



# Supporting the Canadian Coast Guard

## QinetiQ supports development of a Fleet Renewal Plan

### Executive summary

We provided our customer, the Canadian Coast Guard, with independent subject matter expertise to support the development of a Fleet Renewal Plan. QinetiQ's advice was comprehensive in nature and, amongst other elements, covered:

- Program Management
- Concepts of Analysis
- Fleet Cost Modelling
- Fleet Optimization
- Procurement Options Analysis
- Economic Impact Assessments
- Industrial Capacity Assessments
- Policy Development
- Concept Design
- Operational Effectiveness Analysis
- Change Management Advice.

### The brief

The Canadian Coast Guard (CCG) is currently, as part of the Canadian National Shipbuilding Strategy, undertaking the largest re-capitalization of its Fleet in a generation. To ensure that the CCG remains fit-for-purpose into the latter half of the century, a new Fleet Renewal Plan (FRP) is being created at the strategic level. The CCG wanted to develop a FRP that was more strategic than the current 'one-for-one' replacement strategy for its Fleet of more than 100 vessels.

A future Fleet would need to be optimized to deliver success in all its mandated missions across three oceans, working 365 days a year. This optimized Fleet would also need to be costed, independently, using Canadian Treasury Board guidelines to allow for budgetary decisions at a federal department level. For this concept of a fully-costed optimized Fleet to become a strategic reality, the CCG needed third party assistance to develop a robust methodology for modelling and costing the optimum future Fleet.



## Our solution

Our solution made full use of a combination of skills and expertise available across the whole of the QinetiQ Group, both in Canada and across the globe. Using maritime expertise, in-depth options analysis, cost engineering and management consultants, we delivered output-based solutions focused around the delivery of specific evidence required to support the proposed future Fleet structure.

Collaboration was essential, requiring frequent engagement with the CCG Fleet Renewal Team and numerous stakeholders across the wider Canadian federal maritime community. QinetiQ employed a proven end-to-end Fleet mix planning methodology approach to design and implement an analytical campaign, which optimized future capabilities to future requirements. The resultant Fleet options were fully-costed using custom cost models, and a comprehensive set of combined operational effectiveness and investment appraisals were produced.

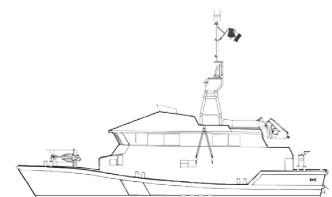
## Outcomes and benefits

QinetiQ independently developed the supporting analysis and operational modelling to ascertain the operational capability of the CCG future Fleet, the optimized Fleet renewal schedule based on a realistic drumbeat of new vessels, and the capability gap challenges. Our analysis also provided the total cost of ownership of the Fleet renewal potential capability gap mitigation measures, and an overall cost effectiveness comparison for the future Fleet.

Results from the analysis produced a number of fully-costed options for a future optimized Fleet. Each option was generated in a way that it could be compared, based on operational output and cost to the CCG over the next 50 years.

With our support, the CCG was able to generate the evidence-based analysis and robust audit trail required to create a viable Fleet Renewal Strategy that allows for the optimum delivery of programs in support

of its mandate across Canada. QinetiQ was able to ensure that our customer had all of the available information to give it the greatest advantage in its future planning.



QinetiQ's modelling and analysis provided fully-costed options based on operational outputs and cost to the CCG over the next 50 years

For more information, contact [Ottawa@QinetiQ.com](mailto:Ottawa@QinetiQ.com)

QinetiQ is always on your side, protecting, improving and advancing your vital interests

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