that provides departments with a non-lapsing capital appropriations authority. This will facilitate greater efficiency and productivity in the management of capital projects and reduce the risk associated with unforeseen delays in projects in the last quarter of the fiscal year.

We have been conducting surveys of vessel condition so we can make better informed investment decisions, plan refits better, and minimize the effect on operations. We have completed surveys of our six highest priority vessels, and a strategy and plan to survey the condition of the remaining vessels (as warranted) is in place. The vessel-survey program will

### 2007-2008 Accomplishments

#### Improved Maintenance of the Existing Fleet

- Treasury Board has approved a new Refit Authority for CCG that permits the consolidation of resources in a single refit budget.

continue as a standard practice within CCG, with about 20% of the fleet's vessels being surveyed, to some degree, each year.

Building on the work completed in 2007-2008 for Type 1100 class vessels, we will continue to develop and implement critical refit standards, as warranted, for the remaining vessels in the fleet. We will also continue to work on initiatives such as standard maintenance plans for critical ship systems.

Finally, to enhance safety and awareness in the workplace, we will develop signage, markings, and training on antenna safety on CCG vessels.

Commitment	Lead	
<b>2008-2009</b>		
Continue the vessel condition program which will survey about 20% of the fleet vessels each year. This will become standard practice within CCG in the coming years.	AG	DG, ITS & ACs
Develop and implement signage, markings, and training on antenna safety onboard fleet vessels.		DG, ITS & ACs
Implement standard maintenance plans for critical ship systems for Type 1100 class vessels.	AG	ACs
Issue a standard set of refit specifications for Type 1100 vessels.	AG	DG, ITS

### Human Resources Initiatives

The continuing development of Coast Guard Fleet Operational Readiness includes a variety of initiatives designed to support the fleet workforce. About 2,500 of our employees — more than 50% of our workforce — are fleet seagoing personnel. They are supported by an additional 180 shore-based fleet personnel. Thus, ensuring the effective management of fleet human resources is as critical to our operations as the management of our vessels and other physical assets.

In addition to initiatives announced in 2007-2008 to respond to concerns raised in the OAG Report and A-Base Review, we have embarked on a number of complementary initiatives under a Fleet Human Resources Development Program. This program is designed to foster employees' learning and development. It is also designed to ensure continuity of knowledge between seagoing and on-shore operations, and between regional management and headquarters. We expect this will further strengthen a fully integrated, national fleet.

Commitment	Lead	
<b>2008-2009</b>		
Develop standardized crewing matrix predicated on competency (crewing) profiles.	AG A-Base	DG, Fleet
Launch a Fleet Human Resources Development Program that includes: <ul style="list-style-type: none"> <li>• Establishing a Professional Development Unit section at headquarters.</li> <li>• Putting in place funded rotational assignments for regional staff in the National Co-ordination Centre at headquarters.</li> <li>• Establishing regional developmental positions for seagoing personnel.</li> <li>• Ensuring that each new vessel class under construction is assigned a Project Director, typically from a region.</li> <li>• Opening up Fleet Executive Board meetings to regional Superintendents to ensure effective transference of operational and management knowledge.</li> <li>• The involvement of regional and operational personnel in the management of North Atlantic and North Pacific Coast Guard fora to promote wider knowledge of international issues and co-operation.</li> <li>• Through collective bargaining attempt to remove structural barriers to the migration of seagoing personnel to on-shore work in support of their development and CCG succession planning.</li> </ul>	AG	DG, Fleet

### Reinvestment in the Fleet Asset Base

In the past few years, the government has made significant investments in the fleet asset base. As we acquire new vessels, we continue to invest in our existing fleet to optimize its availability and reliability. Thirty-two fleet capital projects with a total value of \$202 million are funded for 2008-2009. Twelve other capital projects are waiting to begin in 2008-2009 if funding becomes available.

For a full description and a complete list of projects, see Annex B.

## Ice Floe Operation off the Coast of Newfoundland – April 2007

Because of strong winds, ice floes coming down from the coast of Labrador were pushed into Notre Dame Bay, off the northeast coast of Newfoundland. The strong winds compacted and compressed the ice floe, trapping over 100 sealing vessels travelling out for the annual seal harvest. More than 700 fishers and commercial mariners were stranded in heavy ice for over three weeks.

The constant winds had compressed the ice to the point where it presented the Coast Guard with Arctic ice conditions. To assist the trapped vessels, CCG deployed a total of six icebreakers: CCGS *Des Groseilliers*, CCGS *Terry Fox*, CCGS *Henry Larsen*, CCGS *Sir Wilfred Grenfell*, CCGS *Ann Harvey*, and CCGS *George R. Pearkes*. CCG also used five helicopters for ice reconnaissance and for assistance in evacuating non-priority crew members and providing others with food and fuel.

During this operation, CCG also responded to 133 search and rescue cases related to the ice and escorted through ice other commercial traffic that needed access to our ports and harbours. Although one trapped vessel was lost, all hands were safely escorted back to shore.



## Lifecycle Asset Management

The Coast Guard Lifecycle Asset Management Services program involves the effective lifecycle

management of the CCG asset base. The program provides lifecycle engineering, acquisition, maintenance and disposal services in support of CCG's non-fleet assets and lifecycle engineering in support of CCG's fleet

assets (with vessel acquisition and maintenance funded through the Fleet Operational Readiness

program). This program activity ensures that asset capability, reliability, availability and value are satisfied at minimum lifecycle cost, thereby improving the efficiency of CCG program delivery to Canadians.

CCG manages physical assets with an estimated replacement value of \$5.6 billion. This breaks down as follows:

- Fleet assets — estimated replacement value of \$4 billion. This includes major vessels, small craft, and helicopters.
- Equipment and other moveable assets — estimated replacement value of \$1.6 billion.

These assets range from large icebreakers and radio towers to electronic communication and navigation systems to small, hand-held radios and fixed and floating aids to navigation.

Asset management services are delivered by over 950 engineers, technicians, technologists, trades people, managers, and support staff located in over 70 workshops and offices across five regions and at national headquarters.

### In 2007-2008, Lifecycle Asset Management Services...

- Delivered \$114M worth of capital projects to ensure that CCG had the capital assets to provide services to Canadians.
- Instituted a vessel survey program that will help to ensure that CCG vessels are available, and reliable.

## Lifecycle Asset Management Services

Provides these services...	Measured this way...*	With these targets...
• CCG major capital asset Acquisition	• Percentage of major capital projects completed on schedule	• 90%
• Fleet Renewal initiative Major CCG Fleet Asset Acquisition	• Percentage of Major Crown Projects completed on schedule, budget and performance	• 100%
• CCG fleet assets Maintenance	• Percentage of maintenance (by cost) that is unplanned (Fleet assets)	• 20-35%
• CCG MNS Assets Maintenance	• Percentage of maintenance (by cost) that is unplanned for CCG Aids to Navigation	• 25-40%
• CCG MCTS Assets Maintenance	• Percentage of maintenance (by cost) that is unplanned for CCG MCTS Assets	• 30-40%



To achieve this result...	Measured this way...*	With these targets...
• CCG Assets are available for intended purpose. CCG Assets are reliable	• Percentage of Asset Base Service Life Remaining – CCG Fleet Assets	• 40 to 60% (for 2015)
	• Percentage of Time CCG fleet assets are available (as influenced by Maintenance)	• 85%
	• Re-investment rate into CCG Fleet Asset base (rolling three year average)	• 4%
	• Re-investment rate into CCG Aids to Navigation Asset base (rolling three year average)	• 7%
	• Re-investment rate into CCG Marine Communications and Traffic Services (MCTS) Asset base (rolling three year average)	• 5%

\* These are the performance indicators in the CCG Performance Measurement Framework.

**Table 12: Lifecycle Asset Management Services Resource Profile, 2008-2009**  
(thousands of dollars)

Region	Salary	O&M	Total
Newfoundland and Labrador	8,397.9	4,343.2	<b>12,741.2</b>
Maritimes	11,396.5	4,088.1	<b>15,484.6</b>
Québec	10,447.5	5,985.6	<b>16,433.1</b>
Central and Arctic	10,151.8	3,280.1	<b>13,431.9</b>
Pacific	11,744.6	4,067.2	<b>15,811.8</b>
National Programs	-	-	-
NCR*	7,053.7	6,244.7	<b>13,298.3</b>
<b>Direct Program Total</b>	<b>59,191.9</b>	<b>28,009.0</b>	<b>87,200.9</b>

\* The NCR is responsible for the National Engineering function, as well as for the lifecycle management of several nationally used CCG information systems.

## Key Initiatives

### *Improved Maintenance of the Existing Fleet*

See the section Coast Guard Fleet Operational Readiness, on page 58, for further details on improving the maintenance of the existing Fleet.

### *Vessel Maintenance Review*

See Vessel Maintenance Review, on page 24, for further details on vessel maintenance review.

### *Continued improvement in Lifecycle Management Practices for all CCG Assets*

We will continue to improve our processes and documentation to enhance the maintainability and to minimize the lifecycle cost of our assets.

In 2008-2009, we will begin to explore the concept of establishing Centres of Engineering Expertise within the regions to leverage best practices in design, engineering, and maintenance. A pilot project will be run in the Québec region and assessed for potential broader application.

Commitment	Lead
<b>2009-2010</b>	
Establish a pilot Centre of Engineering Expertise for hydraulics in the Québec region.	AC, QC

The Maintenance Information Management System (MIMS) project, completed in March 2004, was intended to deploy a single national Asset Management System (AMS) to support the lifecycle management of all of our physical assets. However total deployment, particularly within the fleet, remains incomplete. An AMS is critical for the efficient and effective lifecycle management of the wide range of assets we operate. We have therefore developed a strategy to complete, by 2010, the deployment of an AMS applicable to all CCG physical assets.

Commitment	Lead	
<b>2008-2009</b>		
Begin implementation of AMS deployment.	AG	DG, ITS
Complete the five AMS vessel pilots	AG	ACs

In 2008-2009, we will fulfil our requirements under the Treasury Board Secretariat Management of Information Technology Security (MITS) Action Plan.

Commitment	Lead
<b>2008-2009</b>	
Implement the Treasury Board-directed Management of Information Technology Security (MITS) Action Plan:	
• Develop and implement a MITS governance structure.	DG, ITS
• Implement the IT security component of Operational Systems Security Enhancement Project (OPSSEP).	DG, ITS

As a part of the ongoing continuous improvement arising from the Integrated Technical Services Strategy Project (ITSSP), a catalogue of the services available will be finalized. In addition, to actualize some of the services developed as part of ITSSP, we will develop and implement a Technical Solution Centre (Electronics), complete with Service Level Agreements, at the national and regional levels.

Commitment	Lead
<b>2008-2009</b>	
Continue the development of ITS services and governance:	
• Finalize ITS Services Catalogue and begin implementation.	AG DG, ITS
• Develop a plan to implement a Technical Solution Centre (Electronics).	AC, QC
• Identify and develop national and regional level service level agreements (SLAs) for the major electronic services to be used at the Technical Solutions Centres.	DG, ITS
<b>2009-2010</b>	
Continue the development of ITS services and governance:	
• Implement the Technical Solution Centres (Electronics).	ACs

### *Improved Maintenance of Existing Shore-based Infrastructure*

As with our seagoing vessels, we will continuously improve the maintenance of our shore-based physical assets in line with government expectations of asset capability, reliability, availability, and value at minimum lifecycle cost.

In 2007-2008, the requirement for standardized maintenance documentation was included in the Statements of Work for the acquisition of all new shore-based systems. This ensures that standardized maintenance documentation is acquired when we purchase any new shore-based asset. We also initiated a program to assess the condition of assets in 2007-2008.

In 2007-2008, we initiated a program to assess the condition of assets at high-risk sites. As part of our ongoing work, we will continue these surveys and initiate mitigation strategies for any risks or issues found to be unacceptable.

To complement the Engineering Maintenance Manual for Vessels, we will develop and implement similar manuals for electronic assets (mainly MCTS-related assets) and for marine and civil infrastructure (mainly fixed and floating aids).

Commitment		Lead
<b>2009-2010</b>		
Develop standardized engineering and maintenance manuals for selected CCG assets;	AG	
<ul style="list-style-type: none"> <li>Develop an engineering and maintenance manual for marine and civil infrastructure, including communications and training materials.</li> </ul>		DG, ITS & ACs
<b>2010-2011</b>		
Further develop and implement standardized engineering and maintenance manuals for selected CCG assets:	AG	
<ul style="list-style-type: none"> <li>Ensure implementation of the engineering and maintenance manual for marine and civil infrastructure.</li> </ul>		ACs
<ul style="list-style-type: none"> <li>Develop the engineering and maintenance manual for electronics and informatics, including communications and training materials.</li> </ul>		DG, ITS
<ul style="list-style-type: none"> <li>Ensure implementation of the engineering and maintenance manual for electronics and informatics.</li> </ul>		ACs

### *Human Resources Initiative*

As CCG is committed to learning and development initiatives to ensure having a skilled, well-trained, knowledgeable, and professional workforce, initial training will soon be delivered on the Lifecycle Management System (LCMS) guidance manual. The purpose of this training is to enhance the understanding of Lifecycle Management (LCM) and its processes throughout the CCG workforce. The target audience for this one-day course is non-technical

personnel, and the course will be based on a condensed version of LCMS training given to technical personnel over the past couple of years.

Commitment	Lead
<b>2009-2010</b>	
Provide required training on the LCMS guidance manual.	ACs

### **Reinvestment in the Asset Base**

We expect to spend \$131 million in 2008-2009 on reinvestment in the CCG asset base.

The average age and deteriorated physical condition of the asset base is diminishing assets' reliability and performance, and operating and maintenance costs are escalating. Effective cost management is further strained by the increasing need to manage both old and new assets, as old technologies are retained even while new technologies are adopted.

The goal of the Coast Guard reinvestment strategy is to refurbish and replace assets that have deteriorated over time. This reinvestment strategy is expected to bring the asset base back to its original baseline operating condition. Improving the condition of capital assets will have a direct impact on the quality and extent of CCG service delivery and the associated ongoing operating and maintenance costs.

For a full description and a complete list of projects, see Annex B.

## Canadian Coast Guard College

The Canadian Coast Guard College is the main operations and technical training facility for the CCG and operates as the “Centre of Excellence” for delivering high quality, bilingual, up-to-date maritime training and services to Canadian students. Its mission is to train and develop marine professionals in support of CCG mandated programs in marine safety, security and environmental protection.

The College employs approximately 100 people, including 40 instructors. As a residential training facility, the College has approximately 60 full-time staff dedicated to hostelling, property management, academic support,

and general administration and management of the institution.

The College offers training in four streams: CCG Officer Training Program (CCGOTP), Marine Communications and Traffic Services (MCTS), Marine Maintenance and Equipment Training (MMET), and Rescue, Safety and Environmental Response (RSER). In 2007-2008, the College delivered over 20,000 training days to over 300 Canadian Coast Guard employees.

**In 2007-2008, the Canadian Coast Guard College...**

- Graduated 29 Ships' Officers.
- Graduated 23 MCTS Officers.
- Provided training to 152 Electronic Technologists and Ship Radio Inspectors.
- Provided SAR training to 52 Coast Guard and DND personnel.


**Table 13: Number of Candidates at Canadian Coast Guard College**

Program		Projected Number of Graduates*			
		2007-08	2008-09	2009-10	2010-11
CCG Officer Training Program (CCGOTP) Approx. 120 Officer Cadets are expected to be enrolled in the 4-year program during the 2008-2009 fiscal year.	Navigation	14	0	0	11
	Engineering	15	0	14	12
Marine Communications and Traffic Services Officers (MCTSO) In MCTS, 23 of 27 Ab-initio candidates were successful	English	21	26	21	19
	French	2	8	0	4
Marine Maintenance and Equipment Training (MMET)		152	150	N/A	N/A
Rescue, Safety, and Environmental Response (RSER)	Search and Rescue Training	81	56**	56**	56**
	Environmental Response Training	0	0	0	0
	Fleet Technical Training	0	0	0	0

\* Subject to change, given enrolment outcome and the financial and human resources available

\*\* These numbers are based on projected number of courses and number of seats per course.

Canadian Coast Guard College		
Provides these services...	Measured this way...*	With these targets...
• Trained personnel	• Percentage of courses delivered over planned course delivery (CGOTP)	• 100%
	• Percentage of courses delivered over planned course delivery (MCTS)	• 100%
	• Percentage of courses delivered over planned course delivery (SAR)	• 100%
	• Percentage of courses delivered over planned course delivery (ER)	• N/A
	• Percentage of courses delivered over planned course delivery (MMET)	• 100%
• Qualified personnel	• Number of students completing their courses and programs (CGOTP)	• 72
	• Number of students completing their courses and programs (MCTS)	• 34
	• Number of students completing their courses and programs (SAR)	• 56
	• Number of students completing their courses and programs (ER)	• N/A
	• Number of students completing their courses and programs (MMET)	• 150



To achieve this result...	Measured this way...*	With these targets...
• Qualified marine professional to deliver CCG programs	• Delivery of targets set out in CCG Human Resources Plan	• To be determined

\* These are the performance indicators in the CCG Performance Measurement Framework.

**Table 14: Canadian Coast Guard College Resource Profile, 2008-2009 (thousands of dollars)**

Region	Salary	O&M	Total
Canadian Coast Guard College	6,488.9	6,476.5	<b>12,965.4</b>
National Program	-	-	-
<b>Direct Program Total</b>	<b>6,488.9</b>	<b>6,476.5</b>	<b>12,965.4</b>
Coast Guard Fleet Operational Readiness Allocation	-	-	-
Lifecycle Asset Management Services Allocation	133.1	63.0	<b>196.1</b>
<b>Total Service Cost</b>	<b>6,622.0</b>	<b>6,539.5</b>	<b>13,161.5</b>

**Key Initiative**

*Canadian Coast Guard College Transformation*

In 2007-2008, the Canadian Coast Guard College continued a renewal process in furtherance of its mandate as the Canadian Coast Guard training Centre of Excellence.

In 2008-2009, the College will focus on developing a Transformation Plan designed to ensure the organization is properly structured and that policies and procedures are established to improve the overall effectiveness and efficiency of the institution. The plan is intended as a blueprint for the College for the next 5 years and as the framework within which course development, investment, and infrastructure decisions will be taken.

Commitment	Lead
2008-2009	
Develop the Canadian Coast Guard College Transformation Plan.	Executive Director, CCGC

## Commissioner's Commendation Awarded to Canadian Coast Guard College

The Canadian Coast Guard College received a Commissioner's Commendation for the values and ethics demonstrated in the year of planning, research, co-ordination, and intensive teamwork that went into the unveiling and dedication of a CCG memorial to fallen colleagues. Many individuals from the College worked behind the scenes to provide the foundation and support that were critical to the organization of this important national tribute.

The College's work culminated in a weekend of events in October 2007. Over one hundred people representing 28 families of the 34 individuals being honoured were present, as were the Minister of Fisheries and Oceans and the Commissioner of the Canadian Coast Guard. Numerous representatives of local, provincial, and federal government departments and organizations also attended. A spiritual vigil and dinner were held on the eve of the unveiling. The unveiling ceremony itself was a moving and meaningful tribute to those being remembered.

*From left to right: Suzanne Drouin, André Vallée, Annette Aucoin, OC Ottley (accepted award on behalf of Vaughan Owens) and Commissioner George DaPont.*

*OC Ottley on behalf of OC Owens emphasized that the award was being accepted on behalf of the all the Officer Cadets and the MCTS students who contributed to the deeply moving ceremonies.*

*Please note that Vaughan Owens, Cathy Barratt and Kathryn McElhone were awarded the Commissioner's Commendation but were not present at the award presentation ceremony.*



## CCG'S ROLE IN THE ARCTIC

CCG has a long and proud history of service in the Arctic. As early as 1884, government survey expeditions sought a shorter navigational route to Western Canada through Hudson Bay and Strait to meet the needs of a growing economy. Arctic sovereignty patrols began in 1903 with CGS *Neptune*. Coast Guard has served Arctic Canada for generations.

Every year, from late June to early November, we deploy one light, two heavy, and four medium icebreakers to the Arctic. These icebreakers operate in a harsh climate and some of the most challenging sea ice conditions in the world. They are often the first vessels into the Arctic each shipping season and the last to leave. We also have three vessels on the Mackenzie River and Beaufort Sea.

Close to 70 CCG employees are assigned to northern operations in the Central and Arctic Region on a seasonal basis. In addition,

the officers and crew of six icebreakers are deployed to the Arctic in summer once southern icebreaking operations are complete.

The reassuring and longstanding presence of Coast Guard personnel and assets in the Arctic underscores Canada's national sovereignty and helps keep Arctic waterways open, safe, and clean. The women and men who crew our vessels and serve in the Arctic each year have a combined wealth of knowledge and experience. Many of the Commanding Officers of our icebreakers have more than 20 years of service in the demanding Arctic marine environment. CCG personnel also visit the Arctic communities we serve to tap into local and traditional knowledge. Much of our success in delivering our programs and services is due to our attention to the human elements involved.

Our Arctic activities, many of which are delivered in partnership with other federal departments



and agencies, academic institutions, and northern communities, include:

- Escorting commercial ships through ice to ensure access to Northern communities;
- Supporting scientific endeavours such as hydrographic charting and marine science;
- Maintaining aids to navigation in the Canadian Arctic waterways;
- Acting as the primary response lead for pollution incidents north of 60°;
- Providing marine SAR services;
- Operating two seasonal Arctic MCTS Centres: Inuvik in the west and Iqaluit in the east;
- Providing marine telephone services such as radio medical calls;
- Delivering food, cargo, and fuel to remote sites where commercial ships do not go; and
- Conducting joint exercises with DND (Operation Nanook in 2007).

Retreating polar ice, rising global demand for resources, and the prospect of extending the

shipping season are creating new challenges, demands, and exciting opportunities in Canada's North. For example, there are plans for year-round commercial resource-extraction activities around the archipelago, and Nunavut is planning to further develop local fisheries by building a commercial harbour at Pangnirtung.

Our most capable icebreaker, CCGS *Louis S. St-Laurent*, is playing a key role in mapping the seabed and extended continental shelf to support the Canadian claim before UNCLOS; for more information, see page 56. As this vessel is scheduled to be decommissioned in 2017, Budget 2008 provided \$720 million for a new replacement vessel with greater icebreaking capabilities. This both reflects expected future demand for CCG services in an extended Arctic navigation season and will help strengthen Canadian Arctic sovereignty.



## HOW WE HELP PROTECT OUR ENVIRONMENT

The Canadian Coast Guard contributes significantly to protecting the environment. First, a number of its programs and services help protect the environment directly, or support other government departments and agencies in their environmental agendas. Second, the Coast Guard is taking measures to make its internal operations as environmentally friendly as possible.

### Providing Services That Help to Protect the Environment

Several Coast Guard programs and services that contribute directly to improving the marine environment include: Waterways Development, Environmental Response, and Icebreaking. They are described in detail in earlier sections of this Business Plan. In addition, the Coast Guard provides significant vessel support to DFO Science, Environment Canada and other federal departments and agencies engaged in scientific and environmental research in Canada's oceans and on the Great Lakes. Finally, the Coast Guard supports the enforcement activities of DFO Fisheries and Aquaculture Management that help maintain sustainable fisheries. Again, these support activities are described in more detail in other sections of this document.

### Greening Operations through Better Environmental Management

In our operations, we strive to meet all national and international standards and regulations protecting the environment, and do more than is required in a many areas. We have taken steps to make Coast Guard more eco-friendly, both in our sea-going and shore-based activities. We look

for ways to reduce fuel consumption by our ships, better manage waste, and innovate by acquiring newer technologies and making more efficient use of our existing equipment.

Coast Guard implements the provisions of the International Management Code (ISM) for the Safe Operations of Ships and Pollution Prevention through its Fleet Safety and Security Management System (SSMS) one important objective of which is to avoid harm to the environment. Within CCG this requires clear guidance and procedures, and appointment of 'designated persons' to monitor implementation practices. There must also be careful management of seagoing personnel to ensure that they achieve and maintain high standards of environmental protection, and training for continuous improvement of skills to handle safety and environmental emergencies.

CCG's performance in implementing the ISM is independently audited by Det Norske Veritas (DNV) of Norway, which is authorised by all major Flag States to carry out audits and issue Documents of Compliance (DOC) and Safety Management Certificates (SMC). During the five-year certification cycle each vessel is twice audited by DNV, while CCG's auditors annually audit each vessel.

Through partnership with Environment Canada, CCG has established a Fuel Consumption Guide to help reduce its fuel consumption by identifying the optimal speed at which each ship uses the least amount of fuel during the conduct of routine, non-emergency, operations. By reducing

fuel consumption, CCG also reduces the level of air emissions that would otherwise be released.

Using satellite imagery of sea ice cover provided by Environment Canada, Coast Guard plans the best routes through which its own and escorted vessels avoid ice thereby economizing the use of fuel. The CCG, through its multitaskable vessels, also maximizes the work that a particular ship and crew can accomplish at sea for a given level of fuel consumption and associated air emissions.

Coast Guard has adopted a policy governing the safe storage and disposal of solid waste on board its vessels that ensures the capacity to retain as much garbage, recyclable material, contaminated fluids and hazardous material onboard between ports. The policy dictates what can be safely stored and recycled and how to do it in compliance with applicable regulations.

The Agency has been involved in work to find new and better bottom hull coatings. Our ships are equipped with recovery systems that capture heat generated by marine engines and re-use it for other purposes such as heating water. Some of the vessels generating electricity needed for propulsion also employ a Power Take Off from the vessel's turning propulsion shafting for greater efficiency in power generation. CCG has also conducted trials, onboard the CCGS *Louis S. St.-Laurent*, of an innovative wet scrubbing technology designed to reduce air emissions.

Coast Guard has undertaken to establish an environmental disclosure protocol applicable to the disposal of surplus CCG vessels which

requires the services of a Certified Environmental Auditor to inspect ships destined for disposition for any hazardous materials and to provide a disclosure report. The report describes the materials found, their location and quantity, as well as suggested handling procedures. There is also a series of environmental guidelines that range in their application from green procurement, through use and disposal of electronic equipment, to ships' refit.

### Green Procurement to Advance Future Environmental Performance

Coast Guard has embarked on a Fleet Renewal program (see page 19) for some of the larger vessels in its fleet. By renewing its fleet and by adopting best practices in green procurement, CCG is able to employ new and more efficient technologies to improve the environmental performance of the fleet. New vessel construction is managed so as to comply with applicable, existing and near-future domestic and international safety and environmental regulations. Generally speaking, when we put safety first we also put the environment first.

Although many vessels in the fleet have reached their service design life expectancy, the Agency continues to perform environmental assessments as part of new technology evaluations, and efforts to improve the life cycle management of its capital assets. Should a piece of equipment need replacement, we look at doing so with new, more efficient and eco-friendly equipment.

Coast Guard also aims for an efficient and effective aids-to-navigation service for the 21<sup>st</sup>

century by taking advantage of new, more eco-efficient technologies and alternate service delivery options. For example, the conversion of lighted navigational aids to light emitting diode (LED) lanterns enables us to provide better service to navigation at lower overall economic and environmental cost.

Improvements to shore-based environmental management activities are also helping to reduce CCG's environmental footprint by making better use of the physical space at current and new sites, such as those for marine radio communications. Some sites have been converted from diesel to new solar or wind turbine power generation technologies, thereby reducing fossil fuels and emissions in power generation or in vessel tasking for site refuelling and site maintenance operations.

### CCG's Environmental Commitments under DFO's Sustainable Development Strategy 2007-2009

As part of the Department's Sustainable Development Strategy (SDS), the Coast Guard has made the following specific, voluntary commitments to improve environmental outcomes for Canadians and to reduce its own environmental footprint.

**In 2007-2008...**

- As part of the ATON21 initiative (see page 22) the CCG has now converted as many steel buoys to plastic and lighted buoys to LED technology as current technology permits thus completing our SDS commitment which was planned for 2009-2010.

Commitment	Lead
<b>2008-2009</b>	
A Canadian Coast Guard that better understands the environmental impact of its business and directs the operation and development of all assets in accordance with a set of industry leading standards and regulations:	DG, ITS
<ul style="list-style-type: none"> <li>• Under the Departmental Occupational Health and Safety Program, complete development of the CCG component which is a comprehensive management system for health, safety, and environmental issues specific to all shore equipment, facilities and operations.<sup>5</sup></li> </ul>	
Efficacy in ensuring an effective response to minimize adverse impacts of marine pollution incidents in Canadian waters is enhanced.	DG, MS
<ul style="list-style-type: none"> <li>• Complete revision of National Environmental Response Strategy, consulting with partners on the document. As part of the strategy we will develop competency profiles and a training strategy for ER management as well develop the senior managers training course.</li> </ul>	
<b>2009-2010</b>	
A Canadian Coast Guard that better understands the environmental impact of its business and directs the operation and development of all assets in accordance with a set of industry leading standards and regulations:	DG, ITS with the support of the DG, MCP
<ul style="list-style-type: none"> <li>• Develop a set of industry-leading, environmental and sustainability standards and specifications that incorporate modern environmental practices and technology, as well as national and international best practices, into the procurement of new CCG assets. The Coast Guard to take the lead in 'green' acquisitions and operations of both marine and shore-side infrastructure through the use of standards and specifications.</li> </ul>	
<ul style="list-style-type: none"> <li>• Leverage the experience and knowledge of CCG and other organizations to conduct a baseline survey of the physical assets and operations of CCG to establish a benchmark of their environmental sustainability and eco-efficiency.<sup>6</sup></li> </ul>	DG, ITS

5 This is updated wording of a commitment set out in DFO's Sustainable Development Strategy 2007-09.

6 This commitment was identified as a deliverable for 2008-09 in the 2008-09 Report on Plans and Priorities (RPP).

## INTERNATIONAL ACTIVITIES

Many of the tasks CCG performs have an international component. For example, we work with organizations from other countries to advance common interests, participate in various international forums, provide expert advice on Coast Guard issues to governments of other countries, and share best practices with the United States Coast Guard and other Coast Guards.

Here are just some of the specifics of our international activities:

- We lead a multi-departmental team at the North Pacific Coast Guard Forum (NPCGF), a six-nation organization working to ensure safe and secure waters in the North Pacific region through improved multilateral information sharing.
- We lead multi-departmental teams to meetings of the newly formed North Atlantic Coast Guard Forum (NACGF). In September 2008, we will participate in a joint environmental response exercise with Denmark and the United States off Greenland at the NACGF Summit.
- We work with international organizations such as the IMO and the International Association of Lighthouse Authorities (IALA) to develop rules, regulations, policy, and technology for safe and secure transportation on the world's waterways. Among other things, these organizations develop and recommend technical standards for aids to navigation and automated identification systems, areas that are essential to CCG's responsibilities and activities in Canada.
- CCG and the United States Coast Guard have a number of mutual clients and stakeholders. The two Coast Guards perform joint exercises and deliver numerous services to their mutual clients. They also hold a Canada-United States Coast Guard Summit every year to provide the national leadership necessary to guide this partnership.
- We host delegations from foreign Coast Guards as part of our commitment to sharing best practices. In 2007, for example, we hosted at headquarters and in regional offices delegations from Korea, China, and Senegal.
- We are committed to high-level maritime education and research. For instance, with Transport Canada, we recently renewed a Contribution Agreement with the IMO-founded World Maritime University (WMU), which offers specialized graduate education in maritime affairs. The Contribution Agreement supports the Canadian Chair of the Marine Environment Protection Program at WMU.

### 2007-2008 Accomplishments

- CCG led, on behalf of the Government of Canada, multi-departmental teams to the NPCGF March Experts Meeting and September Summit Meeting.
- CCG led, on behalf of the Government of Canada, a multi-departmental team to the inaugural meeting of the North Atlantic Coast Guard Forum (NACGF).
- CCG renewed a Contribution Agreement in support of the Canadian Chair of the Marine Environment Protection Program at WMU.
- CCG hosted visits by the Korea Coast Guard Aviation and Shipbuilding Divisions.
- CCG participated in the annual Canada-US Contingency Plan, joint SAR exercises, and international SAR skills competitions.

### Status of the Initiatives Undertaken in the 2007-2008 Business Plan

During 2007-2008, several initiatives laid the cornerstones for strengthening management and building national consistency in planning, reporting, and management practices. These initiatives included:

- The approval of a new Program Activity Architecture (PAA);
- The development of an activity based approach to budgeting;
- The development of a financial coding structure consistent with the PAA;
- The approval of a new refit authority; and
- The development of common protocols for the entry of salary data.

The key initiative was the approval of the new PAA. This new structure allows us to plan, manage, and report our financial and non-financial information in line with the key services we deliver to Canadians. This initiative will also allow us to present the same information for our fleet and for the lifecycle management of shore-based assets as for other sub-activities. Financial information organized in terms of the new PAA will give our stakeholders and clients a better understanding of the cost to the government of Canada of owning and maintaining the many different types of assets needed to deliver our services.

To provide financial information in line with the PAA, we developed an activity-based approach to budgeting. With the associated coding changes that will be put in place this

year, we will have a simplified method of developing and displaying information. This will clearly link our results-based management process with the Management, Resources and Results Structure (MRRS). The other initiatives, including the new refit authority and common protocols for the entry of salary data, have strengthened our management practices and processes by ensuring that we have the tools we need to deliver on our commitments.

By aligning these processes and reducing organizational inconsistencies, we will ensure that the appropriate information is available for decision-making when it is required. This will allow us to focus on the more important issues we face and to make informed decisions to deal with those issues.

### Overview of the Funding Provided in Recent Federal Budgets

One of the most important issues CCG faces is the management of its assets. There have been significant investments in Coast Guard assets over the past few years. These investments have enabled CCG to maintain service to Canadians and address some chronic reinvestment needs.

In Budget 2007, \$324 million was identified for the purchase and maintenance of six new vessels for the CCG fleet. In Budget 2008, the government committed \$720 million to a new polar-class icebreaker. This brings the government's total investment in CCG since 2005 to more than \$1.4 billion. The purchase of these new vessels will help deliver CCG and DFO

programs and remove some of the risk related to the aging asset base that is being mitigated on a daily basis.

### Increasing Demand versus Capacity

The changes mentioned above will position us to respond to increasing demand. With a greater emphasis on global factors such as climate change and security, demand for the services our assets provide is growing. Our major assets, such as the fleet of vessels and helicopters, are more and more often being tasked to respond to situations outside the planned programs of DFO. With activity-based budgeting in place, we will be able to understand both the financial impact of meeting this increased demand, where possible, and the financial and non-financial impact of delaying or deferring DFO activities.

### Price Increases

As is the case for any other operational organization, inflation has a significant impact on our ability to meet client expectations. One of the most significant inflationary pressures affecting CCG is the price of fuel.

Fuel prices have increased by 74% since 2003-2004. We have attempted to mitigate this pressure through internal reallocation, but this has become increasingly difficult to do while maintaining levels of service. Further increases in the price of diesel fuel now risk affecting program delivery. We are working toward a more permanent solution.<sup>7</sup>

Other operational expenditures such as refit and maintenance, which are required to keep our assets in a state of readiness, have also been subject to inflationary pressures. Although these pressures have been less visible to the public than fuel, they are no less significant for CCG. For example, a shortage of suitable facilities on the west coast has resulted in substantial price increases for dry-docking vessels, which has reduced the amount of work CCG can afford. Similarly, a world-wide shortage in helicopter parts has resulted in significant price increases for aircraft maintenance. Again, CCG has reallocated funding from within to address these issues, but further reallocation would have a significant impact on program delivery.

The nature of our operations requires that our services be available 24/7 every day of the year. This results in systemic overtime, called *operational overtime*, that cannot be avoided. Such overtime is primarily incurred by Ships' Officers, Ships' Crews, and Marine Communications and Traffic Services Officers. Each new contract settlement for these groups therefore results in increased overtime costs that cannot be avoided. During 2007-2008, we sought and received a commitment from Treasury Board to include funding for operational overtime in the funding received for contract settlements. As a result, we will no longer need to reallocate funding to cover these costs.

<sup>7</sup> The planned spending presented in this business plan assumes additional funding to partially offset the impact of increased fuel costs. Should additional funding not be available, this plan will be adjusted accordingly.

## Assets and Liabilities

The Canadian Coast Guard asset base includes such assets as:

- Small, medium, and large aids to navigation;
- Communication systems and equipment;
- Helicopters;
- Vessels; and
- Waterways.

This asset base has a total replacement value of about \$5.6 billion: approximately \$4.0 billion for fleet assets, \$1.6 billion for equipment and other moveable assets.

Although the replacement value of our assets is estimated at \$5.6 billion, the net book value of these assets is \$599.13 million, which is an indication of the age of our assets. For example, some 30% of operational vessels and the majority of large vessels are over 25 years old, and another 32% are between 15 and 25 years old. The useful lifespan of a major vessel is generally considered to be approximately 30 years, while the lifespan of smaller units can vary from 15 to 20 years. The overall condition of smaller fleet assets is acceptable but deteriorating quickly. However, many vessels, especially the medium- to large-sized vessels, are close to or well beyond their useful lifespan and are in need of replacement, and many have significant maintenance requirements. Although recent budgets have provided significant funding for renewal of the CCG large vessel fleet, the results of that investment will take some time to be realized.

A similar situation exists with our shore-based assets: many of these assets, such as communications towers and storage tanks for fuel, are old and at the end of their expected lives. Each year that we continue to operate these assets increases the risk of failure. This is a liability for CCG, and we manage it within our major capital budget.

## Conclusion

CCG has made progress on its management initiatives, and this has translated into financial support from Parliament. As an asset-intensive and highly operational arm of the government, CCG must continue to improve both service delivery and its management practices. These improvements, along with financial support for our major cost drivers, will ensure that the Agency is strong and financially viable well into the future.

*Table 15: Derivation of 2008-2009 Budget Allocation*

(Millions of Dollars)	Salary	O&M	Sub-total	Capital	Vote-Netted Revenue	Contributions	Total
<b>2007-2008 Final Approved Allocation</b>	<b>294,295.1</b>	<b>164,644.2</b>	<b>458,939.3</b>	<b>168,055.9</b>	<b>(50,058.0)</b>	<b>4,901.0</b>	<b>581,838.2</b>
<b>External Funding:</b>							
International Polar Year	-	9,746.6	9,746.6	-	-	-	<b>9,746.6</b>
Real Property 2007/08 Funding for the College	-	(2,054.7)	(2,054.7)	-	-	-	<b>(2,054.7)</b>
Science, FAM & NAFO 2007/08 funding for Ships	(34,853.3)	(19,732.7)	(54,856.0)	-	-	-	<b>(54,586.0)</b>
<b>Vote Conversions:</b>							
Science, FAM & NAFO portion of Refit Vote Conversion	-	(6,085.0)	(6,085.0)	-	-	-	<b>(6,085.0)</b>
Various G&C Vote Conversions	-	(105.0)	(105.0)	-	-	105.0	-
<b>New Funding:</b>							
MSPV Funding	417.0	3,298.8	3,715.8	36,791.0	-	-	<b>40,506.8</b>
Transformational Plan	-	-	-	4000.0	-	-	<b>4000.0</b>
Salary/O&M Conversions:	(3,872.3)	4,576.6	704.3	-	-	-	<b>704.3</b>
<b>Permanent Reductions:</b>							
ERC	-	(4,500.0)	(4,500.0)	-	-	-	<b>(4,500.0)</b>
Efficiency Cut	-	(2,600.0)	(2,600.0)	-	-	-	<b>(2,600.0)</b>
Other (16 items)	(418.6)	1,075.2	656.6	(5,474.4)	-	(125.0)	<b>(4,942.8)</b>
2006/07 to 2008/09 Carry-forward	-	(5,000.0)	(5,000.0)	(5,000.0)	-	-	<b>(10,000.0)</b>
<b>Approved 2008-2009 Main Estimates</b>	<b>255,567.9</b>	<b>143,264.0</b>	<b>398,831.9</b>	<b>198,372.5</b>	<b>(50,058.0)</b>	<b>4,881.0</b>	<b>552,027.4</b>
<b>External Funding:</b>							
Science Ship Funding for 2008/09, Net of Lay Day	22,133.5	10,643.2	32,776.7	-	-	-	<b>32,776.7</b>
FAM ships funding for 2008/09	9,799.0	5,745.5	15,544.5	-	-	-	<b>15,544.5</b>
NAFO ships funding for 2008/09	4,564.3	2,401.2	6,965.6	-	-	-	<b>6,965.6</b>
Real property to College for 2008/09	-	2,085.7	2,085.7	-	-	-	<b>2,085.7</b>
DND MSOC from C&P	-	508.2	508.2	-	-	-	<b>508.2</b>
Science refit 2008/09	-	4,050.0	4,050.0	-	-	-	<b>4,050.0</b>
FAM refit 2008/09	-	985.0	985.0	-	-	-	<b>985.0</b>
NAFO refit 2008/09	-	997.8	997.8	-	-	-	<b>997.8</b>
IMSO G&C	-	(300.0)	(300.0)	-	-	-	<b>(300.0)</b>
Salary/O&M Conversions	11,132.1	(13,358.7)	(2,226.6)	-	-	-	<b>(2,226.6)</b>
CCG ISP Payment	-	(2,782.6)	(2,782.6)	-	-	-	<b>(2,782.6)</b>
Other (2 items)	(5.8)	(105.8)	111.6	-	-	-	<b>111.6</b>
Estimated Additional Funding	-	10,227.2	10,227.2	-	-	-	<b>10,227.2</b>
2007/08 to 2008/09 Operating Carry-forward	-	5,722.7	5,722.7	-	-	-	<b>5,722.7</b>
<b>2008-09 Budget allocation</b>	<b>303,194.0</b>	<b>170,083.4</b>	<b>473,274.4</b>	<b>198,372.5</b>	<b>(50,058.0)</b>	<b>4,881.0</b>	<b>626,469.9</b>

*Table 16: Budget Allocations by Sub-activity, 2008-2009 (thousands of dollars)*

Sub-Activity	Salary	Other Operations and Maintenance (O&M)	Total Operating	Major Capital	Grants and Contributions	Total
Aids to Navigation Services	12,284.6	10,182.6	<b>22,467.2</b>	-	-	<b>22,467.2</b>
Waterways Management Services	2,902.3	10,139.7	<b>13,042.0</b>	-	-	<b>13,042.0</b>
Marine Communications and Traffic Services	32,893.5	7,734.7	<b>40,628.2</b>	-	-	<b>40,628.2</b>
Icebreaking Services	950.9	17,553.1	<b>18,504.0</b>	-	-	<b>18,504.0</b>
Search and Rescue Services	10,724.8	15,419.6	<b>26,144.4</b>	-	4,731.0	<b>30,875.4</b>
Environmental Response Services	5,853.8	3,950.5	<b>9,804.3</b>	-	75.0	<b>9,879.3</b>
Maritime Security	4,155.5	5,291.0	<b>9,446.5</b>	-	300.0	<b>9,746.5</b>
Coast Guard Fleet Operational Readiness*	167,744.7	65,327.0	<b>233,071.7</b>	147,945.8**	-	<b>381,017.5</b>
Lifecycle Asset Management Services	59,191.9	28,009.0	<b>87,200.9</b>	50,426.7	-	<b>137,627.6</b>
Canadian Coast Guard College	6,488.9	6,476.5	<b>12,965.4</b>	-	-	<b>12,965.4</b>
<b>Total</b>	<b>303,191.0</b>	<b>170,083.7</b>	<b>473,274.6</b>	<b>198,372.5</b>	<b>5,106.0</b>	<b>676,753.1</b>

\* Includes all ship support (excluding fuel).

\*\* Includes planned conversion from O&M for refit and carry-forward.

*Table 17: Budget Allocations by Region, 2008-2009 (thousands of dollars)*

Region	Salary	O&M	Total
Newfoundland and Labrador	59,483.5	31,349.2	<b>90,832.8</b>
Maritimes	58,112.6	27,672.5	<b>85,785.1</b>
Québec	50,976.9	27,255.2	<b>78,232.1</b>
Central and Arctic	39,379.9	17,388.1	<b>56,768.0</b>
Pacific	63,567.8	26,319.2	<b>89,887.0</b>
National Programs	1,241.6	13,929.0	<b>15,170.6</b>
NCR	30,428.7	26,170.3	<b>56,599.0</b>
<b>Total</b>	<b>303,191.0</b>	<b>170,083.7</b>	<b>473,274.6</b>

**Table 18: 2008-2009 Financial Allocations by Sub-Activity by Region**  
(thousands of dollars)

Sub-Activity	Newfoundland and Labrador	Maritimes	Québec	Central and Arctic	Pacific	NCR	National Programs	Total
Aids to Navigation Services	5,058.7	3,459.8	1,453.0	2,784.3	6,170.3	3,416.7	124.4	<b>22,467.2</b>
Waterways Management Services	23.8	1,802.0	4,794.4	1,430.9	1,164.9	3,826.1	-	<b>13,042.0</b>
Marine Communications and Traffic Services	6,061.1	6,138.9	6,364.1	6,168.7	10,861.3	3,611.1	1,423.0	<b>40,628.2</b>
Icebreaking Services	2,726.9	3,290.7	1,901.3	466.3	91.7	616.7	9,410.4	<b>18,504.0</b>
Search and Rescue Services	7,737.5	6,465.0	2,507.2	2,981.5	3,830.5	2,345.8	276.8	<b>26,144.4</b>
Environmental Response Services	1,413.0	1,325.7	1,381.1	1,981.8	1,356.6	2,314.6	31.5	<b>9,804.3</b>
Maritime Security	605.8	5.2	1,966.5	3,594.7	175.6	1,029.2	2,069.5	<b>9,446.5</b>
Coast Guard Fleet Operational Readiness	54,464.8	47,813.4	41,431.4	23,927.9	50,424.2	13,175.1	1,835.0	<b>233,071.7</b>
Lifecycle Asset Management Services	12,741.2	15,484.6	16,433.1	13,431.9	15,811.8	13,298.3	-	<b>87,200.9</b>
Canadian Coast Guard College	-	-	-	-	-	12,965.4	-	<b>12,965.4</b>
<b>Total</b>	<b>90,832.8</b>	<b>85,785.1</b>	<b>78,232.1</b>	<b>56,768.0</b>	<b>89,887.0</b>	<b>56,599.0</b>	<b>15,170.6</b>	<b>473,274.6</b>

**Table 19: 2008-2009 National Programs by Sub-Activity** (thousands of dollars)

Sub-Activity	Ice Reconnaissance	Helicopters	Automatic Identification System	Marine Security Operations Centres	New Initiatives Fund	Research and Development	Total
Aids to Navigation Services	-	-	-	-	-	124.4	<b>124.4</b>
Waterways Management Services	-	-	-	-	-	-	
Marine Communications and Traffic Services	-	-	1,369.7	-	-	53.3	<b>1,423.0</b>
Icebreaking Services	9,300.0	-	-	-	-	110.4	<b>9,410.4</b>
Search and Rescue Services	-	-	-	-	238.4	38.4	<b>276.8</b>
Environmental Response Services	-	-	-	-	-	31.5	<b>31.5</b>
Maritime Security	-	-	-	2,069.5	-	-	<b>2,069.5</b>
Coast Guard Fleet Operational Readiness	-	1,835.0	-	-	-	-	<b>1,835.0</b>
Lifecycle Asset Management Services	-	-	-	-	-	-	
Canadian Coast Guard College	-	-	-	-	-	-	
<b>Total</b>	<b>9,300.0</b>	<b>1,835.0</b>	<b>1,369.7</b>	<b>2,069.5</b>	<b>238.4</b>	<b>358.0</b>	<b>15,170.6</b>

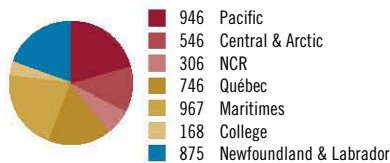
## ANNEX A: WORKFORCE

CCG relies on a diverse, professional, and dedicated workforce to deliver on its objective of safe and accessible waterways. This section provides information on the composition of our workforce and workplace. Demographic information is as of April 1, 2007.

### National Employment Distribution

CCG has a total workforce of 4,554 employees across the five regions, at the CCG College, and the National Capital Region (NCR).

*Figure 4:  
National Employment Distribution*



*Note: Because the organizational snapshot reflects data from April 1, 2007, it does not include the higher number of students typically employed in the summer. For example, CCG's Inshore Rescue Boat Program hires from 150 to 160 students each summer.*

### Language and Diversity

English is the first official language of 79.3% of CCG employees; French is the first official language of the remaining 20.7%.

Of CCG's employees, 24.9% — or 1,135 employees — have self-identified as part of an employment equity group. To reflect the availability of these groups in the Canadian labour market, this proportion would need to be 29%. The largest gap between representation within CCG and labour market availability is among visible minorities, followed by women, Aboriginal peoples, and persons with disabilities.

*Figure 5: Representation of the Four Employment Equity Groups at CCG*

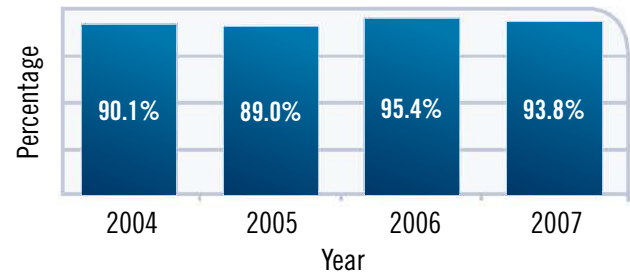
#### Representation — Women (2004 - 2007)



#### Representation — Aboriginal Peoples (2004 - 2007)



#### Representation — Persons with Disabilities (2004 - 2007)



#### Representation — Visible Minorities (2004 - 2007)



## Employment Tenure

CCG has 4,554 employees. Since September 2004, the proportion of determinate and indeterminate employees has remained consistent, varying within a 6% range.

Employment Tenure	Number	Percentage of Total Workforce
Indeterminate	3,784	83.1
Term > 3 months	284	6.2
Seasonal	275	6.0
Casual	146	3.2
Term < 3 months	48	1.1
Student	17	0.4
<b>Total</b>	<b>4,554</b>	<b>100.00</b>

## Distribution by Occupational Group

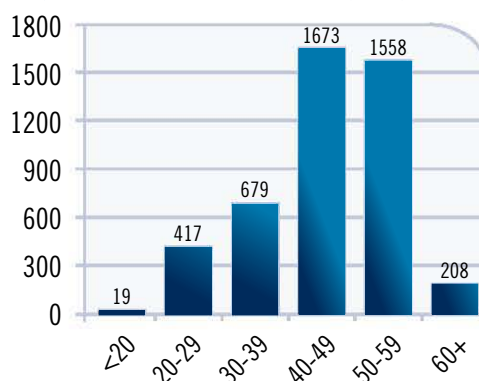
Our workforce encompasses administrative, professional, and operational staff. Over 60% of CCG employees work in areas that provide key services 24/7. This includes Ships' Crew and Ships' Officers, who work at sea, and MCTS Officers, who provide marine communications and traffic services.

Occupational Group	Number	Percentage of Total Workforce
Ships' Crew (SC)	1,474	32.4
Ships' Officer (SO)	917	20.1
Marine Communications and Traffic Services Officers (RO)	384	8.4
Electronics Technologists (EL)	262	5.8
Engineering and Land Survey (EN)	68	1.5
Engineering technologist (EG)	43	1.0
Clerical and Regulatory (CR)	213	4.7
General Technical (GT)	325	7.1
General Labour and Trades (GL)	314	6.9
Administrative Services (AS)	239	5.3
Executive (EX)	38	0.8
Lightkeepers (LI)	102	2.2
Student	17	0.4
Other	158	3.5
<b>Total</b>	<b>4,554</b>	<b>100.00</b>

## Eligibility for Retirement

Approximately 71% of CCG employees are between 40 and 59 years of age, and the average age of CCG employees is 45. Over the next five years, over 25% of our workforce will be eligible to retire. As of April 1, 2007, 8.0% of the total workforce was already eligible to retire.

Figure 6: Distribution by Age Group



Year of Eligibility to Retire	Number	Percentage of Indeterminate Workforce	Percentage of Total Workforce
Already Eligible	363	9.6	<b>8.0</b>
2008	157	4.1	<b>3.4</b>
2009	154	4.1	<b>3.4</b>
2010	179	4.7	<b>3.9</b>
2011	218	5.8	<b>4.8</b>
2012	195	5.2	<b>4.3</b>
<b>Total</b>	<b>1266</b>	<b>33.5</b>	<b>27.8</b>

A significant percentage of the total population of several CCG occupational groups is eligible for retirement between now and 2012. For example, the total percentage is 65% or higher within

the executive group; 28% or higher among lightkeepers, engineer and land surveyors, general labour and trades workers, electrical workers, and engineering and scientific support workers; and nearly 20% for ships' crew and ships' officers — or 450 seagoing employees.

### Projected Departures

Projections about departures are based on departures over the past five years and on eligibility for retirement. The greatest forecast attrition between now and 2009 is among seagoing personnel, with 157 projected departures (92 Ships' Crew and 65 Ships' Officers).

*Table 20: Projected Departures*

Occupational Group	Year of Projected Departure					Total Projected Departures*
	2008	2009	2010	2011	2012	
Ships' Crew (SC)	46	46	47	56	63	<b>258</b>
Ships' Officers (SO)	33	32	38	45	44	<b>192</b>
Marine Communications and Traffic Services Officers (RO)	20	18	16	16	18	<b>88</b>
Electronics Technologists (EL)	14	14	16	18	16	<b>78</b>
Engineering and Land Survey (EN)	3	3	2	3	2	<b>13</b>
Engineering technologist (EG)	3	3	3	3	3	<b>15</b>
Clerical and Regulatory (CR)	12	11	14	15	12	<b>64</b>
General Technical (GT)	14	18	20	19	18	<b>89</b>
General Labour and Trades (GL)	13	17	21	21	22	<b>94</b>
Administrative Services (AS)	16	15	14	19	18	<b>82</b>
Executive (EX)	6	5	5	4	6	<b>26</b>
Lightkeepers (LI)	6	7	7	6	5	<b>31</b>
Other	11	10	8	7	8	<b>44</b>
<b>Total</b>	<b>197</b>	<b>199</b>	<b>211</b>	<b>232</b>	<b>235</b>	<b>1,074</b>

\* Departures include all retirements, resignations, transfers, out and deaths. The data presented do not take into consideration any expected growth or reduction in the workforce.

## Bargaining Agents

CCG has a diversified workforce, and employees are therefore represented by a number of bargaining agents: nearly 63% are represented by the Public Service Alliance of Canada; 19% by the Canadian Merchant Service Guild (Ships' Officers); 8% by Canadian Auto Workers Local 2182; nearly 6% by the International Brotherhood of Electrical Workers; 2% by the Professional Institute of the Public Service of Canada; 0.3% by the Canadian Association of Professional Employees; and 0.2% of employees by the Association of Financial Officers.

*Figure 7: Employee Representation by Bargaining Agent*



## ANNEX B: CCG CAPITAL EXPENDITURES

The Canadian Coast Guard uses a wide range of equipment and other physical assets as it carries out its day-to-day activities. For example, search-and-rescue activities typically require rescue vessels or helicopters, as well as communications equipment; similarly, moving goods safely through Canadian waters depends on having reliable aids to navigation and may require the services of icebreakers.

The infrastructure required to support CCG activities falls into two broad groups:

- **Equipment and other moveable assets.**

These include communications equipment, radio towers and radar sites, as well as aids to navigation such as buoys and beacons.

These assets have an estimated replacement value of \$1.6 billion.

- **Fleet assets.** These assets include 114 vessels — search-and-rescue lifeboats, fishery science vessels, patrol vessels, light and heavy icebreakers, etc. — and 22 helicopters.

These assets have an estimated replacement value of \$4.0 billion.

These assets need to be systematically maintained and eventually replaced for CCG to be able to fulfil its mandate. This requires a long-term approach and significant financial resources, as capital expenditures account for a comparatively high percentage of our expenditures. Please note that the figures contained in the following pages may fluctuate throughout the fiscal year depending on availability of equipment and repair facilities and available funding: such as an emergency repair of a vessel as dictated by a Transport Canada inspection or the urgent requirement to repair a communication service/equipment related to search and rescue operations on a vessel or helicopter.

Capital expenditures for equipment and other moveable assets are grouped in terms of the CCG service involved; CCG capital expenditures for fleet assets are grouped in terms of the type of capital expenditure involved.

Type of Asset	Type of Expenditure or CCG Service	Example of Expenditure	Forecast Expenditure, 2008-2009
<b>Equipment and other moveable assets</b>	<b>Aids to Navigation</b>	Replacing shore-based and floating aids to navigation	\$13.6 million
	<b>Marine Communications and Traffic Services</b>	Upgrading various communication equipment at MCTS centres and remote sites	\$26.0 million
	<b>Environmental Response Services</b>	Investing in Environmental Response equipment	\$1.2 million
	<b>Maritime Security</b>	Investing in critical surveillance and tracking systems	\$12.5 million
	<b>Lifecycle Asset Management</b>	Investing in the enhancement of operational systems security	\$1.4 million
<b>Fleet assets</b>	<b>Coast Guard Fleet Operational Readiness</b>		
	Acquisition or replacement	Acquiring new vessels	\$125.0 million
	Major repairs, refits, and refurbishments	Refitting and refurbishing vessels and helicopters	\$77.2 million
	Vessel life extension (VLE)	Extending vessel life	\$14.9 million
	System enhancement	Modernizing simulators	\$6.3 million

CCG funding for capital expenditures has three sources:

- Ongoing reference levels, which are reflected in the Long-Term Capital Plan (LTCP). This funding is for replacing or extending the life of critical assets. This funding totaled \$164 million for fiscal year 2007-2008.
- Additional annual funding for asset refurbishment. This funding was introduced in Budget 2003, and it totals about \$47 million a year. This is referred to as National Capital Spending Plan (NCSP) funding.

- Major Capital Projects (MCP) funding. This is funding for new vessels, including mid-shore and off-shore vessels, as well as air cushion vehicles.

The tables in this annex indicate the financial source (LTCP, MCP, or NCSP) for each project, as well as project status. Projects currently under way are listed first, followed by those approved in principle or awaiting funding.

Project Description	Total Estimated Cost (millions of dollars)	TEC Used	FY08/09 Forecast	TEC Remaining
<b>Aids to Navigation</b>				
<b>Projects Under Way</b>				
<ul style="list-style-type: none"> <li>• <b>Short-Range Fixed Aids Site Replacement/Refurbishment (Phase 2) (NCSP).</b> Replace, remove, relocate, redesign, and/or refurbish many critical short-range fixed aids to navigation and associated site infrastructure in all CCG regions to address high-risk items associated with structure failure and health and safety codes.</li> </ul>	18.5	4.0	3.9	10.6
<ul style="list-style-type: none"> <li>• <b>Major Navigational Aids Refurbishment (Phase 2) (NCSP).</b> Replace, remove, and/or refurbish many of the short-range major structures supporting shore-based fixed aids to navigation. Make a strategic investment in replacing/upgrading navigation aids with modern equipment involving the use of new technology.</li> </ul>	18.4	2.6	5.6	10.2
<ul style="list-style-type: none"> <li>• <b>Floating Aids to Navigation Refurbishment (Phase 2) (NCSP).</b> Replace or refurbish floating aids to navigation and associated equipment to address codes and standards, health and safety, due diligence, and potential departmental liability issues in all regions.</li> </ul>	17.4	3.7	4.1	9.6
<b>Projects Approved in Principle, Awaiting Funding</b>				
<ul style="list-style-type: none"> <li>• <b>Differential Global Positioning System (DGPS) Refurbishment (LTCP/NCSP).</b> Replace and/or refurbish electronic equipment and site infrastructure at DGPS sites across Canada.</li> </ul>	22.5	-	-	-
<b>Marine Communications and Traffic Services</b>				
<b>Projects Under Way</b>				
<ul style="list-style-type: none"> <li>• <b>MCTS Communications Control System (CCS) Equipment Replacement (LTCP).</b> Replace Communications Control System (CCS) equipment at 22 MCTS centres, along with the associated consoles, radio remote control equipment at remote sites, and two simulators at the new technical training facilities required at the CCG College, in Sydney, NS. Use of the latest digital technology will enable multifunction switching and simultaneous communications on different radio frequencies.</li> </ul>	47.8	2.4	3.9	41.5
<ul style="list-style-type: none"> <li>• <b>MCTS Communication Towers Refurbishment (Phase 2) (NCSP).</b> Refurbish to baseline condition those MCTS communication towers identified as the highest priority in April 2006. The towers identified are those that do not meet current operational requirements or are at high risk of failure due to rust-out and overloading.</li> </ul>	18.7	6.8	4.1	7.8
<ul style="list-style-type: none"> <li>• <b>MCTS Communication Sites Refurbishment (Phase 2) (NCSP).</b> Refurbish existing MCTS communication sites used by CCG across Canada to baseline condition. Work includes replacing or refurbishing equipment, buildings, trailers, roads, and transmission lines, and replacing fuel tank systems and spill containment structures and physical security to meet national and regional standards.</li> </ul>	18.6	1.5	8.7	8.4
<ul style="list-style-type: none"> <li>• <b>Communications Systems Infrastructure Refurbishment (Phase 2) (NCSP).</b> Refurbish communications systems and associated infrastructure, including MF-HF receivers and transmitters, VHF-DF antenna systems and satellite links, radars, UPS, and test infrastructure in all regions. It also includes consolidating the Prince Rupert Microwave Network by adding two microwave sites and includes four microwave links.</li> </ul>	17.9	2.6	2.7	12.6

Project Description	Total Estimated Cost (millions of dollars)	TEC Used	FY08/09 Forecast	TEC Remaining
<ul style="list-style-type: none"> <li>• <b>VHF Radio Refurbishment to Baseline</b> (NCSP). Refurbish to baseline condition the MCTS very high frequency (VHF) radios, in all regions, that are obsolete or at risk of failure.</li> </ul>	17.6	12.4	2.3	2.9
<ul style="list-style-type: none"> <li>• <b>Arctic Telecommunication Refurbishment</b> (NCSP). Bring the Arctic Telecommunications network/infrastructure back to baseline condition, by replacing obsolete HF, MF, VHF, UHF, and satellite communications equipment.</li> </ul>	16.7	9.4	2.3	5
<ul style="list-style-type: none"> <li>• <b>MCTS National Vessel Traffic Management Information System</b> (VTMIS) (LTCP). Upgrade the existing National Information System on Marine Navigation (INNAV) to meet the Pacific Region's operational requirements by incorporating the essential functionalities of the Vessel Traffic Operator Support System (VTOSS), and then implement the resultant VTMIS in each of the CCG MCTS centres across the country, as well as at the CCG College. As an integral part of this project, the existing VTOSS system and related equipment in the Pacific Region will be replaced by the new VTMIS system and equipment.</li> </ul>	4.6	.1	.6	3.9
<ul style="list-style-type: none"> <li>• <b>MCTS Tofino Radar Refurbishment</b> (LTCP). Replace the existing "dark room" radar displays with digitized daylight displays, and complete other minor renovations and infrastructure modifications to enable daylight operations at the Tofino MCTS centre in the Pacific Region.</li> </ul>	3.0	1.7	1	.3
<ul style="list-style-type: none"> <li>• <b>Very High Frequency (VHF) / Digital Selective Calling (DSC) Great Lakes and St. Lawrence</b> (LTCP). Install shore-based Global Marine Distress and Safety System (GMDSS) VHF/DSC at select MCTS centres and Remote Control Outlets (RCOs) along the Great Lakes (Central and Arctic Region) and the St. Lawrence River (Québec Region).</li> </ul>	8.5	7.0	.4	1.1
<b>Projects Approved in Principle, Awaiting Funding</b>				
<ul style="list-style-type: none"> <li>• <b>MCTS Information Logging System</b> (LTCP/NCSP). Replace the outdated Message Data System and automatic message broadcasting system (MDS/NAVTEX) with a new MCTS Logging System at 22 MCTS centres.</li> </ul>	4.6	-	-	-
<ul style="list-style-type: none"> <li>• <b>MCTS Continuous Marine Broadcast Refurbishment</b> (LTCP/NCSP). Replace existing outdated Continuous Marine Broadcast equipment, including a completely automated text-to-speech capability, at Canadian MCTS centres across Canada.</li> </ul>	4.5	-	-	-
<b>Environmental Response Services</b>				
<b>Projects Approved in Principle, Awaiting Funding</b>				
<ul style="list-style-type: none"> <li>• <b>Arctic Environmental Response Equipment</b> (LTCP/NCSP). Invest in environmental response equipment for the Coast Guard's Arctic Environmental Response capability.</li> </ul>	2.0	-	1.2	0.8
<b>Maritime Security</b>				
<b>Projects Under Way</b>				
<ul style="list-style-type: none"> <li>• <b>Automatic Identification System</b> (AIS) (LTCP). Implement a national VHF AIS Service and a Long Range Identification and Tracking Service in Canada to enhance marine security and improve the safety of navigation in Canada.</li> </ul>	25.0	3.5	12.5	9.0

Project Description	Total Estimated Cost (millions of dollars)	TEC Used	FY08/09 Forecast	TEC Remaining
<b>Lifecycle Asset Management</b>				
<b>Projects Under Way</b>				
<ul style="list-style-type: none"> <li>• <b>Configuration Management and Technical Data Management System (LTCP)</b>. Develop and implement a system to support enhanced material acquisition and lifecycle through a nationally managed information infrastructure.</li> </ul>	10.4	.5	4	9.5
<ul style="list-style-type: none"> <li>• <b>Operational System Security Enhancement Project (LTCP)</b>. Develop and implement the required information technology network security for the two Coast Guard networks; design the governance framework for CCG IT security; develop and provide the necessary training; develop the required CCG IT security processes and documentation; and initiate the certification and accreditation of the CCG operational systems/applications.</li> </ul>	1.2	.1	1.0	.1
<b>Projects Approved in Principle, Awaiting Funding</b>				
<ul style="list-style-type: none"> <li>• <b>Asset Management System (AMS) (LTCP)</b>. Implement a national AMS that will include a fully integrated predictive maintenance capability for vessels based on the current deployed version and licensing of MIMS.</li> </ul>	3.5	-	-	-
<b>Coast Guard Fleet Operational Readiness</b>				
<b>Acquisitions and Replacements</b>				
<b>Projects Under Way</b>				
<i>Off-Shore Fishery Science Vessels (OFSV)</i>				
<ul style="list-style-type: none"> <li>• <b>Off-Shore Fisheries Science Vessels (MCP)</b>. Replace three (3) vessels: CCGS <i>Alfred Needler</i> or CCGS <i>Wilfred Templeman</i>, CCGS <i>W. E. Ricker</i> and CCGS <i>Teleost</i>.</li> </ul>	279.5	3.7	47.0	228.8
<i>Mid-Shore Patrol Vessels (MSPV)</i>				
<ul style="list-style-type: none"> <li>• <b>Mid-Shore Patrol Vessels (MCP)</b>. Replace four (4) maritime security patrol vessels. Also replace these eight (8) vessels: CCGS <i>Québécois</i>, CCGS <i>Atlin Post</i>, CCGS <i>Sooke Post</i>, CCGS <i>Cumella</i>, CCGS <i>Kitimat II</i>, CCGS <i>Arrow Post</i>, CCGS <i>Comox Post</i>, and a new vessel for C&amp;P patrols.</li> </ul>	212.5	6.6	56.6	149.3
<i>SAR Lifeboats</i>				
<ul style="list-style-type: none"> <li>• <b>SAR Lifeboat Replacement (LTCP, final year of project)</b>. Construct 16 47-foot SAR vessels, 8 SAR stations, and 8 additional SAR vessels.</li> </ul>	41.1	40.2	0.3	0.6
<i>Air Cushion Vehicles (ACV)</i>				
<ul style="list-style-type: none"> <li>• <b>CCG Air Cushion Vehicle (LTCP)</b>. Acquire an ACV model AP1-88/400, replacing an AP1-88/200 in Québec Region.</li> </ul>	27.9	10.1	11.0	6.8
<i>Near-Shore Fishery Research Vessels</i>				
<ul style="list-style-type: none"> <li>• <b>CCGS <i>Shark</i> Replacement (LTCP)</b>. Construct and deliver to Central and Arctic Region a vessel to meet Science Program requirements as a replacement for CCGS <i>Shark</i>.</li> </ul>	5.9	1.1	2.5	2.3
<ul style="list-style-type: none"> <li>• <b>CCGS <i>J.L. Hart</i> Replacement (LTCP, unfunded EPA)</b>. Replace the 20m inshore fisheries research vessel <i>J.L. Hart</i> with a more modern, more efficient vessel with greater multitasking capability.</li> </ul>	8.2	0.1	1.0	7.1

Project Description	Total Estimated Cost (millions of dollars)	TEC Used	FY08/09 Forecast	TEC Remaining
<b>Projects Approved in Principle, Awaiting Funding</b>				
<i>Offshore Oceanographic Science Vessels (OFSV)</i>				
• <b>Offshore Oceanographic Science Vessel (MCP)</b> . Acquire a new vessel to replace CCGS <i>Hudson</i> .	108.9	-	3.1	105.8
<i>Polar Class Icebreaker</i>				
• <b>Polar Class Icebreaker (MCP)</b> . The acquisition of a new Polar Class Icebreaker was announced on the Federal Budget 2008.	830.0	-	1.5	828.5
<i>Near-Shore Fishery Research Vessels</i>				
• <b>CCGS <i>Shamook</i> – Replacement (LTCP, AIP)</b> . Replace this 25m multi-disciplinary Inshore Fisheries Science vessel.	16.9	-	0.6	16.3
• <b>CCGS <i>Pandalus III</i> – Replacement (LTCP, AIP)</b> . Replace the 13m Small Multi-Task Science Vessel.	1.5	-	0.5	1.0
<i>Hydrographic Survey Vessel</i>				
• <b>CCGS <i>Frederick G. Creed</i> – Replacement (LTCP)</b> . Replace with hydrographic survey vessel.	13.8	-	0.5	13.3
<i>Channel Survey and Sounding Vessel</i>				
• <b>CCGS <i>F.C.G. Smith</i> – Replacement (LTCP)</b> . Replace with a channel survey and sounding vessel.	6.7	-	0.4	6.3
<b>Major Repairs, Refits, and Refurbishments</b>				
<b>Projects Under Way</b>				
• Refit Vessels in Five Regions	52.6	-	52.6	-
• Refit CCG Helicopters in Five Regions (08-09) pending approval	5.3	-	5.3	-
<b>• NCSP Phase I</b>				
• Refurbish Air Cushioned Vehicles (NCSP)	2.9	1.9	0.5	0.5
• Refurbish Light Icebreakers/Major Navaid Tenders (NCSP)	14.0	12.3	1.7	-
• Refurbish Program Boats (NCSP)	9.1	7.7	1.4	-
• Refurbish Research Vessels (NCSP)	7.3	6.1	1.1	0.1
• Refurbish Offshore Research Vessels (NCSP)	11.2	10.2	1.0	-
<b>• NCSP Phase II</b>				
• Refurbish Air Cushioned Vehicles (NCSP)	3.3	0.8	.9	1.6
• Refurbish Icebreakers (NCSP)	13.7	-	4.3	9.4
• Refurbish Light Icebreakers/Major Navaid Tenders (NCSP).	8.5	-	1.0	7.5
• Refurbish Marine Service Vessels (NCSP)	8.5	2.5	1.7	4.3
• Refurbish Patrol Vessels (NCSP)	8.4	2.3	2.4	3.7
• Refurbish Program Boats (NCSP)	13.6	-	-	13.6
• Refurbish Research Vessels (NCSP)	9.6	-	-	9.6
• Refurbish Offshore Research Vessels (NCSP)	11.5	-	1.1	10.4

Project Description	Total Estimated Cost (millions of dollars)	TEC Used	FY08/09 Forecast	TEC Remaining
<b>Projects Approved in Principle, awaiting funding</b>				
<i>Offshore Oceanographic Science Vessel</i>				
<ul style="list-style-type: none"> <li>• <b>CCGS Hudson – Refit</b> (LTCP). Modifications and upgrades are needed until the anticipated replacement of the vessel.</li> </ul>	4.6	-	2	2.6
<i>Specialty Vessels</i>				
<ul style="list-style-type: none"> <li>• <b>Isle Class – Refit</b> (LTCP). Replacement and upgrade of equipment and systems.</li> </ul>	2.6	-	0.2	2.4
<b>Vessel Life Extensions</b>				
<b>Projects Under Way</b>				
<i>High-endurance Multitasked Vessels/Light Icebreakers</i>				
<ul style="list-style-type: none"> <li>• <b>CCGS Edward Cornwallis VLE</b> (LTCP). Ensure that the ship's machinery, equipment, and infrastructure are fully compliant with operational requirements and can function effectively until the vessel's planned replacement in 15-20 years.</li> </ul>	14.7	0.5	0.3	13.9
<ul style="list-style-type: none"> <li>• <b>CCGS Griffon – Major Crane Replacement</b> (LTCP). Project to replace the existing crane used for lifting marine aids and deploying scientific and emergency equipments</li> </ul>	1.6	-	0.7	0.9
<i>Offshore Oceanographic Science Vessels (OOSV)</i>				
<ul style="list-style-type: none"> <li>• <b>CCGS John P. Tully VLE</b> (LTCP, EPA). Undertake VLE on CCGS <i>John P. Tully</i>, a 69m offshore science research vessel that is 21 years old.</li> </ul>	15.8	11.7	3.8	0.3
<i>Off-Shore Fisheries Science Vessels (OFSV)</i>				
<ul style="list-style-type: none"> <li>• <b>CCGS Alfred Needler VLE</b> (LTCP, EPA). Undertake the work necessary to ensure CCGS <i>Alfred Needler</i> remains operationally available and mission capable until its replacement is brought into service through the Offshore Fisheries Research Vessel Project.</li> </ul>	5.9	4.5	0.5	0.9
<i>Off-Shore Patrol Vessels (OPV)</i>				
<ul style="list-style-type: none"> <li>• <b>CCGS Sir Wilfred Grenfell VLE</b> (LTCP, EPA, final year of project). Undertake VLE to maintain the vessel's reliability and capability by addressing existing deficiencies and updating essential machinery and equipment.</li> </ul>	14.5	-	5.6	8.9
<b>Projects Approved in Principle, Awaiting Funding</b>				
<i>Heavy Icebreakers</i>				
<ul style="list-style-type: none"> <li>• <b>CCGS Terry Fox VLE</b> (LTCP). Replacement of out-dated equipment with the latest technology.</li> </ul>	5.7	-	1.9	3.8
<i>High Endurance Multitasked Vessels / Light Icebreakers</i>				
<ul style="list-style-type: none"> <li>• <b>CCGS Martha L. Black VLE</b> (LTCP, AIP). Perform VLE of the 83m light icebreaker/major navaid's tender.</li> </ul>	7.7	-	0.5	7.2

Project Description	Total Estimated Cost (millions of dollars)	TEC Used	FY08/09 Forecast	TEC Remaining
<i>Medium Endurance Multitasked Vessel</i>				
• <b>CCGS Earl Grey VLE</b> (LTCP). Replacement and maintenance of NavAids.	15.9	-	0.4	15.5
• <b>CCGS Samuel Risley VLE</b> (LTCP). Replacement and upgrade of equipment and systems.	7.8	-	0.7	7.1
<i>Offshore Fishery Science Vessel</i>				
• <b>CCGS Teleost VLE</b> (LTCP). Upgrade and replacement of items of machinery and equipment.	8.9	-	0.5	8.4
<b>System Enhancements</b>				
<b>Projects Under Way</b>				
• <b>Halon 1301 Replacement Program</b> (LTCP, final year of project). Acquire and install ozone-safe fire-fighting systems to replace the existing Halon 1301 systems on all CCG vessels within all Coast Guard regions to meet EC regulations by 2010.	10.4	5.9	3.0	1.5
• <b>Integrated Navigation Systems</b> (LTCP). Procure and install a Shipboard Universal Automatic Identification System, DGPS, and Electronic Navigational Chart System on selected DFO/CCG vessels.	10.2	2.2	1.5	6.5
• <b>E-Mail Aboard Ships</b> (LTCP, final year of project). Deliver the capability for all shipboard personnel on 55 designated vessels to receive personally addressed e-mail from any other person or agency ashore; also provide intranet and Internet access.	9.1	7.4	0.8	0.9
• <b>CCG College Simulators</b> (LTCP). Modernize two of the CCG College's simulators: the Marine Propulsion Plant Simulator and the Blind Pilotage Radar Simulator. Both simulators are beyond the normal 10-year industry standard for hardware and software support.	5.9	0.3	0.3	5.3
• <b>Fleet Activity Information System (FAIS) – Upgrade</b> (LTCP). To upgrade existing obsolete system (1993), increase the security of the system, ensure the provision of timely information, and ensure compliance with Treasury Board policies.	3.5	-	0.6	2.9
• <b>SAR Lifeboat Standardization Plan</b> – To implement design changes on the first seven SAR Lifeboats built to bring uniformity with the other vessels.	1.98	1.56	.07	0.35

# ANNEX C: CCG PROGRAM ACTIVITY ARCHITECTURE

CCG’s Program Activity Architecture (PAA) explains how we contribute to Safe and Accessible Waterways, one of DFO’s three strategic outcomes.

The Canadian Coast Guard is one of several program activities in DFO’s PAA. Like the other program activities, the Coast Guard program

activity has a number of sub-activities, each of which contributes to the CCG program activity.

The image below shows the relationship among the Safe and Accessible Waterways strategic outcome, the CCG program activity, and CCG sub-activities.



# ANNEX D: AUDITOR GENERAL'S RECOMMENDATIONS (2000 AND 2002):

## CROSSWALK TO 2008-2009 BUSINESS PLAN COMMITMENTS

In its 2007 Status Report, the Auditor General found that the Coast Guard had not made satisfactory progress addressing recommendations from previous audits on the Fleet (2000) and marine navigational services (2002). The Auditor General noted that one of the contributing factors was that the Coast Guard had tried to deal with all of the previous recommendations simultaneously and, as a result, had not been able to complete any.

The 2007 Report recommended that the Coast Guard focus on establishing 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. The Canadian Coast Guard committed to using the business

planning process to establish priorities for improvement in the context of delivering its programs and services.

This Annex illustrates how the Coast Guard is addressing the recommendations made by the Auditor General in audits since 2000. Future CCG business plans will also include an annex that cross-references business plan commitments with the Auditor General's recommendations.

Listed below are the Auditor General's 2000 and 2002 recommendations followed by the 2008-2009 Business Plan commitments which are linked to these recommendations. In a few instances, there are certain actions being taken by the Coast Guard which are not specific commitments within the Business Plan.

---

### Auditor General's Recommendations - 2000

1. **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)**

Improve National Consistency in Human Resources Management

- Begin migration to standard regional organizational structures.
- Complete the development of National Model Work Descriptions for technical and seagoing positions.
- Also see commitments under Recommendation 2.

2. **The Department should address the weaknesses associated with its key fleet management processes, including:**

- a. **Establishing clear, concrete and realistic program performance expectations that include a long-term perspective**

Strengthening Management

- Consult with clients and stakeholders and adjust the Performance Measurement Framework where required.

**b. Establishing a long-term fleet planning and funding horizon**

Ongoing Improvements in Fleet Management

- Continue to enhance and improve Fleet business management through a variety of activities. This will include:
  - Further development of the elements of the Fleet Financial Framework.
  - Continued implementation of the Fleet fuel management process.
- Develop a Fleet Management Manual.
- Revise the Long Term Capital Plan and Fleet Renewal Plan.
- Also see commitments under Recommendation 3

**c. Developing service accords between the programs and the fleet**

Fleet Operational Readiness

- Implement an improved Service Level Agreement with internal non Coast Guard clients based on new funding and charging models.

**d. Establishing budgetary processes that support accountability**

Strengthening Management

- Implement activity based management and budgeting based on the approved PAA:
  - Train all users on the new coding structure.
  - Verify the usage of the coding developed in 2007-2008 for its alignment with the new PAA.
- Also see commitment under Recommendation 2(c)

**e. 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**

Ongoing Improvement in Fleet Management

- Complete the requirements analysis for the FAIS upgrade project, and continue to improve the existing FAIS system.
- Also see commitment under Recommendation 2(a)

**f. Implementing costing policies that support the use of the lowest-cost alternative in acquiring service while meeting departmental objectives (paragraph 31.73)**

Please see commitments under Recommendations 2(c) and 2(d)

In addition, CCG is participating in a pilot project for non-lapsing capital authority. Once the pilot project is completed, CCG will seek a permanent authority taking into consideration the experience and impact of the pilot project.\*

\* Please note that this is not a Business Plan commitment.

3. **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)**

Procurement of New Vessels

- Issue contract for 12 Mid-Shore Patrol Vessels (MSPVs).
- Issue competitive RFP for 3 Offshore Fisheries Science Vessels (OFSVs).
- Conduct project-definition activities and establish the procurement strategy for the Offshore Oceanographic Science Vessel (OOSV).
- Please see commitments under Recommendation 2(b)

4. **The Department should complete the development and implementation of life cycle management policies and procedures for its fleet (paragraph 31.107)**

Vessel Maintenance Review

- Begin to address the findings of the Vessel Maintenance Management Review. The initial focus is on:
  - Clarifying roles, responsibilities, and accountability;
  - Creating an accessible bank of current maintenance policies and procedures;
  - Assessing options for increasing the number of marine engineers both on vessels and on-shore; and
  - Beginning to develop a program management framework for maintenance activities.

Aids to Navigation 21<sup>st</sup> Century (AToN21)

- Develop guidelines for synthetic moorings and related equipment standardization (for anchors exceeding 272 kg but not more than 1136kg) in preparation for the introduction of Life Cycle Management of these assets.

Improve National Consistency in Human Resources Management

- Begin migration to standard regional organizational structures
- Complete the development of National Model Work Descriptions for technical and seagoing positions.

Improve Maintenance of Existing Fleet

- Continue the vessel condition program which will survey about 20% of the fleet vessels each year. This will become standard practice within CCG in the coming years.
- Implement standard maintenance plans for critical ship systems for Type 1100 class vessels.
- Issue a standard set of refit specifications for Type 1100 vessels

Continued Improvement in Lifecycle Management Practices for All CCG Assets

- Begin implementation of Asset Management System (AMS) deployment.
- Complete the five AMS vessel pilots.
- Finalize ITS Services Catalogue and begin implementation

**5. The Department should ensure that the fleet activity is supported by information systems that produce integrated, timely, reliable and relevant information (paragraph 31.108)**

Ongoing Improvement in Fleet Management

- Complete the requirements analysis for the FAIS upgrade project, and continue to improve the existing FAIS system.

**6. 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 ship's personnel so that they can be administered in an efficient and economical manner and can support the fleet's operational requirements (paragraph 31.137)**

Attract and Retain a Skilled Workforce

- Implement a pilot Seagoing Personnel Career Development Initiative

Fleet Operational Readiness – Human Resources Initiative

- Establishing regional developmental positions for seagoing personnel.
- Through collective bargaining attempt to remove structural barriers to the migration of seagoing personnel to on-shore work in support of their development and CCG succession planning.

**7. The Department should regularly analyze payroll costs related to the fleet and take action to control such costs, where necessary (paragraph 31.138)**

Fleet Operational Readiness – Human Resources Initiative

- Develop standardized crewing matrix predicated on competency (crewing) profiles.

Strengthening Management

- Develop national SMIS procedures to ensure consistent salary data entry into SMIS.

## Auditor General's Recommendations - 2002

8. **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)**

### Levels of Service Review

- Develop a report that reflects input received and validate information with clients.
- Develop options, and implement those changes that are feasible, within current resource levels, which consider the outcomes of the consultations on LOS Review.

### Aids to Navigation 21<sup>st</sup> Century (AToN21)

- Complete the modernization of five additional aids to navigation directives for a total of 10.

### Search and Rescue Needs Analysis

- Validate SAR Needs analysis findings and recommendations with SAR partners.
- Implement the recommendations from the SAR Needs analysis that are feasible, within existing resource levels.

9. **For its navigational support services and boating safety activities, Fisheries & Oceans Canada should do the following:**

- a. **Complete the implementation of its results-based management and accountability frameworks;**

Coast Guard will implement Result-Based Management Accountability Frameworks over the next two years following consultations with partners, clients and Central Agencies.\*

- b. **Establish clear, measurable, concrete targets for the identified outputs and immediate outcomes for each framework;**

Please see commitment under Recommendation 9(a).

- c. **Identify who is accountable for achieving targets and managing resources;**

As part of the Results-Based Management Accountability Frameworks, specific accountabilities will be defined at the lower program levels.\*

\* Please note that this is not a Business Plan commitment.

**d. Align budgeting and resource allocation with the frameworks; and**

Strengthening Management

- Implement activity based management and budgeting based on the approved PAA:
  - Train all users on the new coding structure.
  - Verify the usage of the coding developed in 2007-2008 for its alignment with the new PAA.

**e. Develop or identify sources of information to measure results (paragraph 2.68)**

Strengthening Management

- Consult with clients and stakeholders and adjust the Performance Measurement Framework where required.

Over time, CCG will try to improve the type and quality of data to better reflect and measure performance. \*

**10. The Coast Guard should complete and implement its draft guidance on risk management (paragraph 2.73)**

Final approval of the Risk Management Guidelines taking into consideration the new Performance Measurement Framework is being sought. \*

**11. Fisheries & 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)**

Marine Service Fees Strategy

- Implement government direction.

Aids to Navigation 21<sup>st</sup> Century (AToN21)

- Develop a business case on the effectiveness and efficiency of CCG paint facilities.
- Engage the shipping industry through the advisory bodies about e-Navigation vision, strategy, and next steps.
- Develop guidelines for synthetic moorings and related equipment standardization (for anchors exceeding 272 kg but not more than 1136 kg) in preparation for the introduction of Life Cycle Management of these assets.

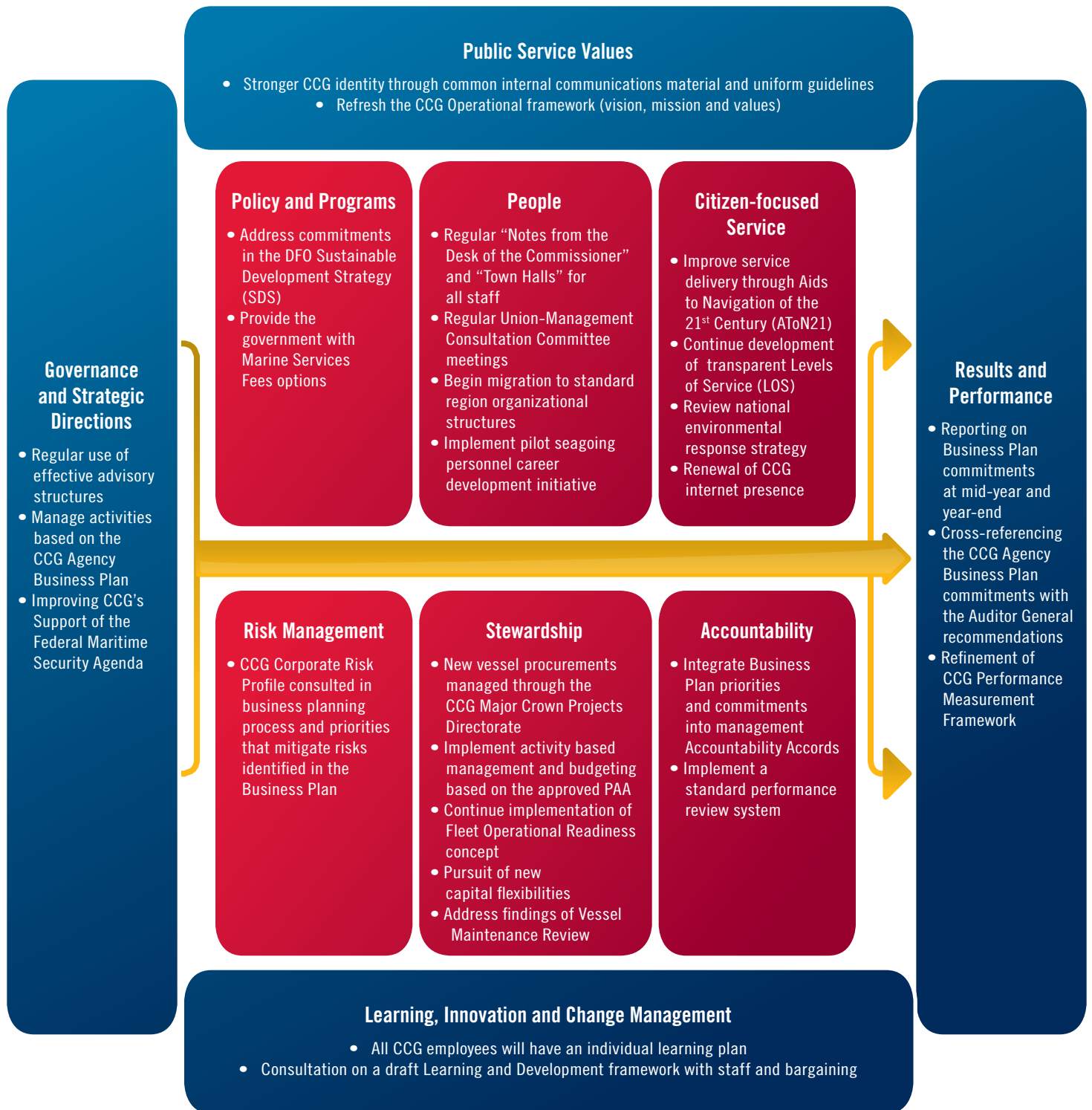
**12. Fisheries and Oceans Canada should develop and implement an overall strategy for the future of its light stations, considering maritime safety and heritage objectives (paragraph 2.90)**

Senate Bill-215 – An Act to protect Heritage Lighthouses may have an impact on this initiative and establish additional requirements for maintenance and divestiture activities.

\* Please note that this is not a Business Plan commitment.

# ANNEX E: MANAGEMENT AGENDA

The Coast Guard has a clear management agenda that is consistent with the broader Management Accountability Framework (MAF) that applies to all departments and agencies ([http://www.tbs-sct.gc.ca/maf-crg/documents/booklet-livret/text-texte\\_e.asp#g1](http://www.tbs-sct.gc.ca/maf-crg/documents/booklet-livret/text-texte_e.asp#g1)). The following chart lists some of the initiatives and activities that the Coast Guard is undertaking over the next three years that relate to the 10 elements of the MAF.



## LIST OF ACRONYMS

AC	Assistant Commissioner	FAIS	Fleet Activity Information System
ACV	Air Cushion Vehicle	FAM	Fisheries and Aquaculture Management
AIS	Automatic Identification System	FTE	Full Time Equivalent
AMS	Asset Management System	GMDSS	Global Maritime Distress and Safety System
ARLU	Annual Reference Level Update	HF	High Frequency
AToN 21	Aids to Navigation of the 21 <sup>st</sup> Century	HR	Human Resources
CCGA	Canadian Coast Guard Auxiliary	HRCS	Human Resources and Corporate Services
CCG	Canadian Coast Guard	IALA	International Association of Lighthouse Authorities
CCGC	Canadian Coast Guard College	IBMS	Integrated Business Management Services
CCS	Communication Control System	IISPA	Ice Information Service Partnership Agreement
CHS	Canadian Hydrographic Service	INNAV	Integrated Information System on Marine Navigation
CIS	Canadian Ice Service	IMO	International Maritime Organization
CMB	Continuous Marine Broadcast	IPY	International Polar Year
CMTDMS	Configuration Management and Technical Data Management System	ISVR	Inshore Science Vessel Replacement
C&P	Conservation and Protection	ITS	Integrated Technical Services
CSA	Canadian Standards Association	JRCC	Joint Rescue Co-ordination Centre
DACS	Departmental Activity Costing System	LED	Light Emitting Diode
DF	Radio Direction Finding	LOS	Levels of Service
DFO	Department of Fisheries and Oceans	LRIT	Long Range Identification and Tracking
DGPS	Differential Global Positioning System	LTCP	Long-Term Capital Plan
DND	Department of National Defence	MAF	Management Accountability Framework
DPR	Departmental Performance Report	MCP	Major Crown Projects
DSC	Digital Selective Calling	MCPD	Major Crown Projects Directorate
DG	Director General	MCTS	Marine Communications and Traffic Services
EC	Environment Canada		
ENC	Electronic Navigational Chart		
EPA	Effective Project Approval		
ER	Environmental Response		

MCTSO	Marine Communications and Traffic Services Officer	SDS	Sustainable Development Strategy
MDS	Message Data System	SLA	Service Level Agreement
MF	Medium Frequency	SM	Synthetic Mooring
MIMS	Maintenance Information Management System	SOLAS	International Convention for the Safety of Life at Sea
MRRS	Management, Resources and Results Structure	UAIS	Universal Automatic Identification System
MRSC	Marine Rescue Sub-Centre	UNCLOS	United Nations Convention on Law of the Sea
MS	Maritime Services	UPS	Ultraviolet Photoelectron Spectroscopy
MSET	Marine Security Enforcement Team	VHF	Very High Frequency
MSOC	Marine Security Operations Centre	VLE	Vessel Life Extension
MSPV	Mid-Shore Patrol Vessel	VMMR	Vessel Maintenance Management Review
NAFO	Northwest Atlantic Fisheries Organization	VNR	Vote-Netted Revenue
NCR	National Capital Region	VTMIS	Vessel Traffic Management Information Systems
NCSP	National Capital Spending Plan	VTOSS	Vessel Traffic Operator Support System
NMWD	National Model Work Description		
NRA	NAFO Regulatory Area		
NRCan	Natural Resources Canada		
NSERC	Natural Sciences and Engineering Research Council of Canada		
O&M	Operations and Maintenance		
OAG	Office of the Auditor General		
OFSV	Off-Shore Fisheries Science Vessels		
PAA	Program Activity Architecture		
PIANC	International Navigation Association		
PPA	Preliminary Project Approval		
PSES	Public Service Employee Survey		
RCMP	Royal Canadian Mounted Police		
RO	Radio Operations		
RPP	Report on Plans and Priorities		
SAR	Search and Rescue		

# INDEX

## A

A-Base Review — 5, 10, 11, 13, 15, 16, 25, 49, 59  
 Aids to Navigation — 7, 9, 11, 12, 22, 23, 24, 32, 33, 87, 88  
 Arctic — 7, 14, 19, 39, 43, 46, 47, 49, 51, 56, 61, 70, 71, 80, 89, 90  
 Asset Management Services — 9, 30, 31, 33, 34, 37, 40, 43, 47, 51, 62, 63, 64, 68  
 Auditor General — 3, 5, 10, 11, 13, 15, 20, 24, 25, 43, 49, 58, 95, 96, 97, 98, 99, 100, 101, 103

## C

Canadian Coast Guard Auxiliary — 11, 41, 102  
 Canadian Coast Guard College — 6, 9, 10, 14, 17, 25, 26, 30, 31, 67, 68, 69, 80, 81, 94, 102  
 Coast Guard Identity — 11, 12, 14  
 CCG Workforce — 6, 9, 10, 14, 17, 25, 26, 30, 31, 67, 68, 69, 80, 81, 94, 102  
 Coast Guard identity — 11

## E

Environmental Response Services — 30, 31, 45, 46, 47, 49, 80, 87, 89, 94

## F

Financial Information — 76  
 Fisheries and Aquaculture Management — 56, 72, 102  
 Fleet — 18, 19, 20, 21, 24, 26, 28, 53, 55, 56, 57, 58, 59, 60, 63, 64, 67, 72, 73, 80, 81, 86, 93, 94, 95, 96, 97, 98, 102  
 Fleet Operational Readiness — 9, 11, 12, 20, 21, 30, 31, 33, 34, 37, 40, 43, 47, 51, 53, 54, 55, 59, 62, 68, 87, 90, 96, 98, 101  
 Fleet Renewal — 12, 19, 96  
 Focus on Client Service — 12, 13  
 Focus on Efficiency and Effectiveness — 12, 18, 19, 22  
 Focus on People — 12, 25

## H

Human Resources — 10, 12, 16, 25, 27, 30, 38, 43, 59, 60, 66, 68, 95, 97, 98, 102

## I

Icebreaking Services — 9, 30, 31, 39, 40, 53, 80, 81, 94  
 Integrated Technical Services — 22, 65, 102  
 International Activities — 75

## L

Levels of Service — 10, 12, 13, 14, 32, 34, 36, 40, 42, 46, 99, 101, 102  
 Lifecycle Asset Management Services — 9, 30, 31, 33, 34, 37, 40, 43, 47, 51, 62, 63, 64, 68  
 Long Range Identification and Tracking — 18, 52, 89

## M

Management Agenda — 101  
 Marine Communications and Traffic Services — 9, 10, 18, 25, 30, 35, 36, 53, 63, 67, 77, 83, 84, 88  
 Marine Security Operations Centre — 18, 103  
 Maritime Security — 9, 10, 12, 18, 30, 31, 50, 51, 53, 55, 80, 81, 87, 89, 94, 101  
 Maritime Services — 7, 8, 23, 26, 28, 49

## P

Priority 1 — 12, 13, 14, 15, 16, 17  
 Priority 2 — 12, 18  
 Priority 3 — 12, 19, 20, 21  
 Priority 4 — 12, 22, 23, 24  
 Priority 5 — 12, 25, 26, 27, 28  
 Program Activity Architecture — 5, 11, 13, 15, 29, 32, 76, 94, 103  
 Public Service Employee Survey — 5, 15, 25, 43, 49, 103

## R

Reinvestment in the Asset Base — 33, 38, 49, 52, 66  
 Royal Canadian Mounted Police — 8, 10, 18, 50, 51, 52, 53, 54, 103

## S

Science — 8, 19, 20, 21, 30, 31, 53, 54, 55, 56, 72, 79, 90, 91, 92, 93, 97, 102, 103  
 Search and Rescue Services — 30, 31, 41, 42, 43, 80, 81

## U

United States Coast Guard — 75

## W

Waterways Management — 9, 30, 33, 34, 80, 94

