International Atlantic Salmon Research Board

SAG(16)4

SeaMonitor – Executive Summary

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Developing Cross-border Capacity for the Monitoring and Management of Protected Marine Areas and Species using Telemetry Arrays in the Seas around Ireland and Scotland

SeaMonitor

Phase 2 Application SUMMARY

INTERREG VA Programme (2014-2020)

European Territorial Cooperation Programme United Kingdom-Ireland

(Ireland-Northern Ireland-Western Scotland)

May 2016

EXECUTIVE SUMMARY

SeaMonitor is a highly innovative project (**Figure** 1) that aims to directly meet the outputs of the INTERREG VA programme Priority: Environment, actions by fully delivering:

- A network of buoys for regional seas including telemetry and oceanographic monitoring (for seals, cetaceans and salmonids)
- Models developed to support conservation of marine habitats and species

In doing so, SeaMonitor will be contributing to a wide range of strategic policy drivers from within and beyond the programme area. Thus, SeaMonitor will be supporting the "blue economy" by specifically addressing important gaps in our knowledge of marine systems, for example on the sustainability of commercial marine developments highlighted for example by Scottish Government's "National Marine Plan", N Irelands Marine Act (2013) and the Irish Government's "Harnessing Our Ocean Wealth strategy". The value of SeaMonitor is in part recognised by the number of letters of support it has received.

SeaMonitor will deliver this through an ambitious programme to develop a monitoring capacity for high conservation and economic value species that cross jurisdictional boundaries. Thus SeaMonitor will create and operate a network of oceanographic and mobile species telemetry arrays both within and between each of the jurisdictions in the programme area.

Although such technology has been used in Canada, the US, Australia and South Africa, this would be the first offshore marine network of its kind in Europe. Much of the technology has been developed in N America, and the world leader in this field, Ocean Tracking Network, is a formal partner in this project. In addition, University of California Davis have pioneered this technology and are also formal partners. Both institutions are prepared to give their time and expertise for free and are willing to lend additional equipment if funding is secured.

SeaMonitor will also develop 12 research projects to test, evaluate and capitalise upon this monitoring network. Data emerging from SeaMonitor will be combined with other datasets available and will be used to build 5 spatially and temporally explicit models to enable predictions supporting the management of highly mobile, high conservation value species in waters linking the programme area. These models will in turn be used to develop action plans for a minimum of 4 marine species and habitats that will then feed into higher level marine management plans within the programme area. The details of the research undertaken, the models developed and the species/habitat action plans progressed will be decided by an Advisory Committee comprising members drawn from the main marine agencies, NGOs and commercial stakeholders in the programme area who will identify the most pressing management needs to deliver maximum benefit for the programme area.

The SeaMonitor partnership comprises a highly motivated group with a broad range of experience and specialisations and thus the very best grouping to deliver this challenging and exciting project. The partnership includes governmental agencies and academic institutions with marine responsibilities and skills from each of the 3 jurisdictions (Loughs Agency; the Marine Institute; University of Glasgow; Queens University Belfast; Marine Scotland Science;

Agriculture, Food and Biosciences Institute for N Ireland; University College Cork; Galway, Mayo Institute of Technology). There is a single named lead person for each of the partners, chosen because of their personal expertise and commitment. The partnership also includes two partners from North America (the Ocean Tracking Network; University of California Davis) who bring very significant expertise and experience to the consortium of 10 partners.

SeaMonitor has developed a robust management plan to ensure timely delivery of high quality outcomes within budget. An innovative element of SeaMonitor is that much of the detail of the actions envisaged is guided by stakeholders. The Advisory Committee comprising a wide range of stakeholders from across the programme area will guide the details of the research and model development components of SeaMonitor. The Project Board will have ultimate responsibility for ensuring delivery of the outputs on time, within budget and in line with the Letter of Offer. A Steering Group will manage the progression of workpackages by identifying and mitigating risks and ensuring that resources are available to complete tasks.

An essential component of SeaMonitor is communication of plans and of results as they develop. Thus SeaMonitor has developed a clear Communications Plan. Key components of this include engagement with stakeholders at the very earliest stage and continued engagement through planned Knowledge Transfer and Continuing Professional Development events. Internal partnership communications are also very important to successful delivery of the SeaMonitor. Thus the Communications Plan includes communication within the partnership.

SeaMonitor will leave a lasting legacy. One strand is the marine monitoring array which will fill a need for information on marine habitat quality and mobile marine species for many years following completion. There will also be a legacy from predictive modelling, from the 12 specific research studies and the monitoring network and species/habitats plans outputs. All of these outputs will, in the medium to long term result in improved management of important marine species and their habitats.

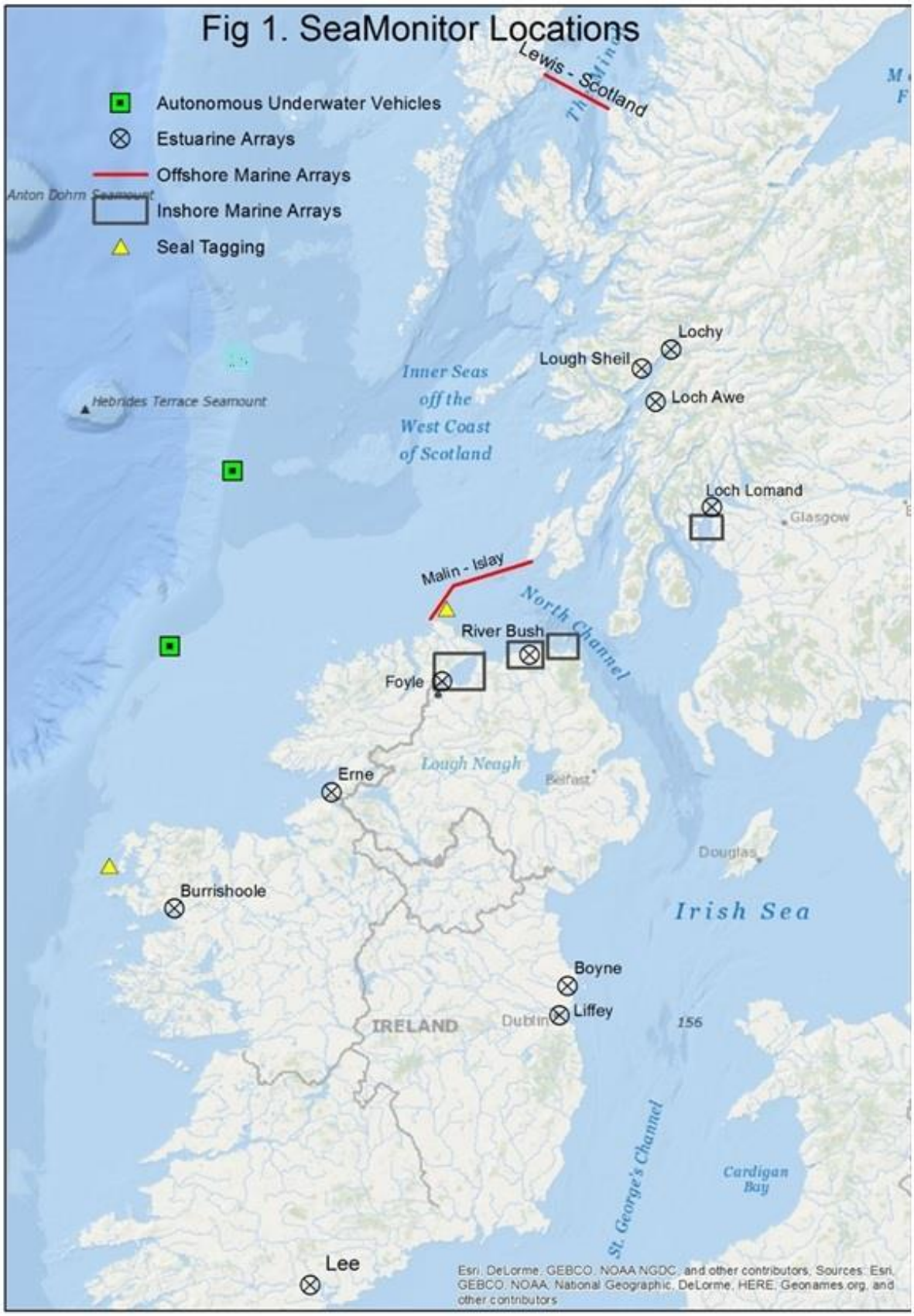
Fig 1. SeaMonitor Locations
Autonomous Underwater Vehicles
Estuarine Arrays
Offshore Marine Arrays
Inshore Marine Arrays
Seal Tagging
Lewis - Scotland
Anton Dohrn Seamount
Hebrides Terrace Seamount
Inner Seas off the West Coast of Scotland
Lochy
Lough Sheil
Loch Awe
Loch Lomand
Glasgow
Malin - Islay
North Channel
River Bush
Foyle
Lough Neagh
Belfast
Erne
Douglas
Burrishoole
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