# Marine Safety – The New Wave

**RDIMS #6676932**

Canada

# Presentation Outline

- Overview of Transport Canada
- Overview of Marine Safety
- Contextual Challenges
- Accomplishments
- Key Planning and Performance Tools
- Marine Safety Planning and Performance Challenges
- Moving Forward

# Overview of Transport Canada

# Transport Canada

Transport Canada is responsible for the Government of Canada's transportation policies and programs. The Department has the added responsibility, under the *Canada Transportation Act*, to monitor the ongoing health of the national transportation system.

Resources

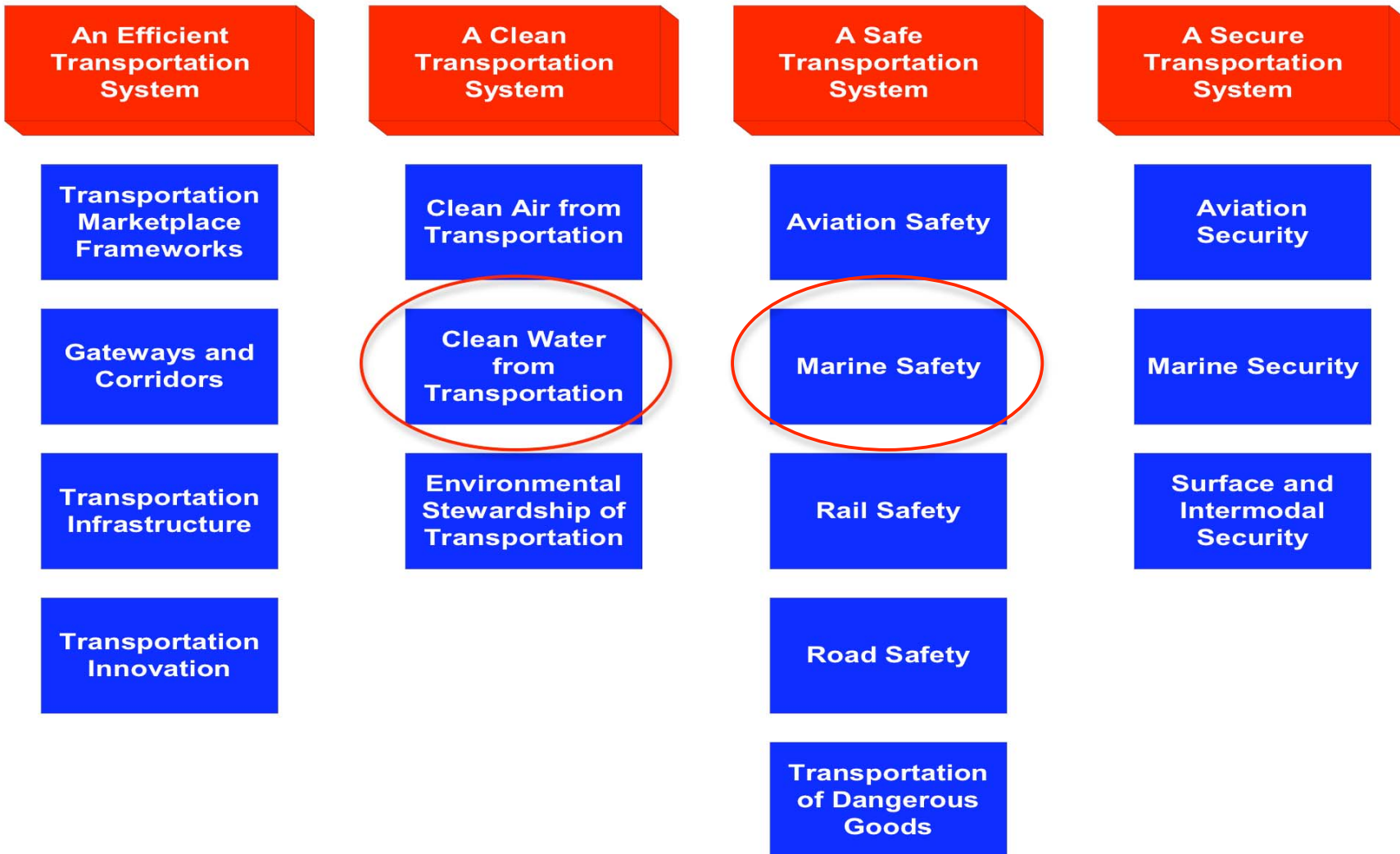    Appropriation (2010/11) – $1,883 M

    Employees (2010/11) – 5,360

The Strategic Outcomes of Transport Canada
- an efficient transportation system;
- a clean transportation system;
- a safe transportation system; and
- a secure transportation system.

**Source: TC RPP 2010-2011**

4

# TC's PAA-Strategic Outcomes & Program Activities

| An Efficient Transportation System | A Clean Transportation System | A Safe Transportation System | A Secure Transportation System |
|---|---|---|---|
| Transportation Marketplace Frameworks | Clean Air from Transportation | Aviation Safety | Aviation Security |
| Gateways and Corridors | Clean Water from Transportation | Marine Safety | Marine Security |
| Transportation Infrastructure | Environmental Stewardship of Transportation | Rail Safety | Surface and Intermodal Security |
| Transportation Innovation | | Road Safety | |
| | | Transportation of Dangerous Goods | |

**Internal Services**

5

# Overview of Marine Safety

# Resources Snapshot

Employees: Approx. 620 employees including 188 in HQ

Operating budget: Approx. $75 million

Revenues: Approx. $7.5 million

# Mandate

- Develop and enforce a safety and environmental protection framework for all segments of the domestic and foreign marine industries as well as the recreational boating community

- Protect the public right to navigation with navigational waters in Canada by collaborating with partner organizations

# What We Do

| | |
|---|---|
| Develop, administer and enforce national and international laws and policies governing marine safety and the protection of the marine environment | Deliver an internal technical training program to Marine Safety's inspector community |
| Promote safe practices and procedures | Deliver prevention-based programs to promote small vessel/recreational boating safety |
| Develop and maintain regulations, examinations and training standards for the certification of seafarers | Conduct research in the marine transportation sector |
| Respond to marine occupational safety and health issues | Administer the navigable waters protection program |
| Maintain a Canadian vessel registry | Oversee pilotage matters |

# Marine Safety in Today's World

- Increased globalization

- Trade barriers dropping

- More international cooperation to promote trade

The world is
getting smaller ➡

# Marine Safety in Today's World

More global trade = more shipping

More Arctic shipping/oil and gas exploration

More vigilance needed to prevent accidents given evolving risks

# Contextual Challenges

# Moving Toward a Risk-Based Inspection Regime

# Promoting Boating Safety



14

# Arctic Shipping Safety



15

# International Agreements and Maritime Borders

# Environmental Issues

- Ship-source oil spill preparedness and response regime and development of a Hazardous and Noxious Substances (HNS) regime as per CESD report recommendations

- Greenhouse gas (GHG) emissions reduction

# Resources Restraints

# What We Must Do

Focus on activities that will accelerate change



Copyright: Rennbootarchiv Schulze

# Accomplishments

# What We Have Done in the Past Two Years

- Ratified 11 international maritime conventions
- Published 45 regulations
- Adopted the North American Emission Control Area
- Assisted with the modernization of the *Navigable Waters Protection Act*
- Amended the *Arctic Waters Pollution Prevention Act*
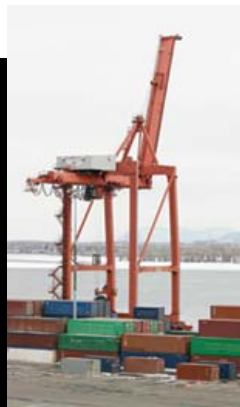- Developed various planning and performance management tools
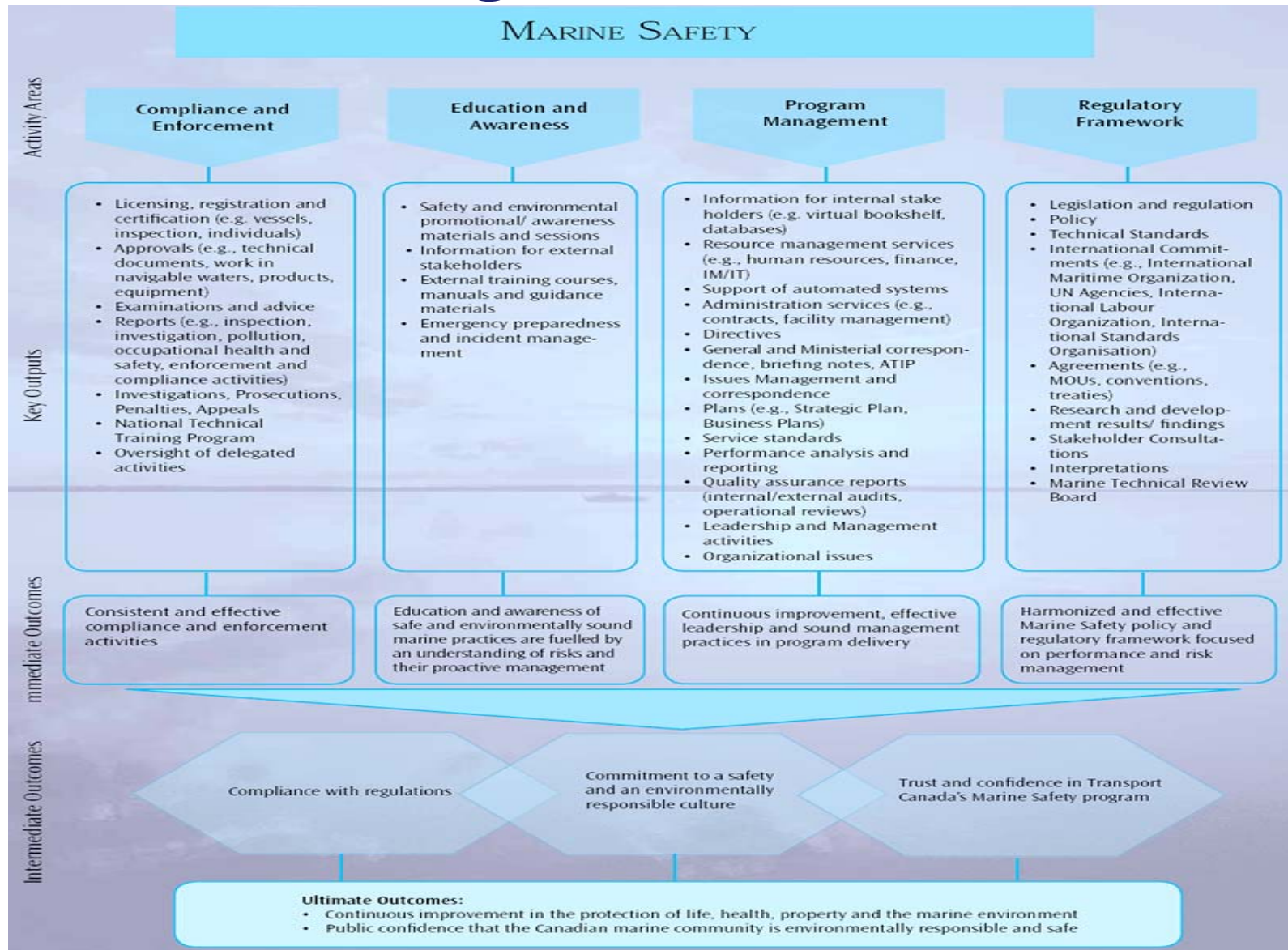
# Key Planning and Performance Tools

# Marine Safety Strategic Plan 2009-2015
## The New Wave

# Logic Model



MARINE SAFETY

**Activity Areas**

| Compliance and Enforcement | Education and Awareness | Program Management | Regulatory Framework |

**Key Outputs**

Compliance and Enforcement:
- Licensing, registration and certification (e.g. vessels, inspection, individuals)
- Approvals (e.g., technical documents, work in navigable waters, products, equipment)
- Examinations and advice
- Reports (e.g., inspection, investigation, pollution, occupational health and safety, enforcement and compliance activities)
- Investigations, Prosecutions, Penalties, Appeals
- National Technical Training Program
- Oversight of delegated activities

Education and Awareness:
- Safety and environmental promotional/ awareness materials and sessions
- Information for external stakeholders
- External training courses, manuals and guidance materials
- Emergency preparedness and incident management

Program Management:
- Information for internal stake holders (e.g. virtual bookshelf, databases)
- Resource management services (e.g., human resources, finance, IM/IT)
- Support of automated systems
- Administration services (e.g., contracts, facility management)
- Directives
- General and Ministerial correspondence, briefing notes, ATIP
- Issues Management and correspondence
- Plans (e.g., Strategic Plan, Business Plans)
- Service standards
- Performance analysis and reporting
- Quality assurance reports (internal/external audits, operational reviews)
- Leadership and Management activities
- Organizational issues

Regulatory Framework:
- Legislation and regulation
- Policy
- Technical Standards
- International Commitments (e.g., International Maritime Organization, UN Agencies, International Labour Organization, International Standards Organisation)
- Agreements (e.g., MOUs, conventions, treaties)
- Research and development results/ findings
- Stakeholder Consultations
- Interpretations
- Marine Technical Review Board

**Immediate Outcomes**

- Consistent and effective compliance and enforcement activities
- Education and awareness of safe and environmentally sound marine practices are fuelled by an understanding of risks and their proactive management
- Continuous improvement, effective leadership and sound management practices in program delivery
- Harmonized and effective Marine Safety policy and regulatory framework focused on performance and risk management

**Intermediate Outcomes**

- Compliance with regulations
- Commitment to a safety and an environmentally responsible culture
- Trust and confidence in Transport Canada's Marine Safety program

**Ultimate Outcomes:**
- Continuous improvement in the protection of life, health, property and the marine environment
- Public confidence that the Canadian marine community is environmentally responsible and safe

# Integrated Business Plan
# 2010-11 to 2012-13 – Snapshot
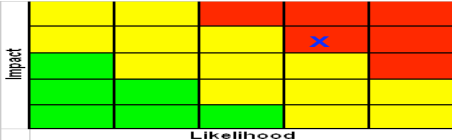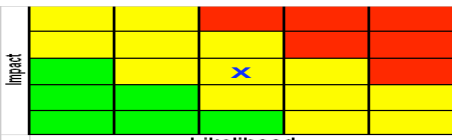
*SECTION II — ENVIRONMENTAL SCAN*

**External Focus** : The following table provides information on external circumstances that could be an opportunity and/or a threat for the successful delivery of the Marine Safety Program.

| Opportunities | Threats |
|---|---|
| **Government - Safety Management Systems**<br><br>• One of Marine Safety's key evolving strategic directions to help manage threats to the successful delivery of its programs as well as further enhance transportation safety is the implementation of safety management systems (SMS).<br><br>• SMS involves building strong alliances and sharing the responsibility of safety with the industry, as well as building a strong safety culture through enhanced safety promotion and education. Under SMS, risk must be systematically managed to acceptable levels.<br><br>• Under SMS, Marine Safety will be working more closely and cooperatively with the marine industry and special interest groups than ever before and this will provide vital increased opportunities to build new or strengthen existing relationships in the industry, as well as promote and educate the industry with regard to safe practices.<br><br>• These close alliances with industry will also place Marine Safety in a position to positively influence any innovations, while they are being developed, to help ensure they are done with safety, environmental protection and risk management in mind, as well as preserve the health and well being of mariners.<br><br>**Government - Management Agenda**<br><br>• The federal government's management agenda calls for more transparency, accountability and reporting on performance and results, which necessitates the enhancement and evolution of a range of new and existing information systems and systems of internal management and control.<br><br>• While challenging to implement, new and appropriate management information, systems and controls will support consistent delivery of responsibilities and informed decision-making that will enable Marine Safety to evolve and institutionalize new managerial and program directions and respond to central agency requirements.<br><br>• Implementation of both SMS and the government's management agenda will also provide for much more public visibility to the work of Marine Safety and how well the industry is performing in terms of safety. It is expected that over time these efforts will bring the public's | **Public Confidence**<br><br>• Public attitudes are changing and are less tolerant of accidents and incidents on waterways — public expectations are getting higher.<br><br>• The latest statistics on the public's perception about the safety and security of marine travel reveal that public confidence has diminished. In August 2002, 54% of respondents felt that marine transportation was extremely safe and secure. In February 2007, 43% of respondents had this perception.<br><br>• Interestingly, public perception decreased while over the same period the overall safety record improved — in 2007 a record low was recorded for Canadian vessel shipping accidents and accidents aboard ship for the fourth consecutive year.<br><br>• This situation highlights that public perception and reality are not necessarily congruent with one another i.e. an improved safety record, on to itself, is not necessarily enough to instill increased public confidence.<br><br>• Over the planning period there will be increased pressure from the public for Marine Safety to do more in support of marine safety. More emphasis needs to be placed on communicating the work being done and results being achieved.<br><br>**Government — New Legislation**<br><br>• In recent years, Marine Safety has undergone numerous and significant changes to its legislative roles and responsibilities.<br><br>• The marine community in Canada is now working under a new regulatory regime. The new *Canada Shipping Act, 2001*, which came into effect in July 2007, replaces the longstanding *Canada Shipping Act* as the principle legislation governing safety in marine transportation and recreational boating, as well as protection of the marine environment.<br><br>• Policy and regulatory responsibilities previously under the Department of Fisheries and Oceans (DFO) have also now been transferred to Transport Canada.<br><br>• Marine Safety is thus in a state of considerable operational and cultural transformation that is dramatically changing how Marine Safety conducts its business. Effectively managing the |

25

# Integrated Business Plan
# 2010-11 to 2012-13 – Snapshot

## SECTION III – RISK AREAS

| Risk Factor<br>What is the key risk factor and impact on PA? | Risk Level<br>What is the risk level with existing mitigative actions and what will it be after additional mitigative actions?<br>(Low, medium or high) | Mitigative Actions<br>What initiatives are currently underway or planned to manage, reduce or avoid the key risk? | Reference<br>Where can I find more details on the mitigative actions? |
|---|---|---|---|
| **RISK #1:**<br><br>**Human and Knowledge Capital Risk**<br><br>There is a risk that Marine Safety will not be able to attract, develop and retain sufficient human resources with the necessary knowledge, skills and competencies to fully and efficiently support its operations and responsibilities.<br><br>The Human and Knowledge Capital Risk originates from conditions largely considered to be external to the immediate control of the department e.g. demographic changes.<br><br>**DESCRIPTION:**<br><br>Marine Safety is facing changes that will result in a dramatic reduction of available and qualified personnel to carry out the necessary work of its program.  The reasons for this are many and include:<br><br>⊙ Demographic trends indicate that Marine Safety program staff at many critical levels will soon be leaving the workforce, which is a trend that will affect the entire marine industry.<br><br>⊙ At the same time, there is a growing need for crews and officers to meet increased global demand for marine capacity.<br><br>⊙ The competency requirements for staff are changing significantly under Safety Management Systems from a "hands on" operational focus to a policy, regulatory oversight and partner-building focus.<br><br>⊙ The rapid development of new technologies by the marine industry is also putting pressure on the skill sets and capabilities of Marine Safety's existing staff.<br><br>⊙ Language requirements and employee linguistic profiles are also posing challenges, particularly given it is predicted that by 2011 all labour force growth is expected to result from immigration. | **Before Mitigation:**<br>**HIGH**<br><br><br><br>**After Mitigation:**<br>**MEDIUM**<br><br> | • Enhance National Training Program (NTP) for Inspectors<br><br>• Human Resource Renewal, Recruitment and Retention | Page 31<br><br><br>Pages 43 and 46 |

26

## SECTION IV – PRIORITIES and THREE -YEAR ACTION PLAN

| Safe Business Priority/Major Initiative #1 : **Develop a safety manage ment systems (SMS) program for the Canadian Marine Industry** | | | |
|---|---|---|---|
| **Status** : Ongoing | | **Priority/Major Initiative Type** : Departmental Priority | |
| ACTION PLAN FROM 2010 -2011 TO 2012 -2013 | | | |
| **Planned Actions Towards Achieving Expected Result(s) Fiscal Year 2010 -2011** | **Key Del iverables (Outputs)** | **Expected Result(s)** | **OPI** |
| a. Continue pilot project to test and assess implementation of SMS (herein referred to as Domestic Safety Management (DSM))<br><br>b. Update DSM guidelines and tools in line with results of pilot for stakeholder use<br><br>c. Develop a MS webpage for industry access and download DSM guidelines and tools<br><br>d. Consult with external stakeholders through CMAC on Domestic Vessel Safety Management<br><br>e. Develop DSM documentation for inclusion in NTP Audit training course and deliver initial training to critical mass of MS staff<br><br>f. Continue development of Marine Safety Oversight (MOS) System | • Pilot project complete<br>• DSM guidelines and tools finalized and published for stakeholder use<br>• Website complete<br>• Several consultations with external stakeholders have take n place through CMAC on safety management systems<br>• Data to support eventual regulatory proposal harvested<br>• Better informed and educated stakeholders<br>• DSM documentation finalized for inclusion in NTP training course and initial training course delivered prior to program deployment<br>• Work is advanced on development of MOS system | • A risk -based regulatory framework consistent with international conventions and Cabinet Directives On Stream lining of Regulations<br>• Reduction of External Dependency Risk<br>• Reduction of Trans formation Risk<br>• Reduction of Information for Decision -Making Risk<br>• Enhanced safety in the marine transportation system | Quality Assurance (AMSA) Director, Julie Gascon |

27

# Integrated Business Plan 2010-11 to 2012-13 – Snapshot

***SECTION V – INTERNAL SERVICES***

## Human Resources

### Summary of Human Resources Management Strategies/Initiatives

Marine Safety has established human resource renewal, recruitment and retention as a management priority for the next three years. The following table provides        a summary of Marine Safety's human resources management strategies/initiatives in support of achieving this priority:

| HR Management Strategies/Initiatives Fiscal Year 2010 -11 | Planned Actions | Key Deliverables (Outputs) | Expected Result(s) | OPI |
|---|---|---|---|---|
| • Establish HR renewal, recruitment and retention as a management priority | • Carry out the staffing process for successful candidates from the TI collective staffing initiative of 2009 (approx. 30 TIs expected to join workforce nationally)<br>• Review strengths and weaknesses of the 2009 collective staffing process and commence plans to carry out another collective staffing process<br>• Investigate the establishment of a developmental program for the technical category<br>• Examine the potential for integrating officers from the Office o f Boating Safety (OBS) to perform some limited inspector's duties by assessing the results from pilot projects currently underway in some regions | • Significant reduction to gap of unfilled TI positions<br>• Report related to the investigation of a developmental program for the technical category<br>• Report on potential for integrating officers from OBS to perform some limited inspector's duties | • Reduction of the Human Knowledge and Capital Risk | Program and Technical Training Services (AMSB)<br><br>Director, Ruth Romkey |

# Integrated Business Plan
# 2010-11 to 2012-13 – Snapshot

## SECTION VII – PERFORMANCE MONITORING AND REPORTING

| SAFE TRANSPORTATION | | | | | |
|---|---|---|---|---|---|
| **Program Name** | **Type Selection** | **Strategic Outcome / Expected Result / Output** | **Performance Indicator** | **Target** | **Date to Achieve Target** |
| Marine Safety (Program Activity) | Expected Result | A safe marine transportation system | Rates of accidents/fatalities | 5% reduction from 2008 levels | 2015 based on strategic plan |
| | Expected Result | Public confidence in the marine transportation system | % of Canadian public reporting confidence in the safety of the marine transportation system | 90% | 2010 to 2015 -based on strategic plan |
| Marine Safety Regulatory Framework (Sub Activity) | Expected Result | A risk-based regulatory framework consistent with international conventions and Cabinet Directives on streamlining of regulations | Number of regulations implemented to support international conventions and Marine Safety Management System (MSMS) policy standards and work instructions | 2% improvement of MSMS - subject to change once baseline is set | 2008 to 2015 -based on strategic plan |
| | | | Level of safety risk reductions (tools to be developed) | 5% reductions in levels of safety risks - subject to change once baseline is set | baseline by 2015 |
| | Output | conventions ratified | # conventions ratified | Increase the number of conventions ratified by 10 | 2015 |
| Marine Safety Oversight (Sub Activity) | Expected Result | Marine community has a strong safety culture | safety culture index (to be developed) | Marine community has a high or very high safety culture - subject to change once index developed | 2015 |
| | Expected Result | Compliance with the regulatory framework | % of compliance | Increase compliance with regulatory framework by 5% | 2015 |
| | Output | Approvals issued | % of approvals meeting service level standards | Improve service level standards by 4% | 2015 |
| | Output | Certificates issued | # certificated issued | Improve service level standards by 4% | 2015 |
| | Output | Enforcement actions | # and type of enforcement actions | N/A | 2015 |
| Navigable Waters Protection (Sub Activity) | Expected Result | The public's right to safely navigate Canada's waterways is protected | compliance with navigable waters regulations | 3% increase in compliance with regulations | 2015 |
| | Output | Navigable waters enforcement actions | # and type of Navigable waters enforcement actions | 10% reduction in enforcement actions | 2015 |
| | Output | Applications processed | # applications received vs. time to process | 5% decrease in time to process applications | 2015 |
| Divestiture of Marine Training Assets (Sub Activity) | Expected Result | Marine training institutions in Canada independently provide world class training | # of institutions using modernised simulators to train seafarers | 5 institutions use modern updated simulators | 2011 |
| | | | # of institutions providing Marine Emergency Duties (MED) training without federal assistance | 5 institutions continue Marine Emergency Duties (MED) training at institutions operating with previously TC-owned assets. | 2011 |
| | Output | Funded replacement/upgrade of formerly TC-owned simulators | # simulators co-funded | 10 simulators located in 5 provinces | 2011 |
| | Output | Divested TC MED assets | # of divestiture agreements | 10 | 2015 |

29

# Revised Performance Measurement Framework

- As part of a departmental initiative, we revised expected results and performance indicators to:

  - Have tangible, measurable and meaningful indicators

  - Make informed day-to-day decisions

  - Properly reflect Marine Safety activities

  - Better assess "value for money" to Canadians

30

# Marine Safety Applications - Examples

- National Time and Activity Reporting System (NTARS)

- Ship Inspection Reporting System (SIRS)

- Automated Certificate Examination System (ACES)

- Regulations Query System (RQS)

- Marine Inspectors Bookshelf

# Marine Safety
# Planning and Performance
# Challenges

# Planning and Performance Challenges

- Decentralized Organization

- PAA vs Organization

- Receipt of many last minute info requests

- Access to information not easily available and consolidated

- Disparate IT applications

33

# Moving Forward

# Effective and Efficient Service Delivery to Clients

- Marine Safety organization re-alignment

- Business Line Review to maximize use of resources

- Changes to PAA Structure related to the "Clean Water from Transportation" Program Activity

- Development of program service standards

- Redevelopment of National Training Program initiatives

35

# Integrated Planning Improvement

- Delivery of integrated planning and reporting training across the country

- Revision of Integrated Business Plan

- Development of Operational Plans 2011-12 and 2012-13

# Maximization of Performance Information

- Consolidation of Marine Safety applications

- Establishment of an organizational monitoring process

- Alignment of EX performance management agreements with deliverables

# Thank You!



# Questions?