

Innovative Technological Solutions for Sea Control and Enforcement

Phase 1 Needs Assessment

12th July 2017



NLA INTERNATIONAL

Project overview

Phase 1

Identify and prioritise current and future fisheries control and enforcement challenges in the UK Exclusive Economic Zone (EEZ).

Phase 2

Scope available technologies and assess whether they meet the identified requirements

Phase 3

Trial chosen technologies

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Literature review

- Review of strategies, assessments and reviews of current UK fisheries control enforcement systems
- Used to inform the expert interviews and to provide information into the triangulation exercise.

Legal analysis

- Legal considerations on the current use of information technology for fisheries enforcement within UK jurisdictions

Expert interviews

- Experts from each UK fisheries administration to assess and prioritise current and future fisheries control and enforcement challenges in the UK EEZ.
 - What are the challenges?
 - What are the greatest assets?
 - What technology programmes do you have running?

Phase 1 report

Identify and prioritise current and future fisheries control and enforcement challenges in the UK Exclusive Economic Zone (EEZ).

Priority areas

Fisheries access, licensing and monitoring

Catch compliance and traceability

Situational awareness platforms and intelligence
analysis

Intelligence sharing and asset tasking

Challenges

The need for new and expanded data sources

The need for enhanced data analysis and intelligence sharing

**The need for
new and
expanded data
sources**

Detection of all non-transmitting vessels and their activity within UK waters

Consistent high-resolution positional information for all fishing vessels within UK waters.

Ability to fuse and correlate tracking and detection information, e.g. analysis of “dark” vessels.

Integration of identity and administrative history with all vessel activity.

Automated verification and identification of fishing activity.

Automated verification of retention of species.

Automated identification of catch composition.

Secure and transparent traceability from catch to landing to first point of sale.

The need for enhanced data analysis and intelligence sharing

Automated data integration to produce alerts to prompt fisheries analysts and investigators to conduct further analysis

Integrated platform for visualising, processing, analysing and sharing data in a common operational picture to be shared by administrations

Systematically and efficiently conduct intelligence analysis from current and new data sources

Ability to securely store, share and access intelligence analysis within and between administrations and operational personnel in the field/at sea

Ability to produce timely analysis to support directed tasking of maritime patrols.

Capability to conduct and share ongoing and post-patrol analysis for new observations to provide updated tasking and inform future patrols.

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**Technology
Assessment
Criteria**

Capability need

Technology Readiness Level

Operability

Cost benefit / Cost effectiveness

Applicability to current legal system

Impact on regulated industry / Better Regulation

Phase 2 approach

Finalise review criteria

Technology scoping

Technology assessment pt 1

Long list

Capability need

Operability

Technology Readiness Level

Technology assessment pt 2

Short list

Capability need

Operability

Technology Readiness Level

Legal

Better Regulation

Cost benefit / effectiveness

Phase 2 report production

Recommendations