

# ENVIRONMENTAL SCAN OF OTHER MARITIME ADMINISTRATION OVERSIGHT REGIMES

## Executive Summary

With a goal of protecting the marine environment and upholding safety in the marine industry, this research paper is focussed on the central research question: what are the best practices that Transport Canada might consider to improve regulatory compliance of its domestic marine industry? The oversight regimes of eight leading maritime nations have been considered which include: Australia, the United Kingdom, the United States, Germany, Norway, Denmark, France, and New Zealand.

Through statistical comparison, document review, and detailed interviews with key leads in the maritime administrations, a diversity of programs have been revealed. Some of the initiatives have broad commonality across many nations. The use of risk-based methods in the allocation of resource is of particular interest in Australia, the US, the UK, Norway, Denmark, and France. Current trends with riskbased methods are the integration of large telling datasets, and predictive methods such as machine learning. It is found that the development of risk-based methods isn't necessarily a project but rather a program of continual refinement and improvements.

The countries assessed are roughly split on the use of private sector marine surveyors; Australia, and New Zealand rely on private surveyors exclusively, while the US, the UK, and Norway draw in surveyors for certain situation or vessel types. The US and Norway in particular show a very positive experience in the use of private surveyors. A shared element of these two programs is the authorization of organizations, rather than individuals. In addition, parallel survey and inspection by the administration's own employees ensures the administration has a direct channel to what's really happening in the field.

A couple wholly unique programs have also been highlighted for their potential in Canada. This includes Denmark's dialogue-based inspections in which surveyors focus on conversations with crew rather than simply checklists. Another example is New Zealand's Maritime Operator Safety System, in which the focus is placed on the operations, rather than the physical safety of vessels. The program has been effective in appropriately scaling a Safety Management System to smaller operations. New Zealand also has a unique approach to adopting reconciliation into its oversight

regime through language, symbols and concepts that permeate throughout the work of the organization.

Drawing in the findings from a parallel report on professional marine capacity in Canada to support vessel oversight, this study's three broad recommendations are:

### RECOMMENDATION 1

**Build a pilot project incorporating private marine surveyors into domestic commercial vessel oversight**

Building from the US Towing Vessel Inspection Program, Transport Canada should focus on a single geographic region and a subset of smaller vessels, such as small tugs and workboats.

### RECOMMENDATION 2

**Drawing from best practice of leading administrations, review Transport Canada's communication strategy on domestic commercial vessel oversight**

Inspired by Australia's "Pyramid Model of Compliance", Transport Canada should refine its communication strategy to ensure that readily digestible information is findings its way to those who need it most.

### RECOMMENDATION 3

**Incorporate Indigenous Ways, Methods, and/ or Symbols into the Oversight Regime**

Drawing inspiration from Maritime New Zealand's Te Korowai o Kaitiakitanga, Transport Canada should consider ways to better incorporate Indigenous ways, methods, and symbols into its oversight regime.

# ENVIRONMENTAL SCAN OF EXTERNAL RESOURCES FOR VESSEL SURVEYS AND ASSESSMENTS

## Executive Summary

With a goal of protecting the marine environment and upholding safety in the marine industry, this research paper is focused on the central research question: how might private sector marine professionals support Transport Canada in oversight of domestic commercial vessels? This report documents the external resources available for surveys and assessments and recommends ways they might be engaged to support the Transport Canada Marine Safety and Security (TCMSS) domestic vessel oversight activities. The resources examined in this report include marine surveyors, naval architects, marine engineers, tonnage surveyors, training providers, and Classification Societies.

The research draws from a review of existing documents and online databases, supplemented by an online survey (n=64), and semistructured interviews (n=29).

It was found that there are 250 to 400 marine surveyors in Canada with a wide variety of skills relative to their specific areas of specializations (i.e. by ship type, size, and purpose). Surveyors have broad geographic coverage, and most are ready, willing, and available to help with Transport Canada oversight. The condition and valuation survey is a form of survey undertaken for insurance purposes, and has similarities to a statutory survey of the type undertaken by Transport Canada. Because the industry is unregulated, industry associations like the International Institute of Marine Surveying (IIMS) and the Society of Accredited Marine Surveyors (SAMS) are critical to upholding professionalism. To a lesser extent, naval architects, tonnage surveyors, classification societies, and training institutes are also positioned to support.

Drawing in the findings from a parallel report on the oversight best practices of other leading maritime nations, this study's three broad recommendations are:

### RECOMMENDATION 1

**Build a pilot project incorporating private marine surveyors into domestic commercial vessel oversight**

### RECOMMENDATION 2

**Drawing from best practice of leading administrations, review Transport Canada's communication strategy on domestic commercial vessel oversight**

### RECOMMENDATION 3

**Incorporate Indigenous Ways, Methods, and/ or Symbols into the Oversight Regime**