



ANNUAL REPORT 2013



Foras na Mara
Marine Institute

Serving Science and The Sea

To the Minister for Agriculture, Food and Marine

In accordance with the requirements of the Marine Institute Act, 1991, I have the honour of presenting the Annual Report and Statement of Accounts of the Marine Institute for the year ended 31st December 2013.

Mr John Killeen

Chairman (2014 – 2019)

The Marine Institute is the national agency which has the following general functions:

‘to undertake, to co-ordinate, to promote and to assist in marine research and development and to provide such services related to marine research and development, that in the opinion of the Marine Institute will promote economic development, and create employment and protect the marine environment.’

Marine Institute Act 1991

Our Vision

A thriving maritime economy in harmony with the ecosystem and supported by the delivery of excellence in our services

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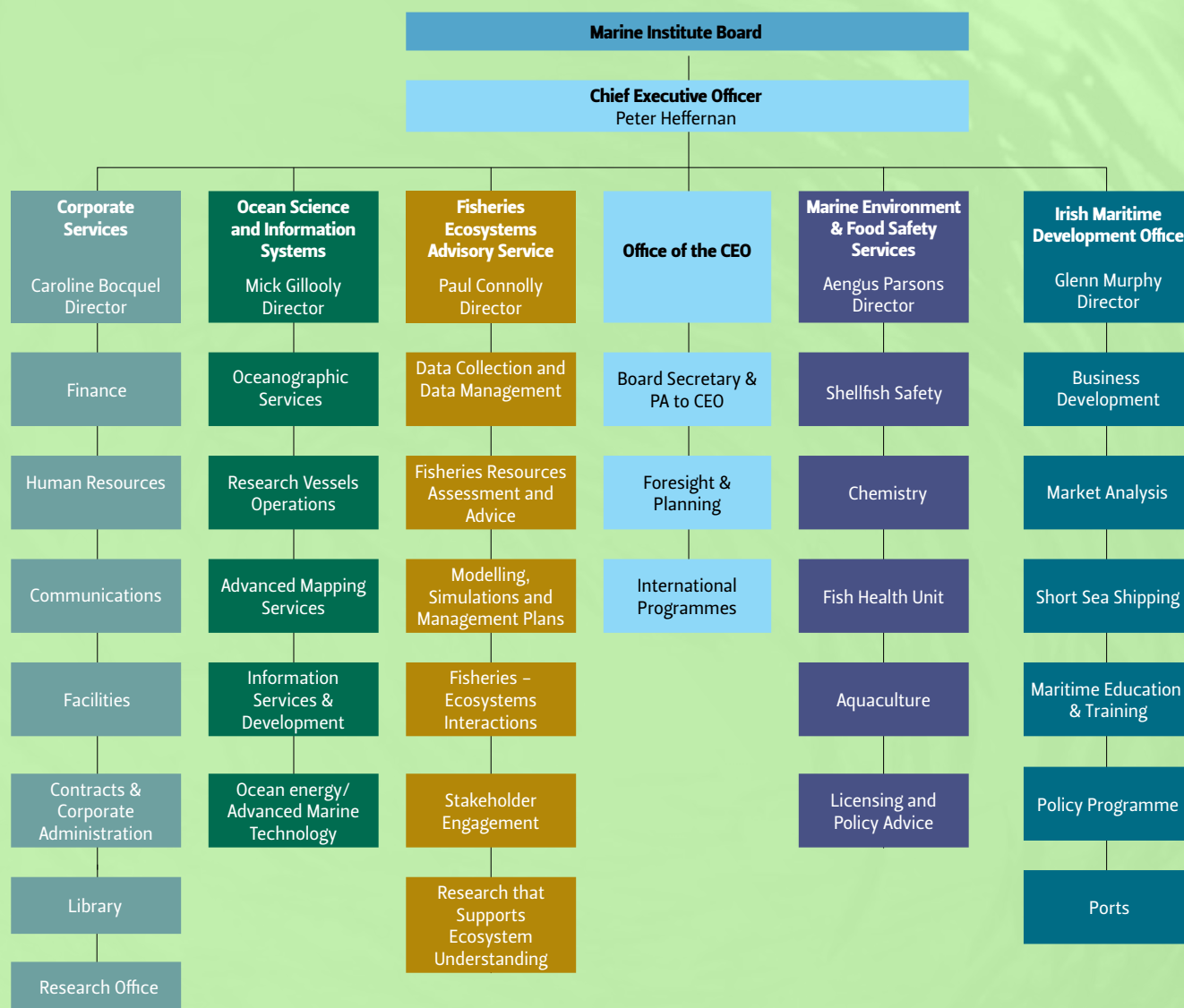
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The Marine Institute Annual Report is available in Irish
and can be downloaded from www.marine.ie

Marine Institute Organisational Structure 2013



Introduction and Organisational Structure

The Marine Institute is the national agency for marine research, technology, development and innovation. We seek to assess and realise the economic potential of Ireland's marine resource, promote sustainable development of marine industry through strategic funding programmes and essential scientific services, and safeguard Ireland's natural marine resource through research and environmental monitoring.

Ireland has a marine resource of up to 220 million acres (approx 880,000 km²) under the sea, which is over ten times its land area. The Marine Institute promotes the sustainable development of this vast marine resource through research, the application of new technologies and by providing management advice to industry, the Government and the EU.

The Institute provides essential marine research services including:

- > National research and development funding programmes
- > Fish stock assessment and management advice
- > Fish health services
- > Marine food safety monitoring
- > Environmental monitoring
- > Research vessel operations
- > Seabed mapping
- > Data management
- > Maritime development services

The Marine Institute has five service areas and the Office of the CEO. The service areas include:

- > Corporate Services
- > Ocean Science and Information Services
- > Marine Environment and Food Safety Services
- > Fisheries Ecosystems Advisory Services
- > Irish Maritime Development Office

The organisation is supported by a strong focus on corporate governance with an emphasis on prudent financial management, which was an important contributor to the success of the Institute during the challenging economic period during 2013.

This report highlights the key deliverables and progress made towards our vision during 2013.



Board Members



Mr Jim Fennell – Chairman (2008–2013)

Appointed in November 2008, Mr Jim Fennell is a Fellow of the Chartered Association of Certified Accountants who holds the position of Financial Controller and Secretary to the Governing Body of Galway-Mayo Institute of Technology (GMIT). In addition to his role at GMIT he also holds a number of directorships including: President of Galway Chamber of Commerce, An Chéim (Collaborative Higher Education Information Management), Ireland's National Education and Research Network (HEAnet), Chairman of the HEAnet Finance Sub-committee and Mayo County Council Audit Committee.



Professor Patricia Barker (2013–2018)

Prof Patricia Barker is a Fellow of the Institute of Chartered Accountants in Ireland, having qualified in 1973. Prof Barker completed a MPhil in Gender Studies in Trinity College. Her PhD developed a paradigm of disclosure of financial information to employees in organisations. She served her articles with Stokes Bros. & Pim in Dublin and worked in Peat, Marwick Mitchell in Manchester. Prof Barker then became a partner in an accounting practice in Manchester for six years and worked in Manchester University as a principal lecturer.

Prof Barker was appointed lecturer in Dublin City University (DCU) in 1980 and progressed through senior lecturer, Associate Dean (Business School) and University Vice-President (Academic) of DCU. She has worked as a visiting professor in universities in New York, Boston, Angers, Malawi, Dares Salaam, Sydney and Cape Town and has been an external examiner for universities and professional bodies. She served as Chairman of the Institute of Chartered Accountant's Accounting Committee for eight years and on the Council of the Institute of Chartered Accountants for four years in the 1990s. She is currently a member of the Council. She represented Ireland on the Accounting Standards Board in London for nine years. She chaired the expert group reporting to the European Union on the role, structure and functions of the European Court of Auditors. She had several tours of duty as Election Supervisor for the



OSCE in Bosnia-Herzegovina, Republica Serpska, South Africa, Kosovo, Kazakhstan and Belarus.

Prof Barker worked as a Human Rights Monitor in Israel and Palestine. She has been a member of the Boards of Women's Aid, Sonas Housing Association, the National Chamber Choir and the Higher Education Authority (chairing the Audit Committee), and was the Chairman of the Irish Blood Transfusion Service for three years.

Prof Barker is currently a Director of Dublin Bus Ltd. and Veritas Ltd (chairing the Audit Committees in both). She is currently a voluntary counsellor and trainer for the Dublin Rape Crisis Centre. She has written books on Group Accounting, Flexible Working in the Profession and more recently on women who have succeeded in the Accountancy profession and on Corporate Governance and Professional Ethics.

Mr Francis Coyle (2010–2015)

Mr Francis Coyle had a long career with Donegal County Council serving in various posts from 1974 to 2010. From 2001 he was Director of Services for Planning and Economic Development. Mr Coyle worked with Letterkenny Town Council and was also Manager of Ballyshannon Town Council from 2005 to 2010. Mr Coyle was the Council's European Liaison Officer with the Conference of Peripheral Maritime Regions (CPMR) for sixteen years.

During the period 1995 to 1999 he managed the Council's multi million pound Peace and Reconciliation funding and was Secretary to the Donegal Task Force for Peace and Reconciliation. Mr Coyle has also worked closely with the International Fund for Ireland and other funding mechanisms such as the EU Inter-Regional Cooperation Programme (INTERREG), and Peace III to develop multi-faceted community and recreation regeneration projects designed to enhance towns and villages, both in Donegal and on a cross border basis. He is a past Director of Donegal Airport Company Ltd and is currently engaged in project management and coordination.


Mr Paul Hyde (2012–2017)

Mr Paul Hyde (BSc Arch, MA, MPlan, MRIAI, RIBA) is the managing partner in the Hyde Partnership Architects and Town Planners, a multi disciplinary design and planning practice. He holds degrees in both Architecture and Planning & Sustainable Development. A member of the Royal Institute of Architects of Ireland (RIAI), the Royal Institute of British Architects (RIBA) and the Irish Planning Institute (IPI).

Mr Hyde has over sixteen years of professional experience relating to the building environment including both terrestrial and coastal development and spatial planning. In addition to his role in the Hyde Partnership he holds a number of committee memberships including: The Irish Planning Institute, Southern Branch and The Royal Institute of Architects in Ireland, Southern Branch and the Cork Chamber of Commerce.


Mr Lorcán Ó Cinnéide (2010–2015)

Mr Lorcán Ó Cinnéide (BA) is a former Chief Executive of the Irish Fish Producers Organisation, a leading fishing industry representative body. A graduate in Economics and Politics from Trinity College Dublin, Mr Ó Cinnéide is also a former fishing vessel owner.

Mr Ó Cinnéide was an active member of the EU Northwestern Waters Regional Advisory Council and a wide range of other fisheries management and advisory bodies in Ireland and at EU level. He has been an expert advisor to the EU on the evaluation of marine research programmes and has been involved in fishing industry development and representation for the past twenty years.

Mr Ó Cinnéide is currently a member of the Aquaculture Licences Appeals Board, Chairman of Comhairle Raidió na Gaeltachta and Secretary of the Blasket Island Foundation.


Mr David Owens (2012–2017)

Mr David Owens (A.C.A) is currently Vice President, Finance and Operations for SolarWinds (NYSE: SWI). Prior to joining SolarWinds, Mr Owens worked for Red Hat, Inc., an enterprise software company, for over seven years, where he served initially as Director of Global Logistics and Production and then as Senior Director of Finance – EMEA. Mr Owens qualified as a chartered accountant with Ernst & Young and is a member of the Institute of Chartered Accountants in Ireland.


Mr Donal Kelly (2013–2018)

Mr Donal Kelly is Managing Director of Fast Fish Ltd, a successful fish sales and oil supply business based in Castletownbere.

Mr Kelly served on the Celtic Sea Herring Management Committee for 10 years and on the West Pelagic Committee for 3 years.

Mr Kelly has served on a number of Board both in the private and voluntary sector. He has been a Cork County Community and voluntary fora, Cork County Development Board and has acted as Chairman of Castletownbere GAA, Management Committee of Berehave Golf Club and Castletownbere Community Development Association.

Chairman's Statement



Corporate governance of the Institute was overseen by Mr Jim Fennell who completed his term as Chairman in 2013 and who I must thank for his diligence and dedication, having left the Institute in ship shape.

The Strategic Plan for the Marine Institute 2013–2016 was finalised in 2013. It has provided an essential reference for internal planning by each service area down to individuals' performance objectives set as part of the Institute's Performance

Management Development System.

During the preparation of the plan, the board of the Marine Institute considered in detail its five High Level Goals; 17 objectives and associated 88 priority actions and KPIs (see Appendix 8). From early 2013, the Board held a number of meetings and a dedicated workshop to further develop the plan in association with the CEO and senior management of the Institute. A key role for the board will be both the supervision of the implementation of the plan and supporting the executive as it balances the increased demand for services with the diminished exchequer resources.

There was some change in the executive management team with a vacancy filled for Director of Marine Environment and Food Safety Services and the position of Director of the Irish Maritime Development Office advertised in December.

The Galway Statement on Atlantic Ocean Cooperation Launching a EU – Canada – United States of America Research Alliance, signed here at the Marine Institute 24 May 2013 witnessed by the Taoiseach, Mr

Enda Kenny, T.D., highlighted our contribution to the European marine research agenda during Ireland's EU Presidency (January–June 2013).

The Marine Institute continued to play an important role supporting the work of the Government's Marine Coordination Group (MCG) as it supervises the implementation of the Integrated Marine Plan for Ireland, Harnessing Our Ocean Wealth, launched in 2012. Our CEO chaired the Enablers Task Force charged with the important task of preparing a report for the MCG on the implementation of marine spatial planning in Ireland.

The Institute continued to maintain excellence in its services with the delivery of a number of statutory monitoring programmes, research and advisory services to a range of clients.

The Marine Institute held the 10th Shellfish Safety conference and delivered a range of national monitoring programmes to ensure consumer safety in relation to seafood and the protection of the marine environment, including residues and contaminants, sea lice, biotoxins, as well as inspections and monitoring of movements of fish and shellfish stocks required under the EU Fish Health Directive and requirements of the Water Framework Directive.

The national research vessels carried out an intensive survey schedule providing an essential research platform as well as important opportunities for third level students through the 'Scientists at Sea' programme run by the Strategic Marine Alliance for Research and Training (SMART). The Advanced Mapping Services Team carried out seabed mapping and data acquisition for the INFOMAR programme in priority areas off the south and west coasts and surveyed areas off the coast of Clare to support the development of the ocean renewable energy sector.



The 'Galway Statement on Atlantic Ocean Cooperation' was signed by representatives of the European Union, the United States and Canada who have agreed to join forces on Atlantic Ocean Research.

We produced the annual Fisheries Stock Book, which is used to input into the International Council for the Exploration of the Seas fish stock advice and is a key reference in the annual Fisheries Council negotiations in Brussels; scientific input into new landings obligations (discard ban) and new regionalised focus for management introduced as part of the new Common Fisheries Policy; supported the Department of Arts, Heritage and the Gaeltacht in successfully listing five vulnerable shark species on the convention of International Trade in Endangered Species.

Our Irish Maritime Development Office published its 10th annual version of the highly regarded Irish Maritime Transport Economist and provided key advisory services to the Department of Transport Tourism and Sport in relation to the latest review of Government Ports Policy and continued its important services in the maritime business development and training areas.

We retained our Excellence Through People Accreditation during the year. This together with the strong focus on staff motivation and involvement in our strategic plan demonstrates the value the Marine Institute places on the essential role played by our staff in the achievement of our organisational goals. We continued to invest (€2.9M) in the implementation of the Sea Change Strategy (*A Marine Knowledge Research & Innovation Strategy for Ireland 2007–2013*) across a range of research areas.

Our Internal Audit Committee and the Executive executed an intensive suite of internal audits which reported maximum levels of assurance on a broad range of controls to the Marine Institute Board.

Such achievements would not have been possible without the commitment of the Chief Executive, management and staff of the Institute, who have maintained an admirable focus and commitment to the shared vision of "a thriving maritime economy in harmony with the ecosystem and supported by the delivery of excellence in our services."

John Killeen.

Mr John Killeen
Chairman
(2014–2019)



Mr Jim Fennell completed his term as Chairman for the Marine Institute board.

"The Galway Statement on Atlantic Ocean Cooperation Launching a EU – Canada – United States of America Research Alliance, signed here at the Marine Institute... highlighted our contribution to the European marine research agenda during Ireland's EU Presidency."



The CEO Dr Peter Heffernan of the Marine Institute presented the 2013 Stock Book to the Minister for Agriculture, Food & the Marine Mr Simon Coveney.

Chief Executive's Report



January to June 2013 marked the Irish presidency of the EU and the Marine Institute was privileged to play a role in support of this important national effort. Our scientific staff were directly involved in supporting Minister Coveney and his Department in their leadership role in bringing the reform of the Common Fisheries Policy to a successful conclusion, with key inputs on the discard ban and new regional management initiatives. Our scientists also assisted the Department of Arts Heritage & Gaeltacht in their work on

the Convention on International Trade in Endangered Species (listing five new vulnerable shark species).

The Marine Institute was also heavily involved in the supporting other key priorities of the Irish EU Presidency namely, the Atlantic Strategy and its associated Action Plan (launched in Brussels in May) and the signing of The Galway Statement on Atlantic Ocean Cooperation Launching a EU – Canada – United States of America Research Alliance (see Appendix 9). The Atlantic Action Plan was informed by four Atlantic Forum workshops, the final of which was organised by the Marine Institute and took place in University College Cork in March 2013.

The Galway Statement was signed on 24th May by political representatives of the EU, Canada and the USA at a special event in the Marine Institute which also included an international scientific workshop “The Atlantic A Shared Resource” (see Appendix 10). The Institute was happy to play a central role in this process on behalf of Ireland and the EU Commission.

This work in the international sphere represented roles performed by the Marine Institute in conjunction with the Irish inter-departmental Marine Coordination Group, chaired by Minister Coveney. Through the work of this MCG, Ireland played a lead role in the evolution of the EU Atlantic Action Plan, the Galway Statement and the shaping of significant marine research elements in the EU Horizon 2020 programme. The European plan for research and innovation, Horizon 2020, was launched in December 2013 with €200m targeted at marine research in the Horizon 2020 programme 2014–2015.

Another Presidency initiative was to bring a performance of the innovative ocean science literacy event, The Longest River, to a full house in Brussels. The event was in partnership by Culture Ireland and Tourism Ireland and under the patronage of both Ms Maria Damanaki and Ms Máire Geoghegan-Quinn, Members of the European Commission. The Longest River was subsequently highly commended by the Allianz Business to Arts award programme.

The Marine Institute continued to play a strong support role for the work of the Marine Coordination Group and during 2012 I chaired the Enablers Task Force established by the Marine Coordination Group to examine and report on a Marine Spatial Planning system for Ireland. The Enablers Task Force submitted its report to the Marine Coordination Group in November. In December a Development Task Force, was established under the aegis of the Marine Coordination Group to report on key actions to promote specified elements of the enterprise agenda from Harnessing our Ocean Wealth.

We concluded a new three-year Strategic Plan, developed by the board and executive of the Marine Institute, which now constitutes the key planning document and framework for which the Marine Institute will operate between now and 2016. The plan sets out a strategy to guide the

Marine Institute as we embrace continuing challenges and opportunities in our work programmes, whilst ensuring our statutory and core services are delivered to the highest achievable standards. By continuing to work together, this plan will allow us to continue to navigate the difficult economic times and help us to plan for the eventual upturn.

Through the dedication and professionalism of our staff the Marine Institute delivered the full suite of our front line services across our services teams as outlined in more detail later in this report. Amongst our larger programmes of scientific and advisory services are:

- > Annual stock assessments and fisheries scientific advice culminating in the annual Stock Book publication
- > Seafood safety statutory monitoring programmes across biotoxins; residues; fish health
- > Aquaculture monitoring
- > Marine Strategy Framework and Water Directive related programmes
- > INFOMAR (seabed mapping) survey and added value programmes and information services
- > Research vessels operations on the *RV Celtic Explorer* and *RV Celtic Voyager* and *ROV Holland I*
- > IMDO – shipping and related services sector development, as well as
- > Corporate governance; human resource and facilities management.

During the year we also hosted a visit from the Chinese Academy of Fisheries Science, building on the Memorandum of Understanding signed in 2012, to explore opportunities for collaboration on marine research, in aquaculture and food safety and staff exchanges.

The Marine Institute both funded and carried out important research activities in a number of areas in 2013. Among the highlights was the discovery of a new habitat in the Whittard Canyon system, by scientists from the Ryan Institute in the National University Ireland, Galway onboard the *RV Celtic Explorer*. A team of scientists were able to explore the canyon remotely using the *ROV Holland I*, to discover a vertical rock face half a mile below the sea surface, which extended upwards for about 150 metres, and was covered in a colony of bivalves and corals. Some of these are believed to be up to 200 years old.

The Marine Institute secured competitive external research funding awards (FP7/INTERREG) to the value of €767k during 2013. This brings our cumulative earnings 2007–2013 to €5.6 million. This is an important element of a most impressive performance by the wider Irish marine research community which has secured a cumulative approximate total of €68 million over the years 2007–2013 from EU FP7 and INTERREG funding sources. The Irish marine sector won over €48 million in competitive funding under the FP7 Programme, which represents an impressive 8% of the total national FP7 drawdown.

Scientists from our Shellfish Safety team completed the Astox2 research project which made significant discoveries about toxicity, pathways and causative species for the azospiracid toxin.

Our scientists also completed the award-winning ASIMUTH project which developed forecasting products using physical models, satellite and in-situ data to provide early warning of harmful algal blooms to allow fish and shellfish farmers to modify their culture and harvesting strategies in order to reduce potential losses.

We continued our collaboration with the Centre for Fisheries Research, Newfoundland, to carry out a transatlantic survey on the *RV Celtic Explorer*. His Excellency the Canadian Ambassador, Loyola Hearn

visited the *RV Celtic Explorer* to meet Irish and Canadian scientists and crew before it sailed from Galway Docks to St. Johns, Newfoundland and Labrador.

Raising awareness of Ireland's ocean wealth and increasing engagement with the sea is a key goal of *Harnessing Our Ocean Wealth – An Integrated Marine Plan for Ireland*. We help to make this happen through our Explorers Education Programme and various events (including the performing of *The Longest River* mentioned above).

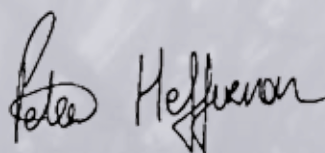
In December 2013 we hosted over 700 students on the *RV Celtic Explorer* in Galway Docks over two days where they toured the vessel and meet the scientists and crew that work on board. We expanded participation levels in the Explorers Education programme in the Galway and East coast areas, with the support of the Galway Education Centre, Galway Atlantaquaria continued the Explorers Programme in Mayo and Clare with the support from the local education centres.

Our Irish Maritime Development Office introduced an innovative new iShip Index as the world's first country index based on trade and traffic flows through its domestic ports. This quarterly weighted indicator is already being used by Irish economists as it gauges the health of the Irish shipping industry and the wider economy.

We took the SmartOcean Forum north to Belfast in November 2013 in very successful partnership with Invest NI. Over 180 individuals representing over 90 organisations participated in the largest forum to date.

I wish to record my sincere appreciation to the staff of the Marine Institute and to commend them for their commitment to public service.

My appreciation also to the board for their continued efforts and guidance. Our chairman for the last five years, Mr Jim Fennell completed his term in December. I want to pay a special tribute to him for his great guidance, thoughtfulness and advice throughout his term.



Dr Peter Heffernan
Chief Executive



The Marine Institute and Galway based choir Cois Cladaigh showcased the marine science literacy and communication event "The Longest River" as part of the celebration of Ireland's Presidency of the Council of European Union, at Eglise du Saint-Sacrement in Brussels. (Left to Right) Dr Brendan O'Connor, Director of Cois Cladaigh; Professor John Delaney, University of Washington; Ms Maria Damanaki, the EU Commissioner for Maritime Affairs and Fisheries; Dr Peter Heffernan, CEO of the Marine Institute

"Ireland played a lead role in the evolution of the EU Atlantic Action Plan, the Galway Statement and the shaping of significant marine research elements in the EU Horizon 2020 programme."



Canadian Ambassador to Ireland, His Excellency, Loyola Hearn, boarded the *RV Celtic Explorer* at Galway Docks to meet the Irish and Canadian collaborators of the transatlantic expedition from Galway to St. Johns, Newfoundland and Labrador.

Corporate Services



Corporate Services

The continuing public sector embargo on recruitment together with a difficult economic environment determined that the focus in 2013 remained on providing value for money to customers in a highly efficient manner. This was achieved through collaborations with other bodies and the provision of a responsive, dynamic service and a continued focus on strong corporate governance.

Highlights of 2013 included:

- > The retention of our Excellence Through People Accreditation (ETP) under the National Standards Authority of Ireland's (NSAI) Standard – ETP 1000:2012. This standard is Ireland's national standard for human resource management with the two main objectives being to act as a business improvement tool as well as being a driver for change and innovation, and to promote employee learning, development and involvement in line with the organisation's goals.
- > Implementation of the *Sea Change strategy – A Marine Knowledge, Research and Innovation Strategy for Ireland, 2007–2013* continued during 2013, with an additional investment of €2.9m under the Marine Institute administered the National Development Plan (NDP) Marine Research Sub-Programme bringing the total investment to-date under the NDP Marine Research Sub-Programme to €63.4m.
- > Participation in a number of key Irish and international public and outreach events in 2013 enabled the Institute to reach new audiences. This included The Atlantic— A Shared Resource event in Galway which saw the signing of the historic *Galway Statement on Atlantic Ocean Cooperation* between the EU, USA and Canada.
- > A positive profile of the Marine Institute and the *Sea Change* strategy was communicated through comprehensive use of electronic and web-based communication evidenced through the number of visitors coming through www.marine.ie.
- > Corporate Governance continued to be an important priority for Corporate Services with regular internal audits reported maximum levels of assurance on a broad range of controls to the Marine Institute Board.

Mrs Caroline Bocquel

Director: Corporate Services

Human Resources

2013 was a year that focused on the provision of services and programmes to support and engage with our staff, in particular with the delivery of programmes and services detailed in the Marine Institute Corporate Plan.

Notwithstanding the embargo on public sector recruitment, the Marine Institute focused its Recruitment and Selection activities on work experience and development programmes. In 2013, eight recently qualified graduates (Stagiaires) were recruited under a 50 week work experience programme across a range of scientific, technical and administration disciplines. Seventeen internship opportunities were offered to persons on the live register across scientific and administrative areas. Seventy-five percent of stagiaires and 67 percent of interns secured employment with other organisations after their placements with us, with 13 percent of interns going forward to study for a Masters or PhD. Three other roles were recruited during 2013, two of which were externally funded temporary roles supporting scientific research projects.

The Marine Institute retained its Excellence Through People Accreditation under the NSAI Standard – ETP 1000:2012. This reflected our investment in the development of staff, our concentration on ensuring effective leadership and focus on improving communications, whilst ensuring ongoing business improvement.

The Marine Institute learning and development focus for 2013 included personal development, management development and health & safety, as well as strategic management & planning and finance for non finance managers. We offered a varied programme of essential and developmental training tailored to support the delivery of business critical work programmes, and ensuring the ongoing development of our staff. We continued to adapt our programmes to support the evolving needs of our teams, delivering value for money, using short preview programmes and online courses, as well as self learning tools and materials.

Eight meetings were held by the Marine Institute's Health & Safety Committee which support our ETP Quality Accredited Programme and represents all locations and activities across the organisation. Health, Safety and Employee Wellbeing awareness Week in December 2013 included seminars on the responsibilities of managers and staff; occupational first aid; positive mental health at work and the importance of healthy eating and exercise. The positive safety track record is a result of the effort and support of the Health & Safety Committee and staff in the Institute.

Finance

The Marine Institute is committed to maintaining the highest standards of corporate governance and ensuring full compliance with the revised Code of Practice for the Governance of State Bodies which was published in 2009. An independent assessment of the Institute's compliance was carried out in 2013 and found that corporate governance standards are given high priority within the Marine Institute.

Under the stewardship of the Internal Audit Committee, the Marine Institute continued to undertake internal audits in 2013, all of which affirmed the Institute's high standards of governance and ensuring that an effective system of internal control is maintained and operated. This included audits on the code of practice, review of the system of internal financial controls, financial management reporting mechanisms and scientific data management. Progress on the implementation plans to address any internal audit recommendations are regularly reviewed and reported to the Internal Audit Committee and the Marine Institute Board.

The Marine Institute financial procedures and policies were updated during 2013. The 2013 budget was reviewed and approved by the Board of Directors in January 2013. Budgetary authority and responsibility is assigned for specific functions to selected managers as laid down in the policies and procedures in relation to financial and procurement issues of the Institute.

There continues to be a strong public procurement ethos and focus throughout the Marine Institute and 39 tenders were issued in 2013 of which 10 were published on the Official Journal of the European Communities (OJEU). Centralised purchasing has proven to be an efficient and effective means of reducing costs and will continue into 2014.

It is the policy of the Marine Institute to ensure that all invoices are paid promptly. Systems and procedures have been put in place to enable invoices to be tracked and to ensure that payments are made before their due date. Purchase invoices are logged on a daily basis in the finance section, and are followed up systematically to ensure that they are certified and returned for payment without delay. Payments are issued as required to ensure prompt payment. An update to our financial system took place in 2013 which now allows electronic entry and approval of purchase orders.

Facilities

The Facilities team manages the daily operations of key support services including cleaning, security, maintenance and catering within the Marine Institute's main offices and laboratories. Based primarily in the headquarters in Oranmore, the main function of the team is to maintain the standard of the facilities and deliver excellent customer services through the stores, reception and maintenance functions, to both internal and external customers.

Twelve thousand incoming telephone queries were responded to by the centralised reception in Oranmore throughout 2013 and over 406 non scheduled or planned maintenance issues were raised and closed out during the year. The key objective for the specialist and general maintenance engineers is to ensure smooth operations throughout the facilities and maintain the buildings, plant and equipment to a very high operating standard.

One of the core objectives for the team is to achieve cost efficiencies through effective procurement practices and facilities operating procedures. The use of Office of Government Procurement Frameworks and open tenders are key procurement components for the team. Centralised purchasing continues to be promoted throughout the organisation, with Facilities members taking the lead.



A group of offshore bottlenose dolphins, about 150km west of Ireland, taken during the fourth dedicated survey of cetaceans on the continental shelf edge which was conducted by scientists from the Galway-Mayo Institute of Technology's Marine and Freshwater Research Centre. The survey which is carried out on the *RV Celtic Explorer* is funded through the Marine Institute's National Research Vessel Ship - Time Programme 2013 supported by the Marine Research Sub-programme of the National Development Plan 2007-2013

"2013 was a year that focused on the provision of services and programmes to support and engage with our staff, in particular with the delivery of Programmes and Services detailed in the Marine Institute Corporate Plan."



Imelda Hehir from the Marine Institute talks to students about her work in fisheries management on the *RV Celtic Explorer*. Over seven hundred students from Galway, Roscommon and Mayo visited the research vessel having entered the "Exploring the XTRA-Ordinary Writing Competition".

Corporate Services



Library Services

In November 2013, the Marine Institute library joined the national open access portal for Irish research publications (RIAN). The Institute's Open Access Repository (<http://oar.marine.ie/>) contained 814 publications by the end of 2013 with 16,422 visits in 2013 and a total of 29,752 visits since its launch in March 2011. In addition to the digital full-text versions of Marine Institute publications the Repository is an important archive for electronically preserving old reports and papers. A significant feature of the repository is that performance indicators are available that show how often publications are being viewed/downloaded and from what countries. The visibility, research impact, and probability of being cited of Marine Institute publications has been greatly increased, as all records in the Repository are fully searchable by Google and other search engines. The Repository ensures the Marine Institute complies with mandates from national and international funding bodies that all publications arising from their funding be placed in an open access repository.

The Institute signed a Memorandum of Understanding with Galway-Mayo Institute of Technology during 2013 to share library resources and established a reciprocal borrowing agreement.

Communications

Proactive communications with the Marine Institute's key stakeholders continued during 2013 through a variety of media, education and outreach programmes. We commenced a project to redevelop the Institute's website which will go live in 2014 as well continuing to develop social media platforms Twitter, Facebook and LinkedIn. Our scientists@sea blog continues to be very popular with significant following and engagement from scientists and the public alike.

We delivered the Explorers Programme in Galway, Mayo, Clare, Dublin, Wicklow and Cork with support from our partners, including Galway Atlantaquaria, Sea Life Centre Bray and the Lifetime Lab Cork. The Explorers Education programme was also supported by Galway, Mayo, Clare and Blackrock education centres. The programme in Galway was restructured, offering four different marine themed modules for schools to apply for through the Education Centre. School tours were held on the *RV Celtic Explorer* where over 700 primary and secondary students had the opportunity to learn about the research conducted on the vessel, including seabed mapping, fisheries research, oceanography as well as getting a sense of life working on a research vessel.

A number of marine-related stories promoted by the Marine Institute featured prominently in the media throughout the year including a biodiversity survey by the National University of Ireland, Galway onboard the *RV Celtic Explorer* during which new deep sea habitats were discovered using the *ROV Holland I*. The survey was funded under the Sea Change Strategy with the support of the Marine Institute and the National Development Plan 2007–2013. ASIMUTH, an Irish led EU Framework 7 funded project (led by the Daithi O'Murchu Marine Research Station-DOMMRS) won the Copernicus (Global Monitoring for Environment and Security) Masters Prize for best earth-monitoring service for European citizens 2013. This pan-European project developed an online alert system to provide an early warning to the aquaculture industry of imminent harmful algal blooms.

Other events which gained significant media coverage included: *The Atlantic – A Shared Resource* event held at the Marine Institute, Galway in May, which saw the signing of an historic *Galway Statement on Atlantic Ocean Cooperation* launching a research alliance between the EU, USA and Canada; the *SmartOcean Forum* in Belfast promoted Ireland and Northern Ireland as leaders in the development of information communications technology (ICT) products and services for global marine sectors; and *The Longest River – A Marine Science, Literacy and Music* event held in Brussels promoted the importance of multidisciplinary marine research and how working across international borders is essential in achieving healthy marine ecosystems. This event was awarded highly commended in the Allianz Business 2 Arts awards.

Sea Change Management Unit and Research Office

2013 marked the final year of the term of the *Sea Change Strategy (A Marine Knowledge, Research and Innovation Strategy for Ireland, 2007–2013)*. During the year, €2.9m was invested under the Marine Institute administered NDP Marine Research Sub-Programme. A full list of the new investments in 2013 is provided in Appendix 1. The investment in 2013 brings the total investment to-date under the NDP Marine Research Sub-Programme to €63.4m (2007–2013). The vast majority (86%) of the 2013 investment was awarded to support research (143 days) and under/post-graduate training programmes (57 days) on-board the national research vessels *RV Celtic Explorer* and *RV Celtic Voyager*. The research undertaken was focused on the areas of fisheries (mackerel egg survey), marine environment (nutrient survey), oceanography/climate change, marine geology, marine technology and marine biodiversity/biodiscovery. Training programmes were provided to students from six Higher Education Institutes, either through structured, accredited specific modules or generic multi-disciplinary courses that were coordinated by the SMART Sea School in Galway – Mayo Institute of Technology.

In 2013, four final project reports were published and made available on the Marine Institute Open Access Repository. These reports provide important evidence based research findings that will assist future policy decision-making for finfish aquaculture (in relation to gill pathologies and fish diseases), seaweed aquaculture (seaweed species with commercial potential), data integration (of geoscientific data) and protecting the marine environment (by quantifying the distribution of marine mammals in Irish waters).

An additional €5m was committed, via other competitive national programmes (e.g. DAFM, HEA, SFI, EPA, IRC), to research aimed at addressing the objectives of *Sea Change*. This included a significant call that awarded €4m under the DAFM Food Institutional Research Measure (FIRM) for marine food research.

Irish marine researchers continued to enjoy success in EU competitive funding programmes (FP7 and INTERREG), with grant-aid of €12.8m being awarded in 2013. This brings the total grant-aid awarded to Irish marine researchers in the current EU funding cycle (2007–2013) to €67.5m. The total investment in marine/marine-related research in Ireland over the lifetime of *Sea Change* (2007–2013) now stands at approximately €204m of which 33% is represented by EU grant-aid for research. The final total of EU grant-aid won over this period is three times the target set in 2007.

The Research Office also provided support to Marine Institute colleagues in all service areas during 2013 in the financial management/administration of EU-funded research projects. Support is currently provided for 26 projects, valued in excess of €3.3m in grant-aid to the Institute. In the latter part of the year the focus turned to familiarisation and preparation for the next seven-year EU funding cycle; Horizon 2020.

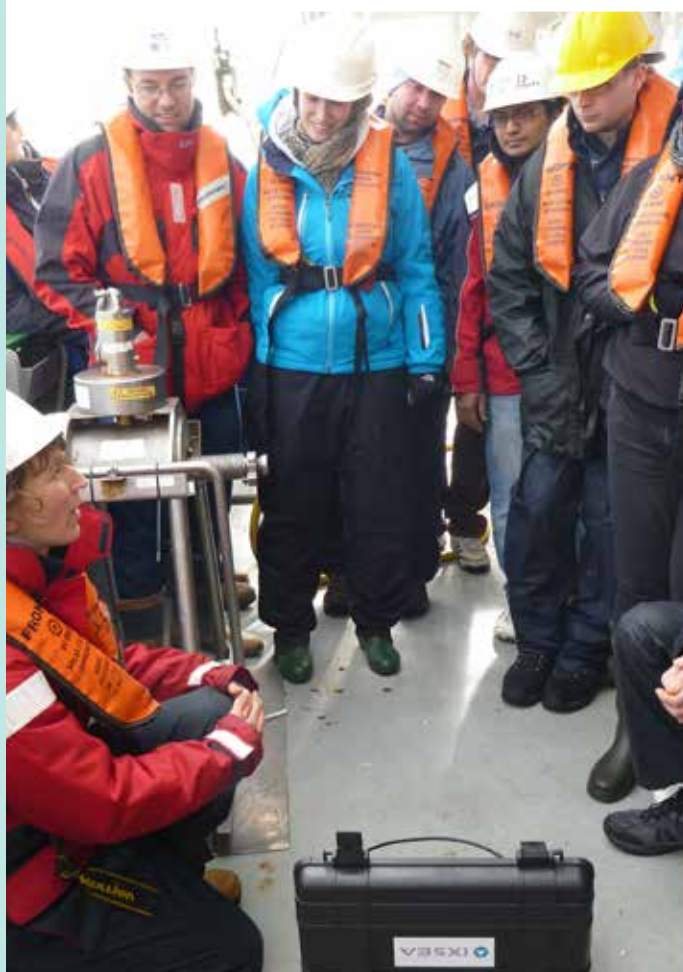
Accessibility

The Institute was fully compliant with the Disability Act during 2013.



The Explorers Marine Education programme was re-launched with the expansion of over forty five primary schools taking part in the marine programme in Galway.

“The Longest River – A Marine Science, Literacy and Music event held in Brussels promoted the importance of multidisciplinary marine research and how working across international borders is essential in achieving healthy marine ecosystems”



Sheena Fennel from NUI-Galway demonstrates an acoustic release during the two-day practical offshore course in advanced marine technologies, which was delivered on the national research vessel *RV Celtic Voyager* to postgraduate students from the International SmartOcean Graduate Enterprise Initiative (ISGEI). The training was carried out under the *Sea Change* strategy with the support of the Marine Institute and the Marine Research Sub-programme of the National Development Plan 2007–2013.

Irish Maritime Development Office



Director's Statement

The maritime transport sector is beginning to emerge from a period of contraction and consolidation that began in 2007. Although many challenges remain, 2013 was an important inflection point. Growth returned to the total volume of trade moving through Irish ports, as the demand for raw materials in industries such as agriculture and construction increased. Throughout the period, as the economy showed signs

of recovery, the Irish Maritime Development Office's (IMDO) work programme remained tightly focused on the development of policies and practices that support growth, sustainability and job creation within the maritime transport sector. The development of such policies and practices is a collaborative effort that relied heavily on the cooperation of industry stakeholders. The results of this collaboration are manifest in the achievements of the IMDO in 2013 and in previous years. For example:

- The IMDO produces reliable and authoritative data that track the growth and development of the sector. Quarterly market commentaries are issued, in addition to the *Irish Maritime Transport Economist* (IMTE), an annual publication that has become a reference document for practitioners, representative bodies and policy makers. These publications would not be possible without the cooperation and support of shipping companies, ports and other agencies in the sector. The 10th edition of the IMTE was issued in 2013, marking an important milestone in its development. The data repository that now exists within the IMDO allowed an informed contribution to be made to the development of a new National Ports Policy, which was published by the Minister for Transport, Tourism and Sport in 2013.
- When introduced in 2002, the Irish Tonnage Tax regime arrested the decline in indigenous ship owning. It was also successful in bringing international ship owners into the scheme and attracting foreign inward investment to the Irish maritime sector. International shipping companies, introduced to Ireland by the IMDO, now feature prominently among Ireland's top companies, as reported in the Irish Times Top 1000 in May 2013. The introduction of the tonnage tax regime was a proactive initiative by Government that continues to deliver dividends to the maritime sector and broader economy. By the end of 2013, 45 companies had registered under the scheme, accounting for almost 300 vessels.
- By supporting the education and training of cadets, through the Irish Seafarers Education Assistance Scheme (ISEAS), the IMDO continues to recognise and showcase the calibre of the graduates emerging from the National Maritime College of Ireland. Through the scheme, cadets find placements with prestigious international shipping companies and many go on to have rewarding and successful careers in the maritime sector. In 2013, the ISEAS program found placements for 123 cadets with the 14 companies that participated in the scheme.
- The performance and efficiency of the maritime transport sector has repercussions for international trade, the competitiveness of our national economy and job creation. Therefore, it is incumbent on the IMDO to work closely with all commercial ports on the island, including those in Northern Ireland to drive the development of the sector. The need for efficiency and competitiveness in the sector was recognised by the Minister for Jobs, Enterprise and Innovation, who asked the Competition Authority to review the competitiveness

of Irish ports. The IMDO contributed to the consultation process by providing technical and statistical analysis, which informed the report that was released by the Competition Authority in November 2013. In addition, the IMDO carried out its annual review of the financial performance of Irish ports, which was presented to the Minister for Transport, Tourism and Sport during the year. The analysis provided a comparative review of the financial performance of ports and its findings were used by colleagues within the Department to inform wider port policy deliberations.

By engaging in initiatives such as those listed above, The IMDO encourages positive change and fulfils its mandate to support the development of the Irish maritime transport sector. Throughout 2013, the IMDO laid emphasis on those initiatives and policies that offer the potential for economic renewal and job creation.

Mr Glenn Murphy

Director: Irish Maritime Development Office

National Perspective

Turning to the performance of the Irish maritime transport sector in 2013, it is clear that a number of indicators give us cause for greater optimism than has been the case for many years.

The volume of trade that moves through Irish ports is a reliable indicator of national economic performance and activity. Although the volume of traffic moving through Irish ports remains below the historic highs of the previous decade, it is noteworthy that the iShip Index, which is an aggregate measure of trade volumes, rose to 862 points in 2013, up 3% on the previous year. Dry bulk traffic, comprising of commodities such as coal, ore and agricultural produce, rose by 6%. The break bulk index, which tracks construction related materials such as steel and timber, rose by 18%, pointing to a resurgence of the construction sector. Overall, as a barometer of economic performance, the iShip index for 2013 supports the view that steady progress is being made towards economic recovery.

A number of port companies, tasked with providing the infrastructure to meet the future demands of the Irish economy under the National Ports Policy, have submitted ambitious proposals for expansion and development. Although total port capacity is not an immediate concern, given that current volumes remain below pre-recession highs, the proposals under consideration recognise the need for additional port capacity as the economy recovers and the potential that exists in specific market segments, such as cruise business, for considerable expansion in the future.

In 2013, plans emerged for the commencement of new services to France and Spain and capacity was added to a number of existing routes. Such announcements underpin growing confidence in the recovery of the Irish economy and the belief that growth in both passenger and freight traffic is possible on a number of routes. These initiatives are welcome and represent a marked change in sentiment in relation to the growth potential of the sector.

Collectively, these indicators and trends, which are closely monitored by the IMDO, justify a degree of cautious optimism that the maritime transport sector is steadily emerging from a period of retrenchment that started in 2007.

International Perspective

Shipping is a global industry that cannot be neatly segmented into discrete geographic regions. Its assets are mobile and as a result, global trends have significant regional impact. The IMDO monitors global shipping markets and reports on the factors that influence supply, demand and pricing within the industry. Included in the analysis are: global demand; charter rates; exchange rates; interest rates; fuel prices; and a range of social, political and economic issues that impact on international shipping markets and as a result, the Irish maritime transport sector.

Global container trade grew by 5% in 2013, marginally below expectations, mainly because of underperformance in the Eurozone. Looking to the future, trade volumes are expected to increase by between 6% and 7% in 2014, as the economic recovery in the Eurozone continues.

The global containership charter market reported modest increases in 2013, as rates rose by 2.9% on average, compared to the previous year. Notably, charter rates for the vessel classes that dominate the Irish market (300 to 1000 TEU), increased by up 20% during the period. However from a historical perspective, rates remained close to an all-time low for the majority of vessel classes, and in many cases are below the level that generates an economic return for owners.

The increases in charter rates that affected the Irish market were mitigated by lower average bunker prices—down 7% from 2012, based on IFO 380. However this relief may be temporary. From the 1st January 2015, the EU Sulphur Directive comes into effect. This will substantially increase the cost of bunker fuel, with consequential increases in fuel surcharges. All ships transiting the Sulphur Emission Control Area (SECA) will be required to use fuel with a sulphur content of less than 0.1%.

Interest rates remained at historically low levels internationally. Further cuts in interest rates and even mildly negative interest rates on deposits are under consideration in order to stimulate economic activity and ease deflationary pressure within the Eurozone.

The strength of the Euro against other major currencies, in particular those of Ireland's major trading partners, added to the challenges facing Irish exporters in 2013. The Euro is expected to weaken gradually in 2014, with median forecasts suggesting an approximate depreciation of 6.0% and 5.2% against Sterling and the US dollar respectively. This move is likely to ease trading conditions for Irish exporters in these two important markets in the coming year.

Throughout 2013, the IMDO monitored the international trends that impact on the performance of the Irish maritime transport sector and these trends subsequently influenced its policy advice to government.

Industry-wide Perspective

The Irish maritime transport industry encompasses a broad range of interest groups. Its performance has a significant impact on the national economy, particularly in terms of trade and tourism. It is important therefore, as a development agency, for the IMDO to take soundings from a range of stakeholders that is representative of the industry as a whole. It is also important that the policy positions taken by the IMDO are informed by national issues, emerging issues within the EU, and relevant global developments. To this end, the IMDO cultivates strong relationships with a network of organisations and agencies that have common cause in developing the maritime transport sector in Ireland.

At a national level, the IMDO routinely engages with representative groups such as the Irish Exporters Association, IBEC and the Irish Ports Association. In supporting the development of the industry, the IMDO has established strong ties with agencies such as the IDA, Enterprise Ireland and third level institutions involved in educational programmes in the maritime sector.

At a European level, the IMDO is involved in the formulation and implementation of EU programs and disseminates relevant information concerning these programs to industry stakeholders. Currently, the IMDO participates actively in programs such as the Waterborne Project, under the Horizon 2020 Program and identifies funding opportunities for the industry and for third level institutions interested in research in the maritime sector. Through its European network of industry contacts, including permanent representatives of Irish agencies in Brussels, the IMDO is kept apprised of significant developments at EU level.

At a global level, the IMDO draws information from international shipping markets through representative organisations, or where appropriate, directly appointed agents. The IMDO has been active in markets as far apart as the USA and the Far East to generate interest in Ireland's maritime sector.

The IMDO remains closely involved in the Irish Shipping Services Centre (ISSC) project, which seeks to establish Ireland as an international shipping hub. The promoters of the project have identified the potential to create more than 3,000 new jobs in Ireland by attracting companies directly involved in the maritime sector, in addition to a broad array of ancillary services, including vessel financing, insurance, advisory and consultancy.

In 2013, the IMDO was both a listening ear to industry stakeholders and a strong voice to government in articulating the practices and policies that will enable the Irish maritime transport sector to realise its potential as a facilitator of international trade and a source of new jobs in the Irish economy.

Marine Environment and Food Safety Services



Director's Statement

The work of Marine Environment and Food Safety Services (MEFS) focuses on protecting the marine environment, providing services in support of a sustainable aquaculture industry, and ensuring consumer safety through providing seafood safety services. This work continues to support market access for Irish seafood exports. This work is

delivered via three core functions including: Monitoring; Advice and Technical Support; and Research.

Ongoing Monitoring programmes in 2013 included:

- > National Biotoxin Monitoring Programme
- > National Residues Control Programme (seafood component)
- > Inspections and monitoring of movements of fish and shellfish stocks as required under the EU Fish Health Directive
- > National Sea Lice Monitoring Programme
- > Water Framework Directive (Transitional and Coastal Waters elements).

In support of these programmes, the Marine Institute is the National Reference Laboratory for diseases in shellfish, finfish, and crustaceans; shellfish biotoxins; microbiological contaminants in shellfish; and certain chemical substances in aquaculture.

Our Irish National Accreditation Board (INAB) accredited quality system (ISO 17025), which underpins the delivery of these programmes, was further expanded in 2013, from 36 to 40 accredited test methods.

Advisory and technical services provided by MEFS in 2013 supported:

- > Appropriate Assessments of Fisheries and Aquaculture activity in Natura 2000 sites, Special Areas of Conservation and Special Protection Areas (SACs and SPAs)
- > Aquaculture licensing
- > Aquaculture Single Bay Management (SBM)
- > Delivery of key Marine Strategy Framework Directive (MSFD) milestones by the Department of Environment, Community and Local Government (DECLG) – an initial assessment of Ireland's marine environment and launch of Ireland's Marine Atlas (<http://atlas.marine.ie>).
- > Foreshore lease/licensing decisions by DECLG
- > Dumping at sea advice to the Environmental Protection Agency (EPA)
- > The work of the Marine Coordination Group's Enablers Task Force on Marine Spatial Planning.

Participation in research programmes/projects – and the dissemination of research outputs, including peer-reviewed publications – that support our core environmental and seafood safety monitoring and advisory roles played a key part in our 2013 work programme. Of particular note was the completion, with Ocean Science and Information Services, of the

award-winning ASIMUTH project, which developed forecasting products using physical models, satellite and in situ data to provide early warning of blooms to allow fish and shellfish farmers to modify their culture and harvesting strategies in order to reduce potential losses.

All of our work is carried out collaboratively with Government departments and agencies including the Department of Agriculture, Food and the Marine (DAFM); the Food Safety Authority of Ireland (FSAI); Department of Environment, Community and Local Government (DECLG), Department of Arts, Heritage and the Gaeltacht (DAHG), Sea Fisheries Protection Authority (SFPA) and the Environmental Protection Authority (EPA). MEFS also play an active role in international fora e.g. International Council for the Exploration of the Seas (ICES) and the Oslo and Paris Convention 1992 (OSPAR).

Mr Aengus Parsons

Director: Marine Environment and Food Safety Services

Monitoring Shellfish Safety

The shellfish biotoxin monitoring programme, carried out by MEFS on behalf of SFPA and FSAI, analysed just over 3,300 samples in 2013. The requirement to analyse increasing numbers of scallops harvested from classified inshore areas has resulted in a large increase in sample numbers on previous years. Elevated biotoxin levels in many shellfish production areas resulted in protracted closures of shellfisheries through the summer and in some areas right up to the end of the year. Although these are natural events and lengthy closures have been observed previously, the impact on the industry was significant. Continuous support by provision of ongoing monitoring was provided to measure the levels of toxicity in all samples submitted and issue advice, along with the SFPA, on the re-opening of areas once it was safe to do so.

Monthly monitoring of *E. coli* levels in shellfish was conducted in all production areas and the annual review of the data was carried out with the SFPA to assign appropriate classification to each area. 2013 marked the completion of two PhD projects in MEFS that added considerably to our knowledge on the distribution of Norovirus from wastewater treatment plants and the risk associated with these in shellfish.

An extensive bloom of the phytoplankton species *Phaeocystis* was detected in June of 2013 and observed using satellite imagery. It led to much public interest. This species, which is regularly observed in Irish waters, forms a floating colony of cells embedded in a polysaccharide gel matrix and led to discoloured water in several locations along the east coast. It is not known to cause a health risk to humans.

Residues and Contaminants Monitoring

The chemistry team carried out the aquaculture component of the 2013 National Residues Monitoring Programme to ensure compliance with European Commission legislation and ensure farmed fish are fit for human consumption. The results from analysis of 658 samples for a wide range of substances will be reported in 2014. The 2012 results, published in 2013, show full compliance with the European standards. Monitoring and advice on the levels of environmental contaminants in seafood was provided to the FSAI and the SFPA.

Finfish Farm Monitoring

The National Sea Lice Monitoring Programme carried out a total of 238 sea lice inspections on 24 active salmonid (salmon and trout) rearing sites during 2013, in accordance with the National Sea Lice Monitoring Protocol. Monthly reports on the monitoring results were circulated to interested parties and all the 2013 data was published in an annual report (O'Donohoe et al., 2014).

A full review was conducted of 2012 finfish farm benthic reports submitted to DAFM in fulfilment of their benthic monitoring protocols.

Fish Health

In 2013, over 3,000 finfish – primarily Atlantic salmon, but also rainbow trout, pike, perch and other coarse fish, were tested for pathogens either under health surveillance programmes; following the submission of diagnostic samples to the laboratory, or as a result of screening tests carried out for the aquaculture industry. Ireland remains free of listed finfish diseases. Two-thousand shellfish samples were tested for the presence of pathogens. Surveillance for the herpes virus (OsHV-1 μ var) in Pacific oysters was a significant focus again in 2013. The virus was detected in a further three bays, bringing the total of positive bays in Ireland to 32. The entire country, with the exception of eight bays, is considered free from *Bonamia ostreae* and the entire country remains free from *Marteilia refringens*.

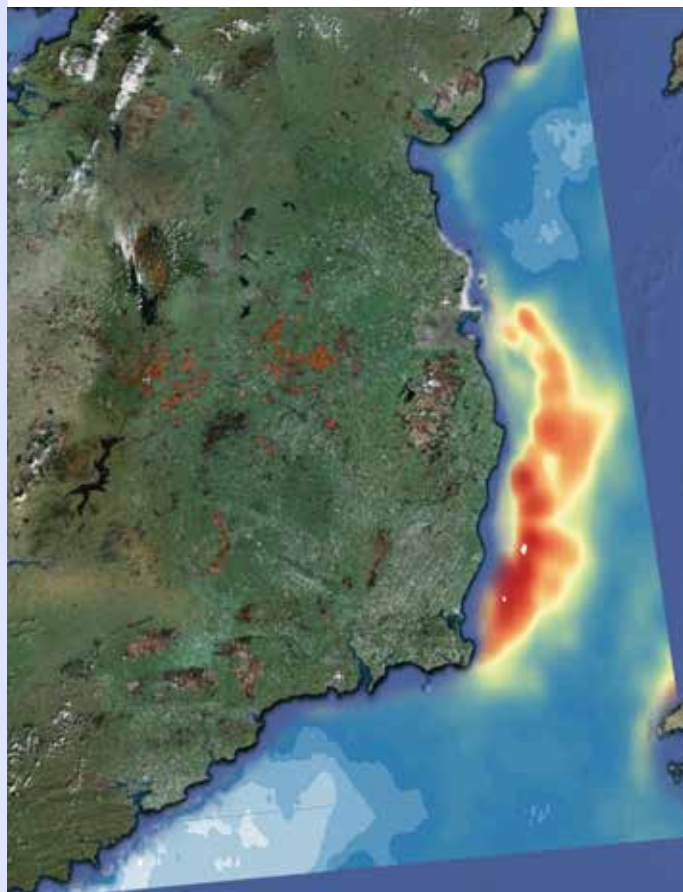
Environmental Monitoring

An extensive environmental monitoring programme was implemented on behalf of EPA and DECLG in transitional and coastal waters for physico-chemical parameters, priority substances, phytoplankton and benthic fauna to fulfil the requirements of the Shellfish Waters Directive. MEFS staff undertook a winter environmental survey in February 2013, on board the *RV Celtic Voyager*, sampling at 280 stations from the Irish Sea, and on the south and west coasts for testing of nutrients and water quality parameters. Ninety-five samples for analysis of the benthic fauna were also collected.



Ireland's marine environment and food safety was supported by ongoing monitoring, advisory and technical services and research.

“MEFS staff provided significant scientific and technical inputs into the completion and submission to the European Commission of Ireland's Initial Assessment, and subsequent public consultation, under the Marine Strategy Framework Directive.”



Phytoplankton bloom off the East coast in June 2013.

Advice and Technical Support

MEFS provide ongoing advice to DAFM in support of aquaculture licensing. During 2013 this consisted of:

- > Completion of three Appropriate Assessments (AA) for marine Special Areas of Conservation (Donegal Bay, Lough Swilly and Roaringwater Bay), allowing for progress on over 150 licensing decisions. A further four AAs were progressed substantially in 2013 and will be completed in early 2014.
- > Environmental Impact Assessment (EIA) screening and AA screening for licence applications in non-Natura sites.
- > Advice on 56 aquaculture licences in non-Natura sites.

The Single Bay Management (SBM) process was successfully completed in all active finfish farming bays in 2013. SBM documents, including active fallow plans, were updated for all 11 finfish aquaculture operators along the coast. The SBM process is designed to coordinate fish husbandry in such a way that best practice is followed and that stocking, fallowing and treatment regimes on individual farms are compatible with the arrangements on neighbouring farMs. It has proven very effective in enhancing the efficacy of sea lice control and in reducing the overall incidence of disease in the stocks. SBM plans are subject to revision for each production cycle.

The Shellfish Safety team provided advice on the food safety of shellfish to the SFPA and FSAI for ongoing official controls under the monitoring programmes for shellfish biotoxins and microbiological classification. During 2013, MEFS assisted the competent authority during an audit of these programmes carried out by the European Commission's Food and Veterinary Office.

The Marine Institute continued to provide inputs to Bord Iascaigh Mhara in support of their consideration of potential offshore aquaculture sites.

MEFS staff provided significant scientific and technical inputs into the completion and submission to the European Commission, in mid-2013, of Ireland's Initial Assessment (an in-depth assessment of our marine environment), and subsequent public consultation, under the Marine Strategy Framework Directive (MSFD). This work, which is managed by the Marine Institute on behalf of DECLG, is being carried out by external contractors. 2013 also saw the completion and launch, on the Marine Institute's website, of Ireland's Marine Atlas. The online Marine Atlas (<http://atlas.marine.ie/>) contains spatial information on ecosystem characteristics, human activities, protected sites and administrative boundaries. The focus of work will now be directed towards developing the monitoring programme required under the Directive.

Other areas in which MEFS staff provided advice during 2013 included:

- > Disposal of dredge spoil at sea – by way of participation on the EPA Dumping at Sea Advisory Committee
- > Applications for Foreshore Leases/Licences – by way of participation on the DECLG Marine Licence Vetting Committee (MLVC)
- > Certain environmental aspects of offshore hydrocarbon exploration and production – advice to the Department of Communications Energy and Natural Resources (DCENR) and the EPA
- > Marine Spatial Planning including providing advice to the Marine Coordination Group's Enablers Task Force and to Dept. of An Taoiseach on the proposed European Directive.

Competent Authority for Fish Health

In addition to the fish health laboratory services, the Fish Health Unit of MEFS is the Competent Authority in relation to the implementation of the Fish Health Directive' (Council Directive 2006 /88/EC). The Competent Authority section directs the work of the DAFM Veterinary Inspectors who work in the aquaculture field. In 2013, 301 inspections were completed under the legislation; 1,421 movements – imports, exports and internal movements – of live aquatic animals were authorised; and 48 new Fish Health Authorisations were issued, bringing the total number of authorised Aquaculture Production Businesses in the country to 465.

Research

MEFS staff continued their involvement in European and nationally funded research programmes, carrying out applied research in support of the delivery of our monitoring programmes and advisory services. As 2013 marked the end of national and European funding cycles a number of projects concluded in 2013, including:

- > The ASTOX II project provided further answers regarding the toxicology of this shellfish poison, the transfer of the toxin via shellfish and the distribution of the causative species *Azadinium spinosum* in coastal waters.
- > The EU FP7-funded *Prevent Escape* project, published results in that provide a qualitative and quantitative study into the causes and extent of escapes from offshore aquaculture operations across Europe. Further peer reviewed publications are expected in the coming months.
- > The award-winning *ASIMUTH* project (FP7 funded) developed forecasting products using physical models, satellite and in situ data to provide early warning of harmful algal blooms (HAB's) to allow fish and shellfish farmers to modify their culture and harvesting strategies in order to reduce potential losses. Daithi O'Murchu Marine Research Station (DOMMRS), project leaders and the Marine Institute, along with the other partners, took up the forecasting challenge to attempt to predict blooms that seriously disrupt the production plans of fish farMs. These blooms add costs not only by causing fish to die, but also through prolonged bay closures, subsequent waste disposal of fish, and increased insurance deductibles. In conjunction with our monitoring service, a weekly regional alert and expert interpretation and forecast on HABs was published via a web-bulletin. The service was designed to combine all of the available information from Earth (in-situ monitoring stations), space (satellite data) and in-silico (biological and physical oceanic models) sources for the northeast Atlantic Ocean. ASIMUTH continues after the project to provide the aquaculture industry with an overview of areas at risk of a HAB event.
- > *Bivalife* (FP7 funded) – the objectives of which are to provide knowledge related to pathogens infecting oysters and mussels and to develop practical approaches for the control of infectious diseases affecting these animals.

- > An EPA-funded project on the impact of Norovirus in wastewater effluent on shellfisheries in Ireland.

Ongoing projects during 2013 included:

- > Biological Effects, which combines biological effects with chemical analysis to provide more effective assessment of pollution in Irish waters.
- > The role of passive sampling in screening and monitoring of new and emerging chemicals in the marine environment (EPA funded)—a Dublin City University led project assessing the potential of passive sampling in monitoring priority pollutants in Ireland.
- > A range of other projects, at MSc and PhD level, in shellfish microbiology, marine chemistry and fish health.

The Marine Institute continues to support Ireland's National Marine Biotechnology Programme, in particular through the provision of laboratory facilities for research projects being carried out by the National University of Ireland Galway under the Beaufort Marine Biodiscovery award led by Prof. Deniz Tasdemir.



Pat Costello from the Marine Institute - Foras na Mara Phytoplankton team shared his knowledge and promoted the theme of Ireland's Xtra ordinary marine science at the Galway Science and Technology Festival.

“The award-winning ASIMUTH project (FP7 funded) developed forecasting products using physical models, satellite and in-situ data to provide early warning of harmful algal blooms”



Jenny Ronan testing the water at Omev Island, which was one of the sampling locations for the Biological Effects and Chemical Measurements in Irish Marine Waters project. This project was jointly funded by the Environment Protection Agency and the Marine Institute and carried out under the Sea Change Strategy and the Marine Sub-Programme of the National Development Plan 2007–2013.

Fisheries Ecosystem Advisory Services



Director's Statement

Fisheries Ecosystems Advisory Services (FEAS) work in 2013 was dedicated to providing the scientific support for the implementation of the Common Fisheries Policy and in providing service delivery to our major client the Department of Agriculture, Food and Marine (DAFM). Implementing the Marine Institute Corporate Plan was achieved through the

FEAS Strategic Plan (2000 to 2013) which was used by all FEAS staff in setting job objectives for 2013 as part of the Institute's Performance Management Development System. Our outputs for 2013 were achieved by a dedicated and highly skilled service team.

Highlights for the year 2013:

- > A key element of our work during 2013 was to provide support to various Government departments during the EU Presidency, particularly in relation to DAFM, who led EU negotiations on the reform of the Common Fisheries Policy. FEAS scientists played a key role in providing scientific input to the new landings obligations (discard ban) and the new regionalised focus for management.
- > FEAS supported Department of Arts Heritage and Gaeltacht (DAHG) in successfully listing five vulnerable sharks on the Convention of International Trade in Endangered Species (CITES). FEAS secured €3.9 million in EU funding under the EU Data Collection Framework. They also participated in a number of key meetings that prepared the groundwork for the new Data Collection Framework (2014–2020).
- > A key service delivery was the annual Stock Book which formed the basis of the Ministers sustainability assessment to the Oireachtas Committee on Agriculture and Fisheries and served as a critical reference tool during the EU Fisheries Council negotiations on fishing opportunities for 2014. FEAS continue to develop local fisheries management plans for various Special Areas of Conservation (SAC) as part of Ireland's NATURA programme and worked closely with the Institute's Marine Environment and Food Safety Services team and National Parks and Wildlife Service (NPWS).
- > In relation to the implementation of the Marine Strategy Framework Directive (MSFD), the team worked closely with our colleagues in Marine Environment and Food Safety Services and played a key role in developing indicators for the status of fish stocks (D3), and biodiversity (D1). Data and knowledge are essential to the formulation of scientific advice and we worked closely with Ocean Science and Information Services on issues related to data management and upgrading of data bases.
- > Research is an important component of FEAS work and national and EU funding was secured for a range of research projects focused on strengthening our service delivery and adding value to our data assets. These included developing mixed fisheries management plans in the Celtic Seas, developing the implementation of the ecosystem approach to management, and evolving research vessel surveys to collect additional data to support the MSFD.
- > Our team also worked closely with the Sea Fisheries Protection Authority (SFPA) and served on the SFPA Consultative Committee during 2013. There was also close cooperation with the third level sector through various research projects and through the joint supervision of PhD and MSc students.

- > A considerable amount of our staff time was spent at sea, port sampling and at both national and international meetings. Internal communications are therefore a critical component of the service group programmes and regular staff and management meetings throughout 2013 ensured an efficient and effective service delivery.

Dr Paul Connolly

Director: Fisheries Science Services

The Data Collection Framework

Implementing Ireland's obligations under the Data Collection Framework (DCF) (EU Council Regulation 199/2008) supports the science needed to conduct the Common Fisheries Policy and is a central part of the teams work programmes. DAFM have given the Marine Institute responsibility to conduct the various data collection, data management and production of scientific advice required to meet our DCF obligations. FEAS submitted the new DCF National Programme for Ireland (2014–2020), the DCF Annual Report for 2012 and a detailed 2012 Cost Statement to the Commission. The 2013 DCF work programme included a comprehensive research vessel survey programme, port sampling of landings, sea sampling of discards, age profiles of the main stocks, analyses of EU logbook data and mapping fishing vessel activity from Vessel Monitoring Systems.

A total of 164 sea sampling observer trips were carried out on Irish fishing vessels resulting in 561 scientist sea days. These trips provide FEAS with invaluable "on the ground" contact with the fishing industry. A total of 483,583 fish were measured and 54,160 fish were aged to provide data for the models used in international stock assessments at ICES.

The STOCKMAN database used by FEAS was redesigned and rebuilt during 2013 and now delivers more efficient and effective data queries and outputs. The discard database was also upgraded and improved access to the EU logbook was achieved. The Marine Institute worked very closely with Bord Iascaigh Mhara who are charged with delivering the economic components of the DCF.

Research Vessel Surveys

Research vessel surveys are a critical component of the FEAS work programmes. A total of 13 surveys were conducted on the *RV Celtic Explorer*, *RV Celtic Voyager* and chartered commercial vessels in the waters around Ireland. A total of 213 sea days and 1,242 scientist days were undertaken on these surveys and this represents a major resource commitment for our staff.

The acoustic survey programmes focused on assessing the blue whiting, boarfish and herring resources. Nephrops are a vital resource for the Irish fishing industry and the underwater TV surveys were critical to the assessment of the stocks worth over €80 million to the Irish industry. The Irish groundfish survey was carried out over a 42 day period in Quarter 4 and surveyed fish stocks in the Celtic Seas and off the west and north west of Ireland. The International mackerel egg survey is carried out every three years and surveys the mackerel egg distributions from Jan to July over an area from Portugal to south east of Iceland and southern Norway.

All of these surveys were coordinated through the International Council for the Exploration of the Seas who also ensure that the protocols and methodologies used by each survey are standardised. The data from all the surveys were used in international stock assessments that informed scientific advice on fishing opportunities for 2014 and 2015.

Stakeholder Interaction

Regular meetings with the fishing industry were held through the forum of the Irish Fisheries Science Research Partnership and the Regional Advisory Councils (RAC's), particularly the North Western waters RAC and the Pelagic RAC. The key issues addressed at the quarterly Fisheries Science Research Partnership included funding mechanisms for surveys, the Marine Strategy Framework Directive, NATURA, sea bass, discard sampling, state of stocks, assessment methods, maximum sustainable yield as a target, economic case studies of Irish ports, Bord Iascaigh Mhara gear trial results, Marine Protected Areas maximum sustainable yield, International Council for the Exploration of the Seas (ICES) advice and management plans. FEAS scientists also provided key input to the Celtic Seas Herring Management Committee. A northwest herring rebuilding plan was developed with input from the Federation of Irish Fishermen and the Pelagic RAC's. Quarterly meetings were also held with the environmental non-governmental organisations and issues addressed included, maximum sustainable yield, Common Fisheries Policy reform, state of stocks, scientific advice for 2014. A new more formalised quarterly forum was established with the non-governmental organisation's (Fisheries Ecosystem Forum) and meetings will commence in 2014.

Scientific Advice

FEAS scientists participated in over 117 international expert group meetings of the EU, ICES and the Scientific Technical and Economic Committee for Fisheries (STECF). Many of these meetings were funded under the DCF. These meetings dealt with the core business of stock assessment and advice, but other scientific issues and challenges related to the implementation of the CFP, NATURA 2000 and the Marine Strategy Framework Directive were also addressed at these meetings. These meetings dealt with topics such as calibration of acoustic instruments in fisheries science; indicators for the Marine Strategy Framework Directive; maximum sustainable yield reference points for fish stocks; mackerel coastal states (e.g. negotiations between EU and Norway); horse mackerel management plans; stock assessment and advice drafting; implementation of the Data Collection Regulation; and EU discard plan and the ecosystem effects of fishing. The team also provided scientific advice on the status of inshore stocks and the shellfish Stock Book. A risk assessment framework for the assessment of fisheries in NATURA sites was developed and risk assessments were completed for all coasts. Salmon and Eel advice was developed in cooperation with Inland Fisheries Ireland and the Standing Scientific Committees for Salmon (SSCS) and Eel (SSCE). The salmon forecast model used for the provision of catch advice was updated in 2011 and 2012 and applied for the first time in 2013. Our staff contributed to the submission of the Marine Strategy Framework Directive initial assessment of Irish marine waters and work was focused on biodiversity and fisheries status indicators.

Newport Facility

The census work programmes on salmon, sea trout and eel continued from the fish traps on the Burrishoole ecosystem. In the traps census

data for 2013, a total of 6,357 wild salmon smolts were recorded moving out of the Burrishoole catchment ecosystem.

The FEAS group at Newport continued their work on the maintenance and development of long term physical, chemical and biological datasets characterising the freshwater component of the ecosystem. These data were available on the new Burrishoole dashboard which went online in 2013. The fish rearing unit continued its work, with 71,862 eyed ova retained for the ranching programme. A total of 34,028 ranched salmon smolts were released in May 2013 as part of the salmon stock assessment programme.

The PhD work on the factors that effect salmon at sea continued in cooperation with Norway and the Loughs Agency in Northern Ireland. Work continued on the acoustic tagging programme on Lough Feeagh which examined behavioural and environmental preferences of wild and ranched adult salmon. The University College Cork Beaufort Genetics project continued its work at Newport and produced many peer reviewed publications in international scientific journals. A new PhD on sea bass commenced in 2013. This will involve the application of new technologies in satellite tagging and acoustic tracking to deepen our understanding of the migration patterns of sea bass in the Celtic and Irish seas.

Applied Research

Evolving scientific advice through the application of the results from research projects is an important element of the FEAS strategy. The Beaufort Ecosystem project, funded under *Sea Change*, addressed areas such as seal predation and by catch issues, food web interactions, size based ecological modelling and identification of closed areas to protect elasmobranchs with the results published in the international literature.

In 2013, our staff secured funding and participated in a wide range of EU funded projects including the Atlantic Crab Resource Network (ACRU-NET); developing mixed fisheries management plan for the Celtic Seas (GEPETO and DAMARA); Fisheries, aquaculture and seafood processing network (COFASP); benthic ecosystem fisheries impact studies (BENTHIS); shark satellite tagging; Maximum Sustainable Yield (MYFISH); Analysis on key food webs (EUROBASIN); Development of models for estimating salmon returns (ECOKNOWS). This included evolving surveys to collect more data that can support the Marine Strategy Framework Directive. These projects have secured EU funding of €683,000 over the duration of the projects and involve close cooperation with the Irish third level including National University of Ireland Galway, University College Cork, Galway Mayo Institute of Technology and Queens University Belfast.

Research work by the Beaufort ECOSYSTEM project continues. The objective of the project, which includes the Marine Institute, University College Cork, and Queens University Belfast, is to implement the ecosystems approach to fisheries management. During 2013, great progress was made on projects involving the interaction of seabirds, seals and cetaceans with fisheries.

A range of PhD projects, supervised by our staff and funded under the Institute's *Sea Change* programme were completed in 2013. These included life history studies on deep water black scabbard fish; signal detection models with limited data; climate change geographical shifts in cod and mackerel; long-term dynamics in herring populations; spatial temporal trends in discarding Trinity College Dublin; and sustainable fisheries and the diversity of marine communities.

Ocean Science and Information Services



Director's Statement

2013 was a very busy year for Ocean Science and Information Services (OSIS) and significant work took place in each of the service areas of oceanography, seabed mapping, research vessel operations, information services, ocean energy and advanced marine technology. This activity supports considerable national and international research, technology development and innovation, as well as monitoring activities from field acquisition

through to the generation of data products and services.

OSIS participated in a range of national, European and international programmes and is particularly active across a range of EU funded programmes which improve our capacity to provide support services tailored to the needs of integrated science programmes which inform cross-sectoral policy advice.

Recognising the increasing requirement for an integrated approach to marine Research Technology Development and Innovation, OSIS provides end-to-end solutions to clients. OSIS also contributed to strategic thinking at national and international level contributing to a range of initiatives including *Harnessing Our Ocean Wealth – An Integrated Marine Plan for Ireland*, the Galway Statement on Atlantic Ocean Cooperation and the EU strategy on the Atlantic.

Mr Michael Gillooly

Director: Ocean Science and Information Services

Research Vessel Operations

Research Vessel Operations' (RVOps) mission is to coordinate and manage the operation of the Marine Institute's two research vessels, the *RV Celtic Voyager*, the *RV Celtic Explorer* and the deep-water remotely operated vehicle *ROV Holland I*. They provide support services to the users of the vessels, including instrumentation and engineering support services and extremely flexible operations.

Highlights for the year 2013:

- > Intensive survey programmes were completed on both research vessels with the *RV Celtic Explorer* completing 15 surveys totalling 292 science days (plus over 20 maintenance days and over 20 mobilisation/demobilisation days) and the *RV Celtic Voyager* completing a total of 31 surveys comprising 261 science days.
- > A "Vessel users workshop" was held in May 2013 in Oranmore which was attended by over 50 vessel users and seagoing personnel. The meeting proved to be a very useful forum for exchange of views on vessel operations and future development.
- > The deep water remotely operated vehicle *ROV Holland I* completed a successful National University of Ireland Galway (NUI Galway) led "Biodiscovery and Ecosystem function of Canyons" survey of 23 days on the *RV Celtic Explorer*.

- > The *ROV Holland I* was mobilised in its deepwater configuration onto the *ILV Granuaile* and following a successful trial of the system the vessel and ROV were contracted to complete a successful fault finding survey of the high voltage Ireland – UK subsea electrical interconnector.
- > RVOps were contracted by Kinsale Energy PLC to complete an inspection survey of its entire subsea gas pipeline network and the Alpha and Bravo production platforms using the *ROV Holland I*. This survey which was again completed using the *ILV Granuaile* (which was under charter to the Institute) and the ROV's regular team of contract pilots and contract survey personnel was completed on time and within budget and resulted in valuable external revenue for the Institute which supports core services.
- > As well as the annual blue whiting, north west herring, herring acoustic surveys for the Institute's Fisheries Ecosystem Advice Services and the 47 day Irish bottom trawl survey (IBTS) ground fish survey, the *RV Celtic Explorer* also completed two 21 day mackerel egg surveys which occur every three years as part of an internationally coordinated program

Three external charters were completed onboard the *RV Celtic Explorer* in German and International waters including surveys for BSH-Germany and National Oceanography Centre (NOC)-UK which provided a valuable external contribution to the operational budget.

- > The *RV Celtic Explorer* was chartered for 36 days in April-May 2013 again by the Centre for Fisheries and Ecosystems Research of the Marine Institute of Newfoundland for the completion of a fisheries survey which included work on the Flemish Cap and the southern Grand Banks. The survey was preceded by a nine day transit survey of the North Atlantic which was manned by Irish and Canadian scientists and on which valuable cetacean and oceanographic data were collected.
- > The *RV Celtic Explorer* was provided to the National Parks and Wildlife Service of the Department of Arts Heritage and Gaeltacht in February to complete a three day drop camera survey of the methane derived autogenic carbonate mounds in the Irish Sea to help establish a potential future Marine Special Area of Conservation.
- > The *RV Celtic Voyager* completed 30 days of Underwater TV surveys for Nephrops stock assessment including a successful survey of the prawn grounds on the Porcupine bank at depths down to 540m.
- > The annual winter monitoring survey was completed on behalf of MEFS who undertook a survey south from Dublin to Galway in January 2013.
- > A total of seven National Development Plan (NDP) shiptime funded research surveys were completed on the *RV Celtic Voyager* totalling 47 days and these were led by scientists from NUI Galway, University of Ulster, Galway-Mayo Institute of Technology and Geological Survey of Ireland (GSI).
- > A very successful program of activity was completed under the Integrated Mapping for the Sustainable Development of Ireland's Marine Resource (INFOMAR) program throughout the year comprising a total of 73 days survey on the *RV Celtic Voyager* including extensive bathymetric surveys off the south coast.
- > The *RV Celtic Voyager* also completed three hydrographic surveys and a site clearance of the Galway bay test site totalling 30 days

in support of Sustainable Energy Authority of Ireland ocean energy development .

- > Other notable *RV Celtic Voyager* activities included successful “science@sea” and smart common module training programs led by the Strategic Marine Alliance for Research and Training (SMART) team and other university lead training programs
- > To facilitate extending survey coverage into the Biologically Sensitive Area, and to underpin future Irish, EU and Trans-Atlantic research requirements, capital funding was sought and approved for survey system upgrades on both the *RV Celtic Voyager* and the *RV Celtic Explorer*, to take place in 2014.

Foreign Vessel Observer Scheme 2013

In 2013, the Marine Institute placed 12 Irish observers on board foreign vessels conducting research surveys in our waters. The total number of days spent by observers at sea was 176 with the surveys varying in length from 25 days to just 4 days. Observers participated onboard British Belgian, Dutch and Norwegian surveys.

Advanced Mapping Services

In collaboration with GSI, an independent programme review was undertaken by PricewaterHouse Coopers (PWC), in support of the successful governmental submission for a five year funding for Integrated Mapping for the Sustainable Development of Ireland’s Marine Resources (INFOMAR) continuation commitment, at €3m per annum to 2018. In line with recommendations made by PWC on increasing resourcing allocated to development of the value added aspects of INFOMAR, a business development tender was issued and one contract was awarded to the Dublin Business Innovation Centre.

During 2013 INFOMAR mapping continued off the South and West coasts on board the *RV Celtic Voyager*, completing the vessels primary commitments for Phase 1 of INFOMAR.

Significant additional data acquisition was undertaken as part of the Value Added Exploitation Programme with extensive coverage acquired offshore West Clare on the *RV Celtic Voyager* for the Sustainable Energy Authority Ireland (SEAI), to underpin the development of the marine renewable sector offshore Ireland.

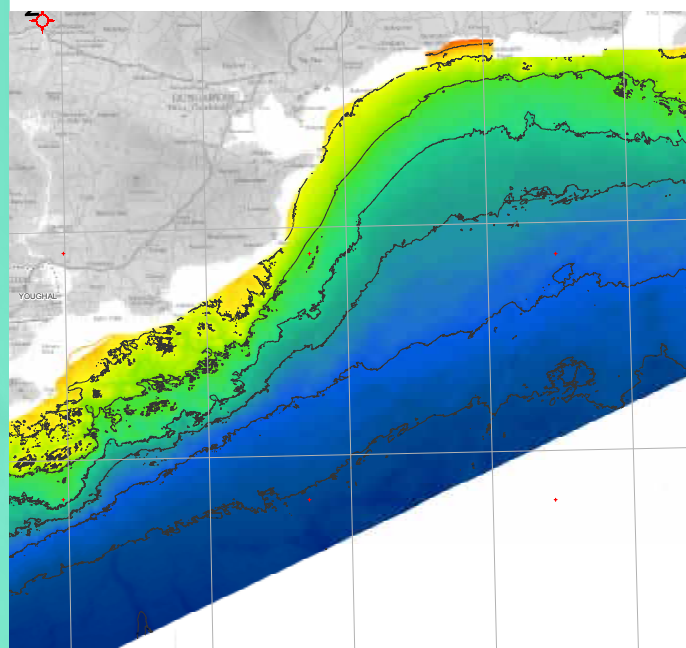
Advanced Mapping Services (AMS) coordinated INFOMAR’s 2013 Annual Seminar in University of Limerick which was an extremely successful event, with speakers from academia, industry and public sectors, both local and international. In addition to the usual presentation format, an interactive workshop session was incorporated, with technology demonstrations ranging from UAV flights, to remote ROV piloting. The level of attendance, and equal split between industry, government and academia, across multiple marine sectors, emphasised the wide impact of the programme activities.

Having focussed outreach in Ireland and UK in recent years, AMS increased the level of outreach internationally in 2013, participating in significant survey events in Portugal, US, UK and Canada. Engagement in these events facilitated networking which supported the Trans-Atlantic Cooperation meeting in the Marine Institute, and has raised the potential for collaborative research initiatives in the future.



Deployment of the Deepwater Remotely Operated Vehicle, ROV Holland I from the national research vessel *RV Celtic Explorer*

“Recognising the increasing requirement for an integrated approach to marine Research Technology Development and Innovation, OSIS provides end-to-end solutions to clients.”



The bathymetry chart produced by INFOMAR shows the contour of Youghal harbour in Cork. Charts can be downloaded from www.infomar.ie

Ocean Science and Information Services



In addition, numerous local events were supported including, Galway, Science & Technology Festival, Atlantic Ireland and SmartOcean to mention a few.

During 2013 Advanced Mapping Services completed the Mapping European Seabed Habitats (MESH) Atlantic INTEREG IVB and INIS Hydro INTEREG IVA projects.

Oceanographic Services

The Oceanographic Services team serviced over 130 requests for oceanographic data and products during 2013. They continued to provide dedicated field and model data and analysis to support advisory services provided by our Marine Environment and Food Safety services team at the Marine Institute.

The Oceanographic Services team delivered all elements of the significant work programme of the SEAI Ocean Energy service level agreement on time and within budget. This included the marine services element of a joint project involving SEAI, Marine Institute, IBM and Galway based SME, Biospheric Engineering Ltd.

Following a successful application to Science Foundation Ireland under its 2012 research infrastructure call, the team commenced a procurement programme to procure and deploy a fibre optic cable and seabed node and associated equipment. This will underpin test and demonstration activities at the quarter scale ocean energy test site and SmartBay in Galway Bay.

The national weather buoy network was supported and maintained on behalf of the Department of Transport, Tourism and Sport (DTTAS). The network performance was reviewed by DTTAS with a positive outcome in 2013 despite restricted resources. Building on the newly developed ocean models for oil spill and biogeochemical applications, a high resolution (localised fine scale) shelf model was developed. A tide prediction tool went live on the internet providing marine users with tide forecasts for up to two years ahead. The development of this application was possible due to the continued maintenance of the National Tide Gauge Network. Oceanographic Services previously provided oceanographic analysis and input to the Marine Strategy Framework Directive initial assessment and are now assisting in a gap analysis exercise and in defining the monitoring programme required under the Directive.

Key elements of the EU funded projects ASIMUTH, JERICO and MyOcean2 were successfully delivered including the production of real-time early warning HAB bulletins to the aquaculture industry, jointly with MEFS.

Oceanographic Services remains active on both the International Council for the Exploration of the Seas (ICES) WGOH and European Global Ocean Observation System (EuroGOOS) and on the Marine Observations and Data Expert Group of DG Mare. The team continued to provide input to the implementation planning and legal work required for the development of a European Research Infrastructure Consortium (ERIC) for a long term partnership on the European Multidisciplinary Seafloor Observatory (EMSO) project and an interim office was established in Rome. OSIS also participated in the CoOPEUS (linking European/US major environmental research projects), SIDERI (European partners in Argo float activities) and Fix03 (linking EU activities on fixed point marine observatories) projects and a wide range of EU and international infrastructure projects.

Information Services and Development

The Information Services and Development (IS&D) team continued to provide day-to-day technical support across the Institute. IS&D serviced over 3,059 requests for support covering technical, applications and data management queries, while furnishing in excess of 250 data requests from external parties.

IS&D were involved in 76 strategic business and technical support, operational and Marine Institute service group support projects and activities during 2013.

Key activities for IS&D in 2013 included the installation of a new more efficient internal IT server environment, the first use of cloud data hosting (HEAnet) and the establishment of high-speed network connections from Newport and Harcourt Street to Oranmore which were all objectives of the Marine Institute Information and Communications Technologies Strategy (2013–2015). The IT Operations team also oversaw the replacement of the Oranmore internal data network switching infrastructure which had reached end-of-life, and the commencement of a very significant upgrade to the *RV Celtic Explorer's* server infrastructure.

The Online Data Download Portal went live to facilitate better access to Marine Institute data, and Ireland's Marine Atlas was developed as part of the Marine Strategy Framework Directive programme. The data behind the Atlas will be maintained by the IS&D Data Management team, and in 2014 the Atlas will be upgraded to be mobile device compatible. The Data management team also supported the Data Collective Framework, INFOMAR and Marine Strategy Framework Directive programmes, and the Aquaculture Foreshore Licensing team.

In 2013 the IS&D Application Development team carried out a significant technical redevelopment of the Institute's website. The website will be populated with content in 2014 prior to being launched.

The team also commenced a major redevelopment of the HABs data system towards the end of 2013 which will greatly modernise the system, and improve data entry, reporting and the public online interfaces. This work will continue throughout 2014.

Other data-related activity included: the completion of the EU FP7 funded ENVIRO-FI Future-Internet project with partners InTune Networks which has showcased the Institute's data services; participation in the SeaDataNet II European data infrastructure project; and ongoing development work on data systems for wave and fisheries data.

IS&D were also involved in the definition of the Irish Digital Ocean concept, which aims to provide easy access to marine data from multiple sources to facilitate marine research and enable information product development. This concept will be developed further in conjunction with the Institute's internal Data Strategy in 2014.

Advanced Technology Programme

In recent years, the Advanced Marine Technology Programme (AMTP) has worked towards the objectives of creating a critical mass, multi-disciplinary industry oriented marine grouping in the area of advanced sensing, communications and informatics. The programme has supported a number of national initiatives for capacity development in this space.

OSIS brought together national stakeholders for the formation of a consortium to respond to an Science Foundation Ireland Research Centres Call under the thematic area of Earth and Ocean Observation.

The pre-proposal titled Atlantic Centre for Earth Observation (ACEObs) was led by NUI Galway and successfully invited to the full proposal stage which is due to be submitted in April 2014.

The Programme has also been working on developing opportunities in the area of Earth Observation. A number of engagements have taken place with the European Space Agency and national contact points in this area. Input has also been provided from the programme around initiatives to develop national capacities in earth observation from the marine perspective.

In late 2013, the Programme continued to mobilise the national marine technology community through brokerage of partnerships, information dissemination and liaising with all relevant national contact points where there are opportunities for marine related projects under *Horizon 2020*. At the end of 2013, notification was received that an Atlantic Area Interreg IVB project proposal called Showcase Technology Applicable to Maritime SMEs in the Atlantic Area (STAMAR) was successful.

AMTP has also been looking at future strategic development. In particular an online SmartOcean research and innovation Strategy consultation was launched in September 2013. This resulted in 35 responses with the majority coming from industry. This was followed with an industry consultation workshop at the SmartOcean Forum 2013. The outputs of these will inform strategic planning for 2014 and beyond.

The AMTP team continued to support the development of existing national test and demonstration infrastructure. This included engaging with the research and development (R&D) community around opportunities to use the SmartBay test and demonstration platform through the National Infrastructure Access Programme, visits to other facilities such as the National Maritime College of Ireland to explore how infrastructures can be promoted nationally. It also began to explore the use of additional infrastructure through engaging with other state agencies such as the Irish Air Corps and industry organisations around the use of digital infrastructure.

In 2013, AMTP began to look at the future evolution of Advanced Marine Technology and SmartOcean. OSIS began to formalise the concept of the Irish Digital Ocean and input into recommendations around research priorities for the flagship area of IT Communication Technologies and the Sea for new national marine R&D strategy 2014–2020.

In November 2013, AMTP successfully organised SmartOcean Forum 2013. This was the largest Forum to date with approximately 180 registered participants. This was a significant event as it was the first time that the Forum took place in Northern Ireland, with sponsorship from InvestNI. This was a two day event held at Titanic Belfast with over 90 organisations represented and a number of speakers, exhibitions, posters and an associated industry consultation workshop.

SmartOcean has also been profiled through engagement in a number of additional events throughout the year including the European Space Agency (ESA) Living Planet Symposium, ESA Big Data workshop, Oceans 13 conference Virginia Beach, Microsoft Innovation Day Dublin, and the Microsoft Research Cambridge Think Tank.

Work has been carried out also to move the SmartOcean web site to a dynamic information hub and to continue to build the SmartOcean online profile.



Minister for Agriculture, Marine and Food Mr Simon Coveney TD with conference delegates at Space Innovation - Powering Blue Growth conference held in Cork where European Space Agency Applauds Irish Marine Innovations.

“the Irish Digital Ocean concept ... aims to provide easy access to marine data from multiple sources to facilitate marine research and enable information product development.”



The SmartOcean Forum, that took place at the Titanic Centre, Belfast aimed to establish Northern Ireland and Ireland as leaders in the development of ICT products and services for global marine sectors. Pictured (Left to Right) Arlene Foster, Minister of Enterprise Trade and Investment, Northern Ireland and Dr Peter Heffernan, CEO of the Marine Institute.

General Administration

Liaison

The programme of the Marine Institute covers a wide range of activities that require close liaison and cooperation with many individuals and organisations. These include the Department of Agriculture, Food and the Marine, the Department of Finance, Department of Environment, Community and Local Government, Department of Transport, Tourism and Sport and other government departments and state agencies, private enterprise and the higher education sector. The Institute acknowledges the continued support and cooperation of all concerned.

Health and Safety

In accordance with the Health and Safety and Welfare Act (1989), the Marine Institute has updated all Health and Safety Statements. The Institute continues to implement appropriate measures to protect the safety and health of all employees and visitors to its premises.

Ethics and Public Office Act

All persons holding a designated position within the Marine Institute provide a statement of interests to the Public Office Commission in accordance with sections 18 and 20 of the Ethics in Public Office Act, 1995.

Employment Equality

The Marine Institute is committed to a policy of equal opportunity and adopts a proactive approach to equality. The Institute operates a number of schemes that provide staff with options in relation to meeting their career and personal needs, such as job sharing, study leave and educational programmes.

Code of Practice (Reporting)

The Marine Institute adheres to the statutory Codes of Practice for Governance of State Bodies as laid down by the Department of Finance. The Institute can confirm that Directors and employees have adopted and are trained on:

- > Formal code of conduct on conflict of interest and customer charter
- > Properly constituted Audit Committees
- > Procurement procedures
- > Sensitive Issues

Energy Efficiency Reporting by Public Sector Bodies (S.I. 542 of 2009)

Overview of Energy Usage in 2013

The predominant energy users in the Marine Institute is the headquarter office and laboratory facility and the research vessels *RV Celtic Explorer* and *RV Celtic Voyager*. Within the laboratories in Oranmore, laboratory mechanical and electrical services account for approximately 20% of the overall electrical energy consumption of the facility. Lighting, general office equipment and laboratory equipment account for the majority of the remaining electrical consumption.

In 2013 the Marine Institute consumed:

2,794,914 kWh of electricity

13,509 litres of Kerosene

345,575 litres of bulk propane gas for heating

9,271 litres of road diesel

1,376,550 litres of Marine gasoil for Marine Institute funded research surveys

Actions Undertaken in 2013

The Marine Institute installed lighting controls through the Building Management System in Oranmore via an outside light level sensor. Lighting in common areas are now activated once the external light level drops below a certain preset lux level. An estimated 30% energy efficiency on the lighting should be seen from 2014 onwards when the system will be operational. A review of the Air Handling Systems throughout the laboratories was commenced in 2013.

Actions Planned for 2014

An initial review of energy usage and facility operations in Oranmore was undertaken with a commitment to reduce consumption and bring about efficiencies during 2014.

It is envisaged that a reduction in running times will be introduced in 2014 to further reduce the energy consumption within the laboratories.

Scéim Gaeilge 2013 Update

The Grúpa Gaeilge was established to prepare the Marine Institute's Irish Language Scheme/Scéim Foras na Mara under Section 11 of the Official Languages Act 2003. The first period of the scheme Gaeilge expired in 2012 and preparation and development of the second phase of the scheme was overseen by the Grúpa Gaeilge in 2012 and 2013. This was lodged with the Irish Language Commissioners office in November 2013. The second period of the scheme builds on the extensive efforts to implement the requirements under the Act which were brought about under the first period following identification of areas for enhancement of Irish language services provided by the Institute. The second period will maintain the commitment to assess, on an ongoing basis, the level of demand for services through Irish and to ensure that the Marine Institute continues to meet this demand in a planned, coherent and accessible way. The Marine Institute continues to gauge the level of demand for its services in the Irish language by carrying out regular audits through a system of counting/measuring the level of queries/requests for services through Irish in a given period. However, in order to generate requests for services, the Marine Institute documents and promotes awareness amongst staff and clients as to which services the Institute provides in Irish.



The Biodiscovery and Ecosystem Function of Canyons Survey investigated a wide diversity of habitats and underwater communities in the Whittard Canyon system on the Irish Atlantic margin. Using the ROV *Holland 1*, on the RV *Celtic Explorer*, images of rare species were captured on camera including this giant hydroid. This research survey was carried out under the Sea Change strategy with the support of the Marine Institute and the Marine Research Sub-programme of the National Development Plan 2007–2013. The Ship–Time Programme provides access to the National Research Vessels (RV *Celtic Explorer*/RV *Celtic Voyager*) for research organisations based in Ireland.

Appendices

APPENDIX 1: NDP MARINE RESEARCH PROGRAMME 2007–2013

NDP MARINE RESEARCH PROGRAMME 2007–2013 – SHIP-TIME PROGRAMME 2013						
Sea Change Research Measure	Sea Change Research Programme	Project Type	Project Reference	Project Title	Grantee/Lead	Total Grant-Aid
Infrastructure Supporting	Research Vessel Ship-Time	Dedicated Training Programme	CV13002	Galway Bay Undergraduate Training	National University of Ireland Galway	€88,000
Infrastructure Supporting	Research Vessel Ship-Time	Dedicated Training Programme	CV13003	SMART Science at Sea: Multidisciplinary Ship-Based Training for Students of Marine-related Sciences	Galway-Mayo Institute of Technology	€48,000
Infrastructure Supporting	Research Vessel Ship-Time	Dedicated Training Programme	CV13005	SMART: Dublin City University Sensing and Bio-fouling	Galway-Mayo Institute of Technology	€16,000
Infrastructure Supporting	Research Vessel Ship-Time	Dedicated Training Programme	CV13006/ CV13011/ CV13021	SMART: Accredited Common Learning Module	Galway-Mayo Institute of Technology	€160,000
Infrastructure Supporting	Research Vessel Ship-Time	Dedicated Training Programme	CV13009	SMART: Observer Programme	Galway-Mayo Institute of Technology	€48,000
Infrastructure Supporting	Research Vessel Ship-Time	Dedicated Training Programme	CV13018	Undergraduate Shipboard Training in Methods of Oceanographic, Benthic, Megafauna and Fisheries Research	Galway-Mayo Institute of Technology	€48,000
Infrastructure Supporting	Research Vessel Ship-Time	Dedicated Training Programme	CV13010	SMART: Offshore Geological Exploration	Galway-Mayo Institute of Technology	€32,000
Infrastructure Supporting	Research Vessel Ship-Time	Dedicated Training Programme	CV13013	MSc Marine Biology-Cork Harbour	University College Cork	€16,000
Infrastructure Supporting	Research Vessel Ship-Time	Dedicated Training Programme	CV13020	SMART: Ocean Energy	Galway-Mayo Institute of Technology	€16,000
Infrastructure Supporting	Research Vessel Ship-Time	Integrated Research Survey	CE13001	Climate Change Oceanography, Biogeochemistry & Geology Sections	Marine Institute	€170,000
Infrastructure Supporting	Research Vessel Ship-Time	Integrated Research Survey	CE13002	Cetaceans on the Frontier 4	Galway-Mayo Institute of Technology	€255,000
Infrastructure Supporting	Research Vessel Ship-Time	Integrated Research Survey	CE13003/ CE14001	Developing Geotechno-Stratigraphies	University College Cork	€221,000

NDP MARINE RESEARCH PROGRAMME 2007–2013 –SHIP–TIME PROGRAMME 2013						
Sea Change Research Measure	Sea Change Research Programme	Project Type	Project Reference	Project Title	Grantee/Lead	Total Grant-Aid
Infrastructure Supporting	Research Vessel Ship-Time	Integrated Research Survey	CE13004/CE13010	Mackerel Egg Survey	Marine Institute	€357,000
Infrastructure Supporting	Research Vessel Ship-Time	Integrated Research Survey	CE13007	SEDEX – Role of Nepheloid Layers in Cross Shelf Edge Sediment Transport	National University of Ireland, Galway	€17,000
Infrastructure Supporting	Research Vessel Ship-Time	Integrated Research Survey	CE13008	Biodiscovery and Ecosystem Function of Canyons	National University of Ireland, Galway	€544,000
Infrastructure Supporting	Research Vessel Ship-Time	Integrated Research Survey	CV13001	Winter Environmental Survey 2013 Programme	Marine Institute	€104,000
Infrastructure Supporting	Research Vessel Ship-Time	Integrated Research Survey	CV13004	De facto Elasmobranch Refuges in the Celtic Seas	Galway-Mayo Institute of Technology	€80,000
Infrastructure Supporting	Research Vessel Ship-Time	Integrated Research Survey	CV13019	Dinophysis Phytoplankton Bloom Survey 2013 (DINO13)	National University of Ireland, Galway	€48,000
Infrastructure Supporting	Research Vessel Ship-Time	Integrated Research Survey	CV13012	Kerry Reefs and Environs Survey	National University of Ireland, Galway	€64,000
Infrastructure Supporting	Research Vessel Ship-Time	Integrated Research Survey	CV13028	Harmful Algal Bloom West Survey 2013 (HABWEST2013)	National University of Ireland, Galway	€40,000
Infrastructure Supporting	Research Vessel Ship-Time	Integrated Research Survey	CV13029	Cold Water Coral Reefs Biodiversity Mapping	Trinity College Dublin	€56,000
Infrastructure Supporting	Research Vessel Ship-Time	Integrated Research Survey	CV13030	Sediment Transport Assessment, Irish North Coast	University of Ulster	€40,000
Infrastructure Supporting	Research Vessel Ship-Time	Integrated Research Survey	CV13031	Paleoenvironments and Sediment Distribution West of Ireland	University of Ulster	€48,000
TOTAL						€2,500,000

Appendices

NDP MARINE RESEARCH PROGRAMME 2007–2013 FUNDED RESEARCH PROJECTS 2013

Sea Change Research Measure	Sea Change Research Programme	Project Type	Project Reference	Project Title	Grantee/Lead	Total Grant-Aid
Policy Support	Policy, Socio-Economic and Legal Research	Contract for Services	SERV-13-OCEO-014	Provide Advice to Enablers Task Force in order to Develop a Marine Spatial Planning Framework for Ireland	John Martin	€17,250
Policy Support	Policy, Socio-Economic and Legal Research	Contract for Services	MGE0381	Legal Research on National/EU Legislation that Apply in the Marine Environment	RPS Group Ltd.	€16,974
Policy Support	Policy, Socio-Economic and Legal Research	Contract for Services	SERV-13-CS-005	Desk-based Review of Best Practice in Marine Spatial Planning	Queen's University Belfast	€13,831
Policy Support	Policy, Socio-Economic and Legal Research	Desk Study	DK/ME/13/001	National, International and EU Legal Instruments Relevant to the Development of a Marine Spatial Planning Framework in Ireland	MacCabe Durney Barnes	€37,219
Industry	Shellfish Aquaculture	Tender	N/A	Production of tetraploid <i>Crassostrea gigas</i> juveniles for use as broodstock by Irish hatcheries for the production of genetic triploids	Cartron Point Shellfish	*€100,000
Discovery	Marine Technology	Networking	N/A	Oceanology International 2014	Reed Exhibitions Ltd.	€28,538
Industry	Finfish Aquaculture	Infrastructure Tender Support	N/A	Stock Identification and Migration of Sea Bass in Irish Coastal Waters	Marine Institute/ University College Cork	€63,559
Innovation Supporting	Innovation	Networking Travel Grants	NT/13/01 to NT/13/53	Attendance at/Hosting of Marine Conferences, Workshops and Events	Various	€30,071
Policy Support	Marine Environment	Post-Doctoral Fellowship	PDOC/ME/13/01	Biogeochemical cycling of carbon and nutrients in Irish marine and estuarine waters	National University of Ireland, Galway	#€44,987
Policy Support	Marine Environment	Capacity Building	N/A	Marine Institute Fulbright Fellowship	N/A	€22,000
TOTAL						€374,429

* This represents the Marine Institute's contribution to the project, which is jointly funded with Bord Iascaigh Mhara.

Jointly funded with the Environmental Protection Agency.

APPENDIX 2: IRISH PARTICIPATION IN EU RTD PROJECTS.

Since the publication of the 2007–2010 review of Irish participation in EU funded marine research projects and marine research related initiatives (ref: *New Connections: Exploring Ireland's International Marine Research Relationships: 2007–2010*), there has been the addition of 51 projects (Grant-aid >€11.7 million) in 2011–2012.

2013 has seen the addition of 16 new FP7 (grant-aid: €11 million) and 12 new INTERREG-IV (Grant-aid: €1.7 million) projects to the Irish total. This results in a total of 190 cooperative projects with grant-aid of over €67.5 million going to the Irish marine research community (including research based-SMEs) over the period 2007–2013.

It is clear that EU cooperative and competitive research funding programmes make a major contribution to the dynamism and innovation of the Irish marine research community and supplement research funding secured through national research, development and innovation programmes, such as those supported under the National Development Plan (2007–2013).

The Marine Institute participated in four of the 28 new 2013 projects (FP7: Fix03, EUROLEETS 2, INTERREG: ARCOPOLPLATFORM, STAMAR) securing grant-aid in excess of €767K.

Details of EU Research Funding opportunities are described on the Marine Institute website and a database of EU funded projects can be found at the EurOCEAN Knowledge Gate (www.kg.eurocean.org/).

A full list of FP7 projects (2007–2013) can be found in the *Blue Growth & Horizon 2020* booklet, published in December 2013 (<http://oar.marine.ie/handle/10793/921>).

EU FP7 Projects (2013):

BRAAVOO: Biosensors, Reporters and Algal Autonomous Vessels for Ocean Observation. *IDS Monitoring Ltd.*

SENSE OCEAN: Drawing together world leading marine sensor developers to create a highly integrated multifunction and cost-effective in situ marine biogeochemical sensor system. *T.E. Laboratories.*

COMMON SENSE: Cost-Effective Sensors, Interoperable with International Existing Ocean Observing Systems, to Meet EU Policies. *University College Cork / Dublin College University / AquaTT / T.E. Laboratories.*

LEANWIND: Logistic Efficiencies and naval architecture for wind installations with novel developments. *University College Cork / Gavin & Doherty Geosolutions Ltd / Rappel Enterprises Ltd / Cork Institute of Technology.*

MARIABOX: Marine environmental in situ assessment and monitoring toolbox. *Dublin City University/SmartBay.*

ASTARTE: Assessment, strategy and risk reduction for tsunamis in Europe. *University College Dublin.*

HERPISH: Herpes virus in Irish oysters and identification of resistant stocks. *University College Cork.*

BACCHUS: Impact of biogenic versus anthropogenic emissions on clouds and climate. *National University of Ireland, Galway.*

MAREFRAME: Co-creating Ecosystem based Fisheries Management Solutions. *North Western Waters Regional Advisory Council.*

SAFI: Support to Aquaculture and Fishery Industry. *University College Cork / Daithi O'Murchu Marine Research Centre.*

DANCERS: DANube Macroregion: Capacity building and Excellence in River Systems (basin, delta and sea). *University College Cork.*

TIDES: Tidal Demonstration for Energy Scheme. *University College Cork/ DPEnergy.*

DTOcean: Optimal Design Tools for Ocean Energy Arrays. *University College Cork.*

SEABIOPLAS: Seaweeds from Sustainable Aquaculture as feedstock from Biodegradable Bioplastics. *Daithi O'Murchu Marine Research Centre/ Cartron Point Shellfish Ltd.*

Fix03: Fix Point Open Ocean Observatories. *Marine Institute.*

EUROLEETS 2: New operational steps towards an alliance of European research fleets. *Marine Institute.*

INTERREG-IV (2013)

ISLES II: Irish-Scottish Links on Energy Study. *Department of Communication, Energy and Natural Resources.*

STAMAR: Showcase Technology Applicable to Maritime SMEs in the Atlantic Area. *Marine Institute/South East Regional Authority.*

ATLANTICBLUETECH: Imagine the marine bio-resources' sector for 2014–2020. *WESTBIC/National University of Ireland, Galway.*

ARCOPOLPLATFORM: Platform for improving maritime coastal pollution preparedness and response in Atlantic Area. *Marine Institute / National Maritime College of Ireland.*

TURNKEY: Transforming Underutilized Renewable Natural Resource into Key Energy Yields. *National University of Ireland.*

MAREN 2: Hydro-environmental and economics modelling of multipurpose platform marine renewable energy platformMs *National University of Ireland, Galway.*

REPUTE: Renewable Public Transport Enterprise. *Limerick Institute of Technology.*

CEAMAS: Civil Engineering Applications of Marine Sediments. *University College Cork / Cork Institute of Technology.*

Salmonids: Salmonids West Project. *Inland Fisheries/National University of Ireland, Galway.*

MaRET: Community and Business Toolkit for Marine Renewable Energy Development. *Limerick Clare Energy Agency/National University of Ireland, Galway.*

SMACS: Small Craft Emergency Response and Survival Training for Arctic Conditions. *Cork Institute of Technology, Ireland.*

APLIC: Economic and environmental sustainability of fish farming in northern Europe. *National University of Ireland, Galway.*

Appendices

APPENDIX 3: MARINE INSTITUTE PUBLICATIONS Special Reports

Marine Institute, 2013. The Stock Book 2013: *Annual Review of Fish Stocks in 2013 with Management Advice for 2014*. Marine Institute. <http://hdl.handle.net/10793/918>

SEAS-ERA (2013): Towards a Strategic Research Agenda / Marine Research Plan for the European Atlantic Sea Basin. *Special Report of the FP7 SEAS-ERA Project (November 2013)*, compiled by Geoffrey O'Sullivan (Marine Institute) and Nan-Chin Chu (European Marine Board), 44pp.tt

Lassoued, Y. (2013). *GeoDI-Geoscientific Data Integration*. Marine Institute. <http://hdl.handle.net/10793/851>

O'Reilly, E. & O'Sullivan, G. (2013). *Blue Growth and Horizon 2020, competitive marine/maritime research funding opportunities in the Horizon 2020 programme (2014–2020)*. Marine Institute. <http://oar.marine.ie/handle/10793/921>

Ruane, N., Rodger, H., Mitchell, S., Doyle, T., Baxter, E., & Fringuelli, E. (2013). *GILPAT: An Investigation into Gill Pathologies in Marine Reared Finfish*. Marine Research Sub-Programme (NDP 2007–'13), PBA/AF/08/002 (01). Marine Institute. <http://oar.marine.ie/handle/10793/866>

Doré, B., Flannery, J., Keaveney, S. & Rajko-Nenow, P. (2013). *STRIVE 109–Norovirus in Wastewater and Shellfish; assessing the Impact of Wastewater Treatment Plant Effluent on Norovirus Contamination in Shellfisheries, (2008–EH-MS-7–S3), EPA STRIVE Programme 2007–2013*. Environmental Protection Agency, An Ghníomhaireacht um Chaomhnú Comhshaoil, PO Box 3000, Johnstown Castle, Co. Wexford, Ireland.

Irish Fisheries Bulletin

ISSN: 1649-5055

Jackson, D., O'Donohoe, P., McDermott, T., Kane, F., Kelly, S. & Drumm, A. (2013). *Report on Sea Lice Epidemiology and Management in Ireland with Particular Reference to Potential Interactions with Wild Salmon (Salmo salar) and Freshwater Pearl Mussel (Margaritifera margaritifera) Populations*. Irish Fisheries Bulletin No. 43: Marine Institute. <http://hdl.handle.net/10793/893>

O'Sullivan, D., O'Keefe, E., Berry, A., Tully, O., & Clarke, M. (2013). *An Inventory of Irish Herring Spawning Grounds*. Irish Fisheries Bulletin No. 42: Marine Institute. <http://hdl.handle.net/10793/874>

O'Donohoe P, Kane F, Kelly S, Mc Dermott T, Drumm A & D Jackson (2013). *National Survey of Sea Lice (Lepeophtheirus salmonis Krøyer and Caligus elongatus Nordmann) on Fish Farms in Ireland – 2012* Marine Institute Irish Fisheries Bulletin No 41. <http://oar.marine.ie/handle/10793/861>

Marine Environment and Health Series

ISSN: 1649 0053

Glynn, D., McGovern, E., Slattery, T., Ó Conchubhair, D., Toomey, M., Kelly, C., Reid, A. & Moffat, R. (2013). *Chemical Residue in Irish Farmed Finfish, 2011*. Marine Environment & Health Series, No. 39. Marine Institute. <http://oar.marine.ie/handle/10793/876>

Survey Reports

Doyle, J., Lordan, C., Fitzgerald, R., Strong, J. & Service, M. (2013). *Western Irish Sea Nephrops Grounds (FU15) 2012 UWTW Survey Report*. Marine Institute and Agri-Food and Biosciences Institute. <http://hdl.handle.net/10793/891>

Doyle J., Lordan C., Ligas A., Brown V., Leocadio A., McCausland I., McCorriston P., Service M., Stewart P., & Schön P.-J. (2013). *Western Irish Sea Nephrops Grounds (FU15) 2013 UWTW Survey Report and catch options for 2014*. Marine Institute and Agri-Food and Biosciences Institute. <http://hdl.handle.net/10793/913>

Doyle, J., Lordan, C., Hehir, I., Fitzgerald, R., O'Connor, S., O'Donovan, S. & Salaun, M. (2013). *The "Smalls" Nephrops Grounds (FU22) 2013 UWTW Survey Report and catch options for 2014*. Marine Institute. <http://hdl.handle.net/10793/919>

Lordan, C., Doyle, J., O'Connor, S., Hehir, I., Fitzgerald, R., Blaszkowski, M., O'Sullivan, D., O'Donovan, S., Salaun, M., Stewart, P. (2013). *Porcupine Bank Nephrops Grounds (FU16) 2013 UWTW Survey Report and catch options for 2014*. Marine Institute. <http://hdl.handle.net/10793/912>

Lordan, C., Doyle, J., Hehir, I., Allsop, C., Butler, R. & Burke, C. (2013). *Aran, Galway Bay and Slyne Head Nephrops Grounds (FU17) 2013 UWTW Survey Report and catch options for 2014*. Marine Institute. <http://hdl.handle.net/10793/910>

Lordan, C., Doyle, J., Hehir, I., O'Sullivan, D., Allsop, C., O'Connor, S., Blaszkowski, M., Butler, R., Burke, C., and Stewart, P. (2013). *FU19 Nephrops Grounds 2013 UWTW Survey and catch options for 2014*. Marine Institute. <http://hdl.handle.net/10793/911>

Nolan, C., O'Donnell C., Campbell, A., Sullivan, M., Mullins, E. & Keogh, H. (2013). *Northwest Herring Acoustic Survey Report 22nd June–12th July, 2013*. FEAS Survey Series: 2013/04. Marine Institute. <http://hdl.handle.net/10793/889>

O'Donnell, C., Farrell, E., Nolan, C. & Campbell, A. (2013). *Boarfish Acoustic Survey Cruise Report 10 July–31 July, 2013*. Marine Institute. <http://hdl.handle.net/10793/916>

O'Donnell, C., Mullins, E., Johnston, G. & Keogh, N. (2013). *Blue Whiting Acoustic Survey Cruise Report March 26–April 15, 2013*. Marine Institute. <http://hdl.handle.net/10793/917>

O'Donnell, C., Nolan C., Mullins, E., Lyons, K., Volkenandt, M., Keogh, N., McAvoy, S. & Williams, D. (2013). *Celtic Sea Herring Acoustic Survey Cruise Report 2013, 07–27 October, 2013*. Marine Institute. <http://hdl.handle.net/10793/920>

Marine Institute, Institute for Marine Resources & Ecosystem Studies, Institute of Marine Research, PINRO, Faroe Marine Research Institute, Marine Scotland Marine Laboratory, Johann Heinrich von Thünen-Institut & Danish Institute for Fisheries Research, Irish Whale and Dolphin Group & Galway and Mayo Institute of Technology, (2013). *International Blue Whiting Spawning Stock Survey (IBWSS) Spring 2013*. Marine Institute. <http://hdl.handle.net/10793/868>

Cooperative Publications

FSAI (2013). *Investigation into Levels of Dioxins, Furans, Polychlorinated Biphenyls and Brominated Flame Retardants in Fishery Products in Ireland Monitoring & Surveillance Series*. Food Safety Authority of Ireland, Dublin www.fsai.ie, <http://hdl.handle.net/10793/875> (Contributing Authors: McHugh, B., McGovern, E., O'Hea, L., & Boyle, B.)

Dwyer, N. (2013). Environmental Protection Agency, 2012. *The Status of Ireland's Climate, 2012. Research Programme-CCRP, Report 26*. <http://hdl.handle.net/10793/867> (Contributing Authors: McGrath, T., McGovern, E., Nolan G., Dwyer, N. 3.9 Nutrients. McGrath, T., McGovern, E., Nolan G., Dwyer, N. 3.3 Ocean Acidification and Carbon Dioxide)

APPENDIX 4: SCIENTIFIC PAPERS AND PUBLICATIONS

- Brown, S. L., **Reid, D.** & Rogan, E. (2013). A risk-based approach to rapidly screen vulnerability of cetaceans to impacts from fisheries bycatch. *Biological Conservation*, 168, 78–87. doi:10.1016/j.biocon.2013.09.019
- Burrell, S.**, Gunnarsson, T., Gunnarsson, K., **Clarke, D.** & Turner, A. D. (2013). First detection of paralytic shellfish poisoning (PSP) toxins in Icelandic mussels (*Mytilus edulis*): Links to causative phytoplankton species. *Food Control*, 31(2), 295–301. doi:10.1016/j.foodcont.2012.10.002
- Cassina, F., Dalton, C., **de Eyto, E.** & Sparber, K. (2013) The Palaeolimnology of Lough Murree, A Brackish Lake in the Burren, Ireland. *Biology & Environment: Proceedings of the Royal Irish Academy* 113, 1–17. Doi:10.3318/BIOE.2013.23
- Cassina, F., Dalton, C., **Dillane, M.**, **de Eyto, E.**, **Poole, R.** & Sparber, K. (2013). A multi-proxy palaeolimnological study to reconstruct the evolution of a coastal brackish lake (Lough Furnace, Ireland) during the late Holocene. *Palaeogeography, Palaeoclimatology, Palaeoecology*. 383–384, 1–15. <http://dx.doi.org/10.1016/j.palaeo.2013.04.016>
- Clegg, T. A., **Morrissey, T.**, **Geoghegan, F.**, Martin, S. W., **Lyons, K.**, Ashe, S. & More, S. J. (2013). Risk factors associated with increased mortality of farmed Pacific oysters in Ireland during 2011. *Preventive Veterinary Medicine*, 113, 257–267. <http://dx.doi.org/10.1016/j.prevetmed.2013.10.023>
- Dabrowski, T.**, **Lyons, K.**, Curé, M., **Berry, A.** & **Nolan, G.** (2013). Numerical modelling of spatio-temporal variability of growth of *Mytilus edulis* (L.) and influence of its cultivation on ecosystem functioning. *Journal of Sea Research*, 76, 5–21. doi:10.1016/j.seares.2012.10.012
- Delaney, C.**, **Gaughan, P.** & **Smyth, D.** (2013). Informatics and Decisions support in Galway Bay (SmartBay) using ERDDAP, OGC Technologies and Third Party Data Sources to Provide Services to the Marine Community. (Vol. 15, p. 11221). Retrieved from <http://adsabs.harvard.edu/abs/2013EGUGA..1511221D>
- Dransfeld, L.**, **Gerritsen, H. D.**, Hareide, N. R. & Lorange, P. (2013). Assessing the risk of vulnerable species exposure to deepwater trawl fisheries: the case of orange roughy *Hoplostethus atlanticus* to the west of Ireland and Britain. *Aquatic Living Resources*, 26(04), 307–318. doi:10.1051/alr/2013066
- Duggan, D. E., Farnsworth, K. D. & **Kraak, S. B. M.** (2013). Identifying functional stakeholder clusters to maximise communication for the ecosystem approach to fisheries management. *Marine Policy*, 42, 56–67. doi:10.1016/j.marpol.2013.01.023
- Ensing, D., Crozier, W. W., Boylan, P., **O'Maoiléidigh, N.** & **McGinnity, P.** (2013). An analysis of genetic stock identification on a small geographical scale using microsatellite markers, and its application in the management of a mixed-stock fishery for Atlantic salmon *Salmo salar* in Ireland. *Journal of Fish Biology*, 82(6), 2080–2094. doi:10.1111/jfb.12139
- Flannery, J.**, **Keaveney, S.**, **Rajko-Nenow, P.**, O'Flaherty, V. & **Doré, W.** (2013). Norovirus and FRNA bacteriophage determined by RT-qPCR and infectious FRNA bacteriophage in wastewater and oysters. *Water Research*. doi:10.1016/j.watres.2013.06.008
- Flannery, J.**, **Rajko-Nenow, P.**, **Keaveney, S.**, O'Flaherty, V. & **Doré, W.** (2013). Simulated sunlight inactivation of norovirus and FRNA bacteriophage in seawater. *Journal of Applied Microbiology*, 115 (3), 915–922. doi:10.1111/jam.12279
- Fung, T., Farnsworth, K. D., Shephard, S., **Reid, D. G.** & Rossberg, A. G. (2013). Why the size structure of marine communities can require decades to recover from fishing. *Marine Ecology Progress Series*, 484, 155–171. doi:10.3354/meps10305
- Gerritsen, H. D.**, Minto, C. & **Lordan, C.** (2013). How much of the seabed is impacted by mobile fishing gear? Absolute estimates from Vessel Monitoring System (VMS) point data. *ICES Journal of Marine Science*, 70(3), 523–531. doi:10.1093/icesjms/fst017
- Giltrap, M.**, **Ronan, J.**, Hardenberg, S., Parkes, G., **McHugh, B.**, **McGovern, E.** & **Wilson, J. G.** (2013). Assessment of biomarkers in *Mytilus edulis* to determine good environmental status for implementation of MSFD in Ireland. *Marine Pollution Bulletin*, 71(1–2), 240–249. doi:10.1016/j.marpolbul.2013.02.021
- Giltrap, M.**, Macken, A., Davoren, M., **McGovern, E.**, Foley, B., Larsen, M., **White, J.** & **McHugh, B.** (2013). Utilising caging techniques to investigate metal assimilation in *Nucella lapillus*, *Mytilus edulis* and *Crassostrea gigas* at three Irish coastal locations. *Estuarine, Coastal and Shelf Science*, 132, 77–86.
- Grienke, U., **Silke, J.**, & Tasdemir, D. (2013). Bioactive compounds from marine mussels and their effects on human health. *Food Chemistry*. doi:10.1016/j.foodchem.2013.07.027
- Hedger, R. D., **de Eyto, E.**, **Dillane, M.**, Diserud, O. H., Hindar, K., **McGinnity, P.**, **Poole, R.** & **Rogan, G.** (2013). Improving abundance estimates from electrofishing removal sampling. *Fisheries Research*, 137, 104–115.
- Houle, J. E., Andersen, K. H., Farnsworth, K. D., & **Reid, D. G.** (2013). Emerging asymmetric interactions between forage and predator fisheries impose management trade-offs. *Journal of Fish Biology*, 83(4), 890–904. doi:10.1111/jfb.12163
- Jackson, D.**, **Cotter, D.**, Newell, J., **McEvoy, S.**, **O'Donohoe, P.**, **Kane, F.**, **McDermott, T.**, **Kelly, S.** & **Drumm, A.** (2013). Impact of Lepeophtheirus salmonis infestations on migrating Atlantic salmon, *Salmo salar* L., smolts at eight locations in Ireland with an analysis of lice-induced marine mortality. *Journal of Fish Diseases*, 36(3), 273–281. doi:10.1111/jfd.12054
- Jackson D.**, **Kane F.**, **O'Donohoe P.**, **Mc Dermott T.**, **Kelly S.**, **Drumm A** & **J Newell** (2013). Sea lice levels on wild Atlantic salmon, *Salmo salar* L., returning to the coast of Ireland. *Journal of Fish Diseases*, Vol 36(3), pp 293–298. <http://dx.doi.org/10.1111/jfd.12059>
- Jackson, D.**, **McDermott, T.**, **Kane, F.**, **O'Donohoe, P.** & **Kelly, S.** (2013). Evaluation of the impacts of aquaculture and freshwater habitat on the status of Atlantic salmon stocks in Ireland. *Agricultural Sciences*, 04(06), 62–67. doi:10.4236/as.2013.46A010
- Jansen, T., **Campbell, A.**, Brunel, T., & Worsøe Clausen, L. (2013). Spatial Segregation within the Spawning Migration of North Eastern Atlantic Mackerel (*Scomber scombrus*) as Indicated by Juvenile Growth Patterns. *PLoS ONE*, 8(2), e58114. doi:10.1371/journal.pone.0058114
- Jaufrais, T., **Kilcoyne, J.**, Herrenknecht, C., Truquet, P., Séchet, V., Miles, C. O., & Hess, P. (2013). Dissolved azaspiracids are absorbed and metabolized by blue mussels (*Mytilus edulis*). *Toxicon*, 65(0), 81–89. doi:10.1016/j.toxicon.2013.01.010
- Keenan, K., Bradley, C. R., Magee, J. J., Hynes, R. A., Kennedy, R. J., Crozier, W. W., **Poole, R.** Prodhhl, P. A. (2013). Beaufort trout MicroPlex: a high-throughput multiplex platform comprising 38 informative microsatellite loci for use in resident and anadromous (sea trout) brown trout *Salmo trutta* genetic studies. *Journal of Fish Biology*, 82(6), 1789–1804. doi:10.1111/jfb.12095

Appendices

- Kochmann, J., **O'Beirn, F.**, Yearsley, J. & Crowe, T. P. (2013). Environmental factors associated with invasion: modelling occurrence data from a coordinated sampling programme for Pacific oysters. *Biological Invasions*, 15 (10), 2265–2279. doi: 10.1007/s10530-013-0452-9
- Kraak, S.B.M.**, Bailey, N., Cardinale, M., Darby, C., De Oliveira, J. A., Eero, M., Graham, N., Vinther, M. (2013). Lessons for fisheries management from the EU cod recovery plan. *Marine Policy*, 37, 200–213.
- Lassen, H., **Kelly, C.**, & Sissenwine, M. (2013). ICES Advisory Framework 1977–2012: From MSY to Precautionary Approach and Back. *ICES Journal of Marine Science*. doi:10.1093/icesjms/fst146
- Mayer, I., Zhou, Q., Lo, J., Abspoel, L., Keijser, X., Olsen, E., **Nixon, E.** & Kannen, A. (2013). Integrated, ecosystem-based Marine Spatial Planning: Design and results of a game-based, quasi-experiment. *Ocean & Coastal Management*, 82, 7–26. doi:10.1016/j.ocecoaman.2013.04.006
- McGrath, T.**, Kivimäe, C., **McGovern, E.**, **Cave, R. R.**, & **Joyce, E.** (2013). Winter measurements of oceanic biogeochemical parameters in the Rockall Trough (2009–2012). *Earth System Science Data*, 5(2), 375–383. doi:10.5194/essd-5-375-2013
- O'Driscoll, C., **de Eyto, E.**, O'Connor, M., Asam, Z.-Z., Rodgers, M., & Xiao, L. (2013). Biotic response to forest harvesting in acidic blanket peat fed streams: A case study from Ireland. *Forest Ecology and Management*, 310(0), 729–739. doi:10.1016/j.foreco.2013.09.018
- O'Farrell, B., Benzie, J. A., McGinnity, P., **de Eyto, E.**, Dillane, E., Coughlan, J., & Cross, T. F. (2013). Selection and Phylogenetics of Salmonid MHC Class I: Wild Brown Trout (*Salmo trutta*) Differ from a Non-Native Introduced Strain. *PloS One*, 8(5), e63035. doi:10.1371/journal.pone.0063035
- O'Hea, B.**, **Johnston, G.**, **White, J.**, & **Dransfeld, L.** (2013). Length-weight relations for seven grenadier species (Actinopterygii: Gadiformes: Macrouridae) to the west of Ireland. *Acta Ichthyologica Et Piscatoria*, 43(4), 285–291. doi:10.3750/AIP2013.43.4.04
- Otero, J., L'Abée-Lund, J. H., Castro-Santos, T., Leonardsson, K., Storvik, G. O., Jonsson, B., Vøllestad, L. A. (2013). Basin-scale phenology and effects of climate variability on global timing of initial seaward migration of Atlantic salmon (*Salmo salar*). *Global Change Biology*, n/a–n/a. doi:10.1111/gcb.12363
- Pazhayamadom, D. G., **Kelly, C. J.**, Rogan, E., & Codling, E. A. (2013). Self-starting CUSUM approach for monitoring data poor fisheries. *Fisheries Research*. doi:10.1016/j.fishres.2013.02.002
- Rajko-Nenow, P.**, Waters, A., **Keaveney, S.**, **Flannery, J.**, Tuite, G., Coughlan, S., **Dore, W.** (2013). Norovirus Genotypes Present in Oysters and in Effluent from a Wastewater Treatment Plant during the Seasonal Peak of Infections in Ireland in 2010. *Applied and Environmental Microbiology*, 79(8), 2578–2587. doi:10.1128/AEM.03557-12
- Ribeiro Santos, A., Minto, C., Connolly, P., & Rogan, E. (2013). Oocyte dynamics and reproductive strategy of *Aphanopus carbo* in the NE Atlantic—Implications for fisheries management. *Fisheries Research*, 143, 161–173. doi:10.1016/j.fishres.2013.01.004
- Rodger, H. D., McCleary, S. J., & **Ruane, N. M.** (2013). Clinical cardiomyopathy syndrome in Atlantic salmon, *Salmo salar* L. *Journal of Fish Diseases*, n/a–n/a. doi:10.1111/jfd.12186
- Ronan, J. M.**, & **McHugh, B.** (2013). A sensitive liquid chromatography/tandem mass spectrometry method for the determination of natural and synthetic steroid estrogens in seawater and marine biota, with a focus on proposed Water Framework Directive Environmental Quality Standards. *Rapid Communications in Mass Spectrometry*, 27(7), 738–746. doi:10.1002/rcm.6505
- Ruane, N. M.**, Bolton-Warberg, M., Rodger, H. D., Colquhoun, D. J., **Geary, M.**, **McCleary, S. J.**, O'Halloran, K., Maher, K., O'Keefe, D., Mirimin, L., **Henshilwood, K.**, **Geoghegan, F.**, & Fitzgerald, R. D. (2013). An outbreak of francisellosis in wild-caught Celtic Sea Atlantic cod, *Gadus morhua* L., juveniles reared in captivity. *Journal of Fish Diseases*, n/a–n/a. doi:10.1111/jfd.12210
- Ruane, N. M.**, **Collins, E. M.**, **Geary, M.**, **Swords, D.**, **Hickey, C.**, & **Geoghegan, F.** (2013). Isolation of *Streptococcus agalactiae* and an aquatic birnavirus from doctor fish *Garra rufa* L. *Irish veterinary journal*, 66(1), 16. doi:10.1186/2046-0481-66-16
- Ryan, C., **McHugh, B.**, Trueman, C. N., Sabin, R., Deaville, R., Harrod, C., ... & O'Connor, I. (2013). Stable isotope analysis of baleen reveals resource partitioning among sympatric rorquals and population structure in fin whales. *Marine Ecology Progress Series*, 479, 251–261. doi: 10.3354/meps10231
- Ryan, C., **McHugh, B.**, O'Connor, I., & Berrow, S. (2013). Lipid content of blubber biopsies is not representative of blubber in situ for fin whales (*Balaenoptera physalus*). *Marine Mammal Science*, 29(3), 542–547.
- Santos, A. R., Trueman, C., **Connolly, P.**, & Rogan, E. (2013). Trophic ecology of black scabbardfish, *Aphanopus carbo* in the NE Atlantic—Assessment through stomach content and stable isotope analyses. *Deep Sea Research Part I: Oceanographic Research Papers*, 77(0), 1–10. doi:10.1016/j.dsr.2013.02.009
- Sharples, J., Ellis, J. R., **Nolan, G.**, & Scott, B. E. (2013). Fishing and the oceanography of a stratified shelf sea. *Progress in Oceanography*, 117, 130–139. doi:10.1016/j.pocean.2013.06.014
- Shephard, S., Minto, C., Zolck, M., Jennings, S., Brophy, D., & **Reid, D.** (2013). Scavenging on trawled seabeds can modify trophic size structure of bottom-dwelling fish. *ICES Journal of Marine Science*. doi:10.1093/icesjms/fst134
- Solomon, C. T., Bruesewitz, D. A., Richardson, D. C., Rose, K. C., Van de Bogert, M. C., Hanson, P. C., Babin, B. L. (2013). Ecosystem respiration: Drivers of daily variability and background respiration in lakes around the globe. *Limnol. Oceanogr*, 58(3), 849–866.
- Sooknanan, K., **Doyle, J.**, Wilson, J., Harte, N., Kokaram, A., & Corrigan, D. (2013). Mosaics For Burrow Detection in Underwater Surveillance Video. Retrieved from <http://www.mee.tcd.ie/~sigmedia/pmwiki/uploads/Main.Publications/Oceans13.pdf>
- Spencer, P. D., **Kraak, S. B. M.**, & Trippel, E. A. (2013). The Influence of Maternal Effects in Larval Survival on Fishery Harvest Reference Points for Two Life-History Patterns. *Canadian Journal of Fisheries and Aquatic Sciences*, 1309211437300000. doi:10.1139/cjfas-2013-0253
- Torrissen, O., Jones, S., Asche, F., Guttormsen, A., Skilbrei, O. T., Nilsen, F., **Jackson, D.** (2013). Salmon lice—impact on wild salmonids and salmon aquaculture. *Journal of Fish Diseases*, 36(3), 171–194. doi:10.1111/jfd.12061
- Turner, A. D., Lewis, A. M., Hatfield, R. G., Higman, W. A., & **Burrell, S.** (2013). A feasibility study into the production of a freeze-dried oyster reference material for paralytic shellfish poisoning toxins. *Analytical and Bioanalytical Chemistry*, 405(26), 8621–8632. doi:10.1007/s00216-013-7273-7
- Van Damme, C. J. G., Thorsen, A., Fonn, M., Alvarez, P., Garabana, D., **O'Hea, B.**, Dickey-Collas, M. (2013). Fecundity regulation in horse mackerel. *ICES Journal of Marine Science*. doi:10.1093/icesjms/fst156
- Viana, M., McNally, L., Graham, N., **Reid, D. G.**, & Jackson, A. L. (2013). Ignoring discards biases the assessment of fisheries' ecological fingerprint. *Biology Letters*, 9(6), 20130812–20130812. doi:10.1098/rsbl.2013.0812

Zhang, D., **O'Connor, E.**, Sullivan, T., McGuinness, K., Regan, F., & O'Connor, N. E. (2013). Smart multi-modal marine monitoring via visual analysis and data fusion (pp. 29–34). ACM Press. doi:10.1145/2509896.2509903

Book Chapters

Wahle, R. A., Castro, K. M., **Tully, O.**, & Cobb, J. S. (2013). Homarus. In *Lobsters: Biology, Management, Aquaculture and Fisheries* (pp. 221–258). John Wiley & Sons, Ltd. Retrieved from <http://dx.doi.org/10.1002/9781118517444.ch8>

Johnson, M. P., **Lordan, C.**, Power, A. M. (2013). Habitat and Ecology of *Nephrops norvegicus*. In Johnson

Popular Press

O'Sullivan, G. (2013). Building Capacity. Pan-European Networks: Science & Technology. September 2013, Issue 8, p: 308–309.

International Council for the Exploration of the Sea (ICES) Publications

Key to ICES abbreviations:

CM	Conference and Meeting Document
ACOM	Advisory Committee
FTC	Fisheries Technology Committee
LRC	Living Resources Committee
RMC	Resource Management Committee
DFC	Diadromous Fish Committee
WKROUND	A Benchmark Workshop on Roundfish
SCICOM	Science Committee
SSGEF	Steering Group on Ecosystem Function
WGNAS	Working Group North Atlantic Salmon
WGECO	Working Group on Ecosystem Effects of Fishing Activities
WGMHM	Working Group on Marine Habitat Mapping
SSGSUE	Steering Group on Sustainable Use of Ecosystems
WGOH	Working Group on Oceanic Hydrography
CRR	Cooperative Research Report

Hydes, D. J., **McGovern, E.**, and Walsham, P. (Eds.) 2013. Chemical aspects of ocean acidification monitoring in the ICES marine area. ICES Cooperative Research Report No. 319. 78 pp.

ICES (2013). Report of the Working Group on Elasmobranch Fishes (WGEF), 17–21 June 2013 Lisbon, Portugal. ICES CM 2013/ACOM:19. 688pp. (Contributing Author: **Johnston, G.**)

ICES (2013). Report of the Working Group on North Atlantic Salmon (WGNAS), 3–12 April 2013, Copenhagen, Denmark. ICES CM 2013/ACOM:09. 380pp. (Contributing Authors: **White, J.** & **O'Maoiléidigh, N.**)

ICES (2013). Report of the Working Group on Pathology and Diseases of Marine Organisms (WGPDMO), 5–9 March 2013, Padova, Italy. ICES CM 2013/SSGHIE:03. 30pp. (Contributing Author: **Ruane, N.**)

ICES. (2013). Report of the Joint EIFAAC/ICES Working Group on Eels (WGEE), 18–22 March 2013, Sukarietta, Spain, 4–10 September 2013, Copenhagen, Denmark. ICES CM 2013/ACOM:18. 851 pp. (Contributing Authors: **de Eyto, E.** & **Poole, R.**)

ICES. (2013). Report of the third Workshop on Practical Implementation of Statistical Sound Catch Sampling Programmes. 19–22 November 2013, ICES, Copenhagen, Denmark. (Contributing author: **Gerritsen, H.**)

ICES (2013). Report of the Marine Chemistry Working Group (MCWG), 4–8 March 2013, Copenhagen, Denmark. ICES CM 2013/SGHIE:07. 65pp. (Contributing Author: **McGovern, E.**)

ICES (2013). Report of the Joint SOPAR/ICES Ocean Acidification Study Group (SGOA), 7–10 October 2013, Copenhagen, Denmark. ICES CM 2013/ACOM:31. 80pp. (Contributing Author: **McGovern, E.**)

The website for all ICES documents is: <http://www.ices.dk/publications/Pages/default.as>

Scientific, Technical and Economic Committee for Fisheries (STECF) Publications

STECF (2013). 42nd Plenary Meeting Report of the Scientific, Technical and Economic Committee for Fisheries (PLEN-13-01) Plenary Meeting, 8–12 April 2013, Brussels. 85pp. (Contributing Authors: **Kraak, S.B.M.**; **Graham, N.**)

STECF (2013). Different Principles for defining selectivity under the future TM regulation (STECF-13-04), reviewed by the Scientific, Technical and Economic Committee for Fisheries (STECF) during its 42nd plenary meeting held from 8 to 12 April 2013 in Brussels, Belgium. Publications Office of the European Union, Luxembourg, EUR 25973 EN, JRC 81584, 38 pp. (Editors: **Graham, N.** & Doerner, H. and contributing author **Kraak, S.B.M.**)

STECF (2013). 43rd Plenary Meeting Report of the Scientific, Technical and Economic Committee for Fisheries (PLEN-13-02) Plenary Meeting, 8–12 July 2013, Copenhagen. 123pp. (Contributing Authors: **Kraak, S.B.M.**; **Graham, N.**)

STECF (2013). 44th Plenary Meeting Report of the Scientific, Technical and Economic Committee for Fisheries (PLEN-13-03) Plenary Meeting, 4–8 November 2013, Brussels. 127pp. (Contributing Authors: **Kraak, S.B.M.**; **Graham, N.**)

STECF (2013). Landing obligation in EU fisheries (STECF-13-23), reviewed by the Scientific, Technical and Economic Committee for Fisheries (STECF) during its 44th plenary meeting held from 4–8 November (2013), Brussels. Publications Office of the European Union, Luxembourg, EUR 26330 EN, JRC 86112, 115 pp. (Editors: **Graham, N.** & Doerner, H.)

STECF (2013). Different Principles for defining selectivity under the future TM regulation (STECF-13-04). This report was reviewed by the STECF during its 42nd plenary meeting held from 8 to 12 April 2013 in Brussels, Belgium.

STECF (2013). Request for an evaluation of the fulfillment of the condition for exclusion under Art 11 of the cod plan (STECF-13-16). Publications Office of the European Union, Luxembourg. 12pp. (Contributing Authors: **Kraak, S.B.M.**; **Graham, N.**)

STECF (2013). Evaluation of Fishing Effort Regimes in European Waters – Part 1 (STECF-13-06). Publications Office of the European Union, Luxembourg, EUR 26901EN, JRC 83567, 691 pp. (Contributing Author: **Davie, S. L.**)

Appendices

STECF (2013). Evaluation of Fishing Effort Regimes in European Waters – Part 2 (STECF-13-21). Publications Office of the European Union, Luxembourg, EUR 26327 EN, JRC86088, 863 pp. (Contributing Author: **Davie, S. L.**)

Conferences and Seminars

Barbosa-Solomieu, V., Faury, N., Joyce, **A.**, Cheslett, **D.**, Webb, S. & Renault, T. (2013). Diversity and phylogenetic relationships of OsHV-1 samples from different geographic origins (O-015). 16th International Conference on Diseases of Fish and Shellfish. Tampere, Finland, 2–6 September 2013.

Clegg, T.A., **Morrissey, T.**, **Geoghegan, F.**, Martin, S.W., **Lyons, K.**, Ashe, S. & More, S.J. (2013). Risk factors associated with increased mortality of farmed Pacific oysters in Ireland during 2011 (P-077). 16th International Conference on Diseases of Fish and Shellfish. Tampere, Finland, 2–6 September 2013.

Donohoe, O., **Henshilwood, K.**, Walls D. & Way, K. (2013). Identification of cyprinid herpesvirus 3 (CYHV-3) encoded microRNAs (miRNAs) and analysis of their expression profile (P-272). 16th International Conference on Diseases of Fish and Shellfish. Tampere, Finland, 2–6 September 2013.

Farrell, E.D., Minto, C., Stokes, D., Pinnegar, J. K., Velasco, F., Burns, F., Salaun, M., Chaves, C. and **Clarke, M.** 2013. Rise of the boarfish: recent boom, range expansion or influx from the deep. ICES CM 2013 N.

Hurst, D. (2013). Concluding remarks: main highlights and key messages of the Conference. Marine Biotechnology in the European Research Area: Challenges and Opportunities for Europe. Brussels, Belgium, 11–12 March 2013.

Hurst, D. (2013). Marine biotechnology an ocean of opportunity. The 2013 Stakeholders Conference–Bioeconomy Days: “Bioeconomy in the EU: achievements and directions for the future”. Dublin, Ireland, 14–15 February 2013.

Kilcoyne, J., Twiner, M. J., McCarron, P., Crain, S., Wilkins, A. L., Nulty, C., Quilliam, M. A., Hess, P., Miles, C. O., 2013. Oral: AZA analogues – isolation, *in vitro* toxicity and relevance to human health. Shellfish safety workshop, Marine Institute, Galway, Ireland, April 18th 2013.

Kilcoyne, J., Twiner, M. J., McCarron, P., Crain, S., Wilkins, A. L., Nulty, C., Quilliam, M. A., Hess, P., Miles, C. O., 2013. Oral: AZA analogues – isolation, *in vitro* toxicity and relevance to human health. AOAC, marine and freshwater toxins analysis. Second joint symposium and AOAC task force meeting, Baiona, Spain, May 7th 2013.

Kilcoyne, J., Twiner, M. J., McCarron, P., Crain, S., Wilkins, A. L., Nulty, C., Quilliam, M. A., Hess, P., Miles, C. O., 2013. Oral: AZA analogues – isolation, *in vitro* toxicity and relevance to human health. Annual Irish chemistry symposium, Trinity College Dublin, Ireland, June 27th 2013.

Kilcoyne, J., Twiner, M. J., McCarron, P., Crain, S., Wilkins, A. L., Nulty, C., Quilliam, M. A., Hess, P., Miles, C. O., 2013. Oral: Isolation of minor and novel azaspiracids – structure elucidation and toxicology. Irish Society of Toxicology annual meeting, Dublin, Ireland, December 6th 2013.

Kilcoyne, J., Twiner, M. J., McCarron, P., Crain, S., Wilkins, A. L., Nulty, C., Quilliam, M. A., Hess, P., Miles, C. O., 2013. Oral: Isolation of minor and novel azaspiracids – structure elucidation and toxicology. 21st Meeting of the French Society of Toxinology (SFET), Paris, France, December 10th 2013.

McCleary, S., Giltrap, M., **Gaedi, T.**, **Henshilwood, K.** & **Ruane, N.** (2013). Detection of salmon alphavirus RNA in Celtic and Irish Sea groundfish (P-137). 16th International Conference on Diseases of Fish and Shellfish. Tampere, Finland, 2–6 September 2013.

Rodger, H.D., Fringuelli, E., Baxter, E.J., Mitchell, S.O., **Ruane, N.**, Gordon, A. & Graham, D. (2013). Gill pathologies of Atlantic salmon (*Salmo salar*): longitudinal studies in marine farms in Ireland (O-044). 16th International Conference on Diseases of Fish and Shellfish. Tampere, Finland, 2–6 September 2013.

Rodger, H.D., **McCleary, S.** & **Ruane, N.** (2013). Clinical cardiomyopathy syndrome (CMS) in Atlantic salmon, *Salmo salar*, in Ireland. 16th International Conference on Diseases of Fish and Shellfish. Tampere, Finland, 2–6 September 2013.

Ronan, J., **Giltrap, M.**, Hardenberg, S., **McHugh, B.**, **McGovern, E.**, Wilson, J.G. (2013). Multi-parameter assessment of endocrine disruption in Irish marine waters using biological effects measurements, chemical analysis and passive sampling. *Society of Environmental Toxicology and Chemistry 6th World Congress, Berlin*, 20–22 May 2013.

Renault, T. Novoa, B., Figueras, A., Culloty, S., Engelsma, M., **Geoghegan, F.**, Furones, D., Pruzzo, C. Venier, P., Peeler, E., Paillard, C., Roch, P., Lichi, T. & Guillaumie, B. (2013). Bivalife, an EU funded project focusing on management of infectious diseases in oysters and mussels in Europe (P-081). 16th International Conference on Diseases of Fish and Shellfish. Tampere, Finland, 2–6 September 2013.

Sooknunan, K., **Doyle, J.**, Kokaram, A., Corrigan, D., **Wilson, J.** and Harte, N. (2013). Mosaics for Burrow Detection in Underwater Surveillance Video. *IEEE International Conference on Oceans (OCEANS 2013) in San Diego*, September 2013, pp. 9–12. IEEE

Theses

Brennan, L. (2013). A stock assessment of Atlantic salmon in large riverine catchments. PhD thesis submitted to National University of Ireland, Galway. (Funded and equipment purchases under the National Development Plan and the **Marine Institute**)

Davie, S.L. (2013). The drivers and dynamics of fisher behaviour in Irish Fisheries. PhD thesis submitted to Galway-Mayo Institute of Technology. (Supervisor: **Lordan, C.**)

Donohoe, O. (2013). An Investigation into the existence of Cyprinid Herpesvirus 3 encoded microRNAs. PhD thesis submitted to Dublin City University. (Supervisor: **Henshilwood, K.**)

Ronan, J.M. (2013). An integrated assessment of estrogenic endocrine disruption in the Irish marine environment, with particular focus on chemical measurements. PhD thesis submitted to Trinity College Dublin. (Supervisor: **Mc Hugh, B.**, Co-supervisor: **Giltrap, M.**)

APPENDIX 5: CENSUS DATA FOR THE BURRISHOOLE SYSTEM 2013

Upstream census data for the Burrishoole system, 2013

Species	Salmon Leap Upstream 2013	Mill Race Upstream 2013	Totals Upstream 2013	Totals Upstream 2012	Totals Upstream 2011	Totals Upstream 2010
Wild Grilse	607	103	710	671	520	682
Wild Spring Salmon	16	7	23	18	51	16
Reared Grilse	1163	138	1301	2288	866	861
Wild Sea Trout	19	2	21	35	18	35
Wild Finnock	30	17	47	108	50	37
Wild Brown Trout	46	41	87	57	87	104

Downstream census data for the Burrishoole system, 2013

Species	Salmon Leap Downstream 2013	Mill Race Downstream 2013	Totals Downstream 2013	Totals Downstream 2012	Totals Downstream 2011	Totals Downstream 2010
Wild Salmon Smolt	4963	1394	6357	7717	6627	7123
Wild Sea Trout Smolt	404	64	468	632	620	213
Silver Eel	2720	921	3641	3335	1969	2137

APPENDIX 6: RESEARCH VESSEL PROGRAMME 2013

Days at Sea from 01/01/2013–31/12/2013	Days	Surveys	Scientist Days	Student Days
<i>RV Celtic Voyager</i>	261	31	1221	628
<i>RV Celtic Explorer</i>	292	15	2330	455
TOTAL	553	46	3551	1083

RV Celtic Voyager Activity 2013

Survey Code	Survey Name	Survey Days	No. of Scientists	Scientist Days	No. Of Students	Student Days	Student and Scientist days
CV13001	Winter Environmental Monitoring Survey (nutrients & benthic)	13	6	78	0	0	78
CV13002	Galway Bay Undergraduate Training 2013	11	5	55	90	90	145
CV13017	INFOMAR Trial	4	4	16	0	0	16
CV13003	SMART Science@Sea 2013	6	5	30	36	72	102
CV13022	SEAI Survey no.1	9	4	36	0	0	36
CV13005	SMART DCU Sensing & Biofouling 2013	2	5	10	12	24	34
CV13006	SMART Common Module Spring 2013	4	5	20	22	44	64
CV13004	De Facto elasmobranch refuges in the Irish and Celtic Seas	10	6	60	0	0	30

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RV Celtic Voyager Activity 2013

Survey Code	Survey Name	Survey Days	No. of Scientists	Scientist Days	No. Of Students	Student Days	Student and Scientist days
CV13023	SEAI SURVEY LEG 2	10	4	40	0	0	40
CV13024	SEAI SURVEY LEG 3	9	4	36	0	0	36
CV13007	INFOMAR 1	40	5	200	0	0	200
CV13025	Weather Buoy Service	4	3	12	0	0	12
CV13016	Aran & Porcupine UWTV	10	6	60	0	0	60
CV13026	Aran Islands Bathymetry	1	2	2	0	0	2
CV13015	Celtic Sea UWTV Survey	10	6	60	0	0	60
CV13019	Dino13	6	3	18	3	18	36
CV13027	INFOMAR	29	4	116	0	0	116
CV13028	HABWEST2013	5	2	10	4	20	30
CV13029	Cold water coral reefs biodiversity mapping	7	5	35	0	0	28
CV13012	Kerry reefs and environs survey	8	4	32	0	0	32
CV13014	Irish Sea and Celtic Sea	10	6	60	0	0	60
CV13032	M4 weather buoy recovery	2	0	0	0	0	0
CV13033	SEAI NO. 4	6	4	24	0	0	24
CV13031	Palaeoenvironments and sediment distribution west of Ireland	6	6	36	0	0	18
CV13030	Sediment Transport Assessment, Irish North Coast	5	5	25	0	0	15
CV13009	SMART Observer Programme 2013	4	4	16	20	40	56
CV13018	Undergraduate shipboard training in methods of oceanographic, benthic, megafauna and fisheries research	6	4	24	60	60	84
CV13010	SMART Offshore Geological Exploration	4	5	20	24	48	68
CV13013	MSc Marine Biology University College Cork (Annual Request)	2	3	6	12	24	32
CV13011	SMART Common Module Winter 2013	10	4	40	60	120	160
CV13021	Common Winter Module 2	6	7	42	34	68	110
CV13034	Wave Energy Site Clearance	2	1	2	0	0	2
TOTAL		261	137	1221	377	628	1786

RV Celtic Explorer Activity 2013

Survey Code	Survey Name	Survey Days	No. of Scientists	Scientist Days	No. of Students	Students Days
CE13001	Ocean Climate Sections and Geology: Porcupine, Rockall area	16	17	272	3	48
CE13002	Cetaceans on the Frontier 4	15	13	195	7	105
CE13016	MDACS Survey	4	12	48		
CE13003	Developing Geotechno-Stratigraphies (DGS)	5	10	50	2	10

Survey Code	Survey Name	Survey Days	No. of Scientists	Scientist Days	No. of Students	Students Days
CE13004	Mackerel Egg Survey March 2013	21	6	126	2	42
CE13005	BSH 2 charter	9				
CE13006	Blue Whiting Acoustic Survey	21	8	168		
CE13007	CE2013 Fisheries Acoustic Survey Newfoundland (Charter)	29				
CE13008	Biodiscovery and Ecosystem Function of Canyons	23	9	207	6	138
CE13009	Northwest Herring Acoustic Survey	21	10	210	1	21
CE13010	Mackerel Egg Survey July 2013	21	6	126	1	21
CE13012	BSH 3 North Sea Survey charter	39				
CE13013	Irish Groundfish Survey 2013	12	12	144		
CE13015	Celtic Sea Herring Acoustic Survey	21	19	399		
CE13014	Irish Groundfish Survey 2013	35	11	385	2	70
		292		2330		455

RV Celtic Voyager Cruise Details 2013

Survey Code	Survey Name	Chief Scientist	Organisation	Start Date	End Date	Survey Days
CV13001	Winter Environmental Monitoring Survey (nutrients & benthic)	Dr Evin McGovern	Marine Institute	28/01/2013	09/02/2013	13
CV13002	Galway Bay Undergraduate Training 2013	Dr Robin Raine	National University of Ireland Galway	11/02/2013	21/02/2013	11
CV13017	INFOMAR Trial	Mr Kevin Sheehan	Marine Institute	22/02/2013	25/02/2013	4
CV13003	SMART Science@Sea 2013	Dr Pauhla McGrane	Galway Mayo Institute of Technology	01/03/2013	06/03/2013	6
CV13022	SEAI Survey no.1	Mr Kevin Sheehan	Marine Institute	11/03/2013	19/03/2013	9
CV13005	SMART DCU Sensing & Biofouling 2013	Dr Pauhla McGrane	Galway Mayo Institute of Technology	21/03/2013	22/03/2013	2
CV13006	SMART Common Module Spring 2013	Dr Pauhla McGrane	Galway Mayo Institute of Technology	23/03/2013	26/03/2013	4
CV13004	De Facto elasmobranch refuges in the Irish and Celtic Seas	Dr Samuel Shephard	Galway Mayo Institute of Technology	27/03/2013	05/04/2013	10
CV13023	SEAI SURVEY LEG 2	Mr Kevin Sheehan	Marine Institute	06/04/2013	15/04/2013	10
CV13024	SEAI SURVEY LEG 3	Mr Kevin Sheehan	Marine Institute	17/04/2013	25/04/2013	9
CV13007	INFOMAR 1	Dr Fabio Sacchetti	Marine Institute	26/04/2013	04/06/2013	40
CV13025	Weather Buoy Service	Mr Kieran Adlum	P&O Maritime Services	05/06/2013	08/06/2013	4
CV13016	Aran & Porcupine UWTV	Dr Colm Lordan	Marine Institute	10/06/2013	19/06/2013	10
CV13026	Aran Islands Bathymetry	Dr Ronadh Cox	Unassigned	20/06/2013	20/06/2013	1
CV13015	Celtic Sea UWTV Survey	Ms Jennifer Doyle	Marine Institute	24/06/2013	03/07/2013	10
CV13019	Dino13	Dr Robin Raine	National University of Ireland Galway	04/07/2013	09/07/2013	6
CV13029	Cold water coral reefs biodiversity mapping	Mr Xavier Monteys	Geological Survey of Ireland	13/08/2013	19/08/2013	7
CV13027	INFOMAR	Dr Fabio Sacchetti	Marine Institute	10/07/2013	07/08/2013	29
CV13028	HABWEST2013	Dr Robin Raine	National University of Ireland Galway	08/08/2013	12/08/2013	5
CV13012	Kerry reefs and environs survey	Dr Louise Allcock	National University of Ireland Galway	20/08/2013	27/08/2013	8

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Survey Code	Survey Name	Chief Scientist	Organisation	Start Date	End Date	Survey Days
CV13014	Irish Sea and Celtic Sea	Ms Jennifer Doyle	Marine Institute	28/08/2013	06/09/2013	10
CV13032	M4 weather buoy recovery	Ms RV Ops Chief Scientist	Marine Institute	09/09/2013	10/09/2013	2
CV13033	SEAI NO. 4	Mr Kevin Sheehan	Marine Institute	12/09/2013	17/09/2013	6
CV13031	Palaeoenvironments and sediment distribution west of Ireland	Mr Jared Peters	University of Ulster	18/09/2013	23/09/2013	6
CV13030	Sediment Transport Assessment, Irish North Coast	Mr William Evans	University of Ulster	27/09/2013	01/10/2013	5
CV13009	SMART Observer Programme 2013	Mr John Boyd	Galway Mayo Institute of Technology	10/10/2013	13/10/2013	4
CV13018	Undergraduate shipboard training in methods of oceanographic, benthic, megafauna and fisheries research	Dr Ian O'Connor	Galway Mayo Institute of Technology	26/10/2013	31/10/2013	6
CV13010	SMART Offshore Geological Exploration	Professor Andrew Wheeler	University College Cork	03/11/2013	06/11/2013	4
CV13013	MSc Marine Biology University College Cork (Annual Request)	Dr Rob McAllen	University College Cork	07/11/2013	08/11/2013	2
CV13011	SMART Common Module Winter 2013	Dr Pauhla McGrane	Galway Mayo Institute of Technology	10/11/2013	19/11/2013	10
CV13021	Common Winter Module 2	Dr Pauhla McGrane	Galway Mayo Institute of Technology	25/11/2013	30/11/2013	6
CV13034	Wave Energy Site Clearance	Ms RV Ops Chief Scientist	Marine Institute	03/12/2013	4/12/2013	2

RV Celtic Explorer Cruise Details 2013

Survey Code	Survey Name	Chief Scientist	Organisation	Start Date	End Date	Survey Days
CE13001	Ocean Climate Sections and Geology: Porcupine, Rockall area	Dr Glenn Nolan	Marine Institute	05/01/2013	20/01/2013	16
CE13002	Cetaceans on the Frontier 4	Dr Conor Ryan	Galway Mayo Institute of Technology	21/01/2013	04/02/2013	15
CE13016	MDACS Survey	Dr Yvonne Leahy	National Parks and Wildlife Service	09/02/2013	12/02/2013	4
CE13003	Developing Geotechno-Stratigraphies (DGS)	Professor Andrew Wheeler	University College Cork	13/02/2013	17/02/2013	5
CE13004	Mackerel Egg Survey March 2013	Mr Brendan O' Hea	Marine Institute	18/02/2013	10/03/2013	21
CE13005	BSH 2	Ms Sieglinde Weigelt Krenz	BSH	14/03/2013	22/03/2013	9
CE13006	Blue Whiting Acoustic Survey	Mr Ciaran O'Donnell	Marine Institute	26/03/2013	15/04/2013	21
CE13007	CE2013 Fisheries Acoustic Survey Newfoundland	Dr George Rose	Newfoundland-Fisheries and Marine Institute of Memorial University	24/04/2013	22/05/2013	29
CE13008	Biodiscovery and Ecosystem Function of Canyons	Dr Louise Allcock	National University of Ireland Galway	30/05/2013	21/06/2013	23
CE13009	Northwest Herring Acoustic Survey	Dr Cormac Nolan	Marine Institute	22/06/2013	12/07/2013	21
CE13010	Mackerel Egg Survey July 2013	Mr Brendan O' Hea	Marine Institute	13/07/2013	02/08/2013	21
CE13012	BSH 3 North Sea Survey	Mr Holger Klein	BSH	10/08/2013	17/09/2013	39
CE13013	Irish Groundfish Survey 2013	Mr Dave Stokes	Marine Institute	25/09/2013	06/10/2013	12
CE13015	Celtic Sea Herring Acoustic Survey	Mr Ciaran O'Donnell	Marine Institute	07/10/2013	27/10/2013	21
CE13014	Irish Groundfish Survey 2013	Mr Hans Gerritsen	Marine Institute	28/10/2013	01/12/2013	35

APPENDIX 7: FOREIGN MARINE SCIENTIFIC RESEARCH (MSR) ACTIVITIES IN IRISH WATERS IN 2013

Foreign Vessel Activity 2013

Scientist Days Ireland	Scientist Days Foreign
3551	3135

Vessel Name	Country	No. of Days	No. of Scientists	Scientist Days
Benaiah IV	Britain	60	2	120
Endeavour*	Britain	16	7	112
Scotia	Britain	7	7	49
Vilnyus	Russia	10	11	110
FV Altaire*	Britain	7	6	42
Tridens*	Netherlands	12	6	72
Walther Herwig III	Germany	27	12	324
Scotia*	Britain	11	6	66
Havglans	Norway	18	5	90
Tridens*	Netherlands	23	6	138
Eros*	Norway	13	8	104
Christina S	Britain	13	6	78
Corsytes	Britain	1	4	4
James Cook*	Britain	20	25	500
Corsytes	Britain	5	6	30
Vizconde de Eza*	Spain	25	14	350
Scotia	Britain	17	8	136
Endeavour*	Britain	18	7	126
Stelissa	Britain	5	1	5
Govenek of Ladram	Britain	5	1	5
Nova Spero	Britain	6	1	6
Corsytes	Britain	15	8	120
Corsytes	Britain	4	4	16
Pelagia*	The Netherlands	20	11	220
Alboran	Spain	4	5	20
Discovery	Britain	5	5	25
Thalassa	France	9	15	135
Scotia*	Britain	4	12	48
Scotia*	Britain	7	12	84
TOTAL		387	229	3135

Appendices

APPENDIX 8: MARINE INSTITUTE STRATEGIC PLAN – EXECUTIVE SUMMARY

This plan has been written with the active engagement of the staff and board of the Marine Institute to provide clarity on our operating framework and the strategic approach that will be taken on key decisions that need to be embraced in the period 2013–2016.

The document sets out the key foundations for the current operations and roles of the Marine Institute through the first two sections.

In Section 3 we state our five key high-level goals including: service provider; research performer; research catalyst and funder; infrastructure provider; and the operation of an efficient and effective organisation. These goals support our vision of “A thriving maritime economy in harmony with the ecosystem and supported by the delivery of excellence in our services” (Figure 1). Each goal is accompanied by key objectives and priority actions that inform our detailed service area operational plans and our performance management development systems (PMDS). Table 1 provides an overview of the Institute’s five Goals and associated key Objectives.

Table 1: Marine Institute Goals and associated Key Objectives



GOAL 1: SERVICE PROVIDER

- Carry out a suite of statutory environmental, fisheries and aquaculture data collection surveys and monitoring programmes assigned to the Marine Institute by Government, to allow Ireland to meet its national and international legal obligations.
- Deliver scientific, technical and economic data services that inform policy and provide advice to Government, underpinning sectoral development and protecting the marine environment.
- Maintain international excellence in marine science and research in order to gain a better understanding of the health and functioning of marine ecosystems and provide scientific advice to meet the needs of decision-makers in the rapidly changing area of ocean governance.
- Continue to partner and collaborate with the Higher Education sector and other research performers.
- Provide services, data, and publications online, in line with the eGovernment Strategy, to improve customer services. This includes access through mobile devices and the use of social media.

GOAL 2: RESEARCH PERFORMER

- > Maintain our track record as a research performer in targeted areas and seek further opportunities to participate in competitive national and international research projects and programmes.
- > Engage with key stakeholders to maximise Marine Institute research participation and opportunities to add value to existing research programmes.

GOAL 3: RESEARCH CATALYST AND FUNDER

- > Develop and take the lead role in the implementation of national marine research agenda(s) through cross-departmental/agency and Higher Education Institute collaboration.
- > Drive the further development of national programmes in Advanced Marine Technology and Marine Biotechnology.
- > Maximise Irish participation in, and benefit from, international marine Research, Technology, Development and Innovation programmes.

GOAL 4: INFRASTRUCTURE PROVIDER

- > Maintain and, where possible, enhance key Marine Institute facilities and assets.
- > Maintain and explore opportunities to enhance key national marine infrastructures.
- > Ensure the necessary data infrastructure, guidance and supports are in place to allow delivery of efficient and effective day-to-day ICT operations; support best practice management of Marine Institute data; and promote access to national marine datasets.

GOAL 5: EFFICIENT AND EFFECTIVE ORGANISATION

- > Deliver a solution-driven, best practice human resource service with a focus firmly on the needs of all individual staff and service teams, using management information systems and effective operational practices.
- > Adhere to the highest levels of corporate governance, while delivering a very high level of value-for-money customer-driven services.
- > Maintain and enhance the Marine Institute's reputation and ability to deliver high standards of analysis and services through appropriate quality systems and efficient organisation.
- > Ensure that external communications are effective, comprehensive and relevant and help promote an awareness of Ireland's marine resource.

Section 4 describes our approach to achieving our goals, within the context of the current operating environment. Teamwork is key to this approach. We will build on our open and inclusive planning processes to address challenges and opportunities that may arise in the course of the next three years.

We will continue to identify ways in which we can implement our adaptive and cost efficiency measures to minimise the impact of further budget cuts on the delivery of front-line services. We will also explore new and innovative solutions to our service delivery model and examine the scope for new partnerships with the Higher Education Institutes, other government agencies and the private sector. Furthermore, we will strive to expand on our excellent earnings record as a research performer, through externally funded programmes.

The Institute has identified a number of tools which we can use to address the gaps which have been identified. These are innovative and show the flexibility, responsiveness and dedication to public service that is required of a modern, efficient public body. One highly cost-effective means to deliver new services is through the leveraging of EU funding and international partnerships. The Institute has built up a very strong track record of forming successful partnerships with other European agencies and institutions. Therefore, a protocol agreed in early 2013 for the recruitment of staff under other public, private and EU funding programmes is most welcome and a crucial tool to enable the Institute to achieve its objectives.

Should we reach a limit on the scope of these measures to absorb the impact of further budget cuts on front-line services, we will plan adaptive measures to achieve alignment between budget/capacity and service delivery. This approach would involve dialogue with key clients to clarify service demand prioritisation, in order to identify the most balanced outcome achievable, thus enabling us to protect our priority front-line services to the maximum extent practicable.

Finally, this plan sets out how we will identify and prepare plans to benefit from new opportunities. There are clear signals of an increase in the demand for services from the Marine Institute, in light of economic development opportunities identified in *Harnessing Our Ocean Wealth* and Government/EU resource management and monitoring requirements. Furthermore, the prospects for an increase in the priority and support for marine research and innovation at an EU level are encouraging.

This strategic approach, with its balance of reactive and proactive measures, together with the vision, values and commitment of the Marine Institute staff, will help guide the Marine Institute through the challenges and opportunities over the period 2013–2016.

Appendices

APPENDIX 9: GALWAY STATEMENT AN ATLANTIC OCEAN COOPERATION LAUNCHING AN EU-CANADA-USA RESEARCH ALLIANCE

Galway Statement on Atlantic Ocean Cooperation Launching a European Union - Canada - United States of America Research Alliance

The Signatories of this Statement meeting on the occasion of the high level event

The Atlantic – a Shared Resource, held on

23 and 24 May 2013

at the Marine Institute, Galway, Ireland

Recognizing the importance of the Atlantic Ocean to our citizens, prosperity, human health and well-being, adaptation to climate and other environmental change, and security,

Cognizant of our reliance upon the best available science and knowledge to inform decisions affecting the Atlantic Ocean,

Realizing that our countries face similar challenges in promoting a healthy and well-understood Atlantic Ocean,

Acknowledging the critical interlink between the Atlantic Ocean and the portion of the Arctic region that borders the Atlantic,

Appreciating the value of our ongoing cooperation on ocean science and observation in the Atlantic Ocean, and

Valuing the essential role of international partnership to achieve our shared objectives and the potential of greater cooperation to advance our knowledge of the Atlantic Ocean,

Intend to advance our shared vision of an Atlantic Ocean that is healthy, resilient, safe, productive, understood and treasured so as to promote the well-being, prosperity, and security of present and future generations.

This cooperation is intended to increase our knowledge of the Atlantic Ocean and its dynamic systems - including interlinks with the portion of the Arctic region that borders the Atlantic - by aligning our ocean observation efforts to improve ocean health and stewardship and promote the sustainable management of its resources. Observation is fundamental to understanding the ocean and forecasting its future. Activities may include efforts to better coordinate data sharing, interoperability and coordination of observing infrastructures and seabed and benthic habitat mapping.

This cooperation may result in mutual benefits including better ecosystem assessments and forecasts and deeper understanding of vulnerabilities and risk, including those relating to the global climate system and climate change impacts. It can also help to generate new tools to increase resilience, conserve rich biodiversity, manage risk and determine social, environmental and economic priorities.

We further intend to promote our citizens' understanding of the value of the Atlantic by promoting oceans literacy. We intend to show how results of ocean science and observation address pressing issues facing our citizens, the environment and the world and to foster public understanding of the value of the Atlantic Ocean.

We intend to advance this agenda by

- taking stock of and utilizing existing bilateral science and technology cooperation (e.g. the U.S. - European Union Science and Technology Joint Consultative Group and the Canada - European Union Science and Technology Joint Coordinating Committee) and multilateral cooperation frameworks including those related to ocean observation, and ocean literacy initiatives;
- recommending priorities for future cooperation and, where possible,
- coordinating the planning and programming of relevant activities in these areas, including promoting researcher mobility.

This cooperation could potentially involve national partners and European Commission representatives, the private sector, and the scientific community to further our efforts by harnessing the value of public-private partnerships.



This initiative is also expected to reinforce existing international efforts to advance our knowledge of the ocean, including the World Ocean Assessment.

Signed in Galway on 24 May 2013 in three originals in the English language.

For the European Union

**For the Government of
Canada**

**For the Government of the
United States of America**

**Máire GEOGHEGAN-
QUINN**
Commissioner for Research,
Innovation and Science

Edward FAST
Minister of International
Trade and Minister for the
Asia-Pacific Gateway



Dr Kerri-Ann JONES
Assistant Secretary of State
for Oceans and International
Environmental and Scientific
Affairs



Maria DAMAKI
Commissioner for Maritime
Affairs and Fisheries

APPENDIX 10: THE ATLANTIC A SHARED RESOURCE – WORKSHOP REPORT

The Atlantic – A Shared Resource, Galway, 23rd May 2013 Report of the scientific workshop

On 23rd May 2013, marine scientists from the United States of America, Canada and Europe gathered in Galway, Ireland to identify the key scientific and societal challenges that need to be addressed in order to deliver (by 2020) a predictive capacity [both short term predictions and long term forecasts] for the major risks and changes in the dynamics of the North Atlantic as outlined in the vision statement below.

In identifying key challenges, the participants support the view that a North Atlantic Ocean Observation and Forecasting Capacity is essential to address key scientific, environmental, governance, policy and societal challenges of mutual concern and that cooperation would result in mutual benefits including better ecosystem assessments and forecasts, a deeper understanding of vulnerabilities and risks including those related to global climate change and climate impacts (e.g. sea-level rise, shifts in biogeography of commercially important species, etc) and other anthropogenic impacts including those related to resource exploitation (e.g. fisheries, deep sea mining, etc). Furthermore these activities will create new opportunities for job creation and economic growth, referred to in Europe as Blue Growth.

Vision Statement:

Through seamlessly integrating science and technology and improved collaboration between Canada, the European Union and the United States of America, our common objectives are to have by 2020:

An enhanced predictive capacity for the major risks and changes in the dynamics of the North Atlantic Ocean, its ecology, circulation system, interactions between the Atlantic and Arctic as well as ocean-atmosphere connections.

Based on existing and new capability, to have implemented a fit for purpose North Atlantic multi-platform ocean observing and forecasting system driven by science and societal needs and providing real time data and long term time series.

Mapped the Atlantic to underpin the accuracy of predictive models and forecasts and identified key tectonic /volcanic sites, as well as ecologically and economically important (and potentially undiscovered) seafloor and water column habitats.

Enabled the safest operational and risk management environment for operation at sea as well as for offshore and coastal users.

Forged greatly strengthened collaborative operational and scientific undertakings of mutual benefit and integrated these activities seamlessly across the North Atlantic between Europe and the North Americas.

Supported the development, through public, academic and private sector partnerships (e.g. clusters of innovation), of a range of new and innovative knowledge based and globally traded products and services, including novel observing technologies and innovation to promote new opportunities for sustainable socio-economic growth.

Revolutionised our understanding of the role of the North Atlantic in earth system dynamics, especially with respect to interactions with coastal zones and with the Arctic, Central Atlantic and Mediterranean.

Promoted ocean literacy, engaged with societal stakeholders (including citizen participation) and inspired and educated the next generation of trans-disciplinary scientists and engineers.

The Atlantic – A Shared Resource Workshop through presentations and discussion, identified a broad suite of challenges ranging through those related to the acquisition of the knowledge required to assess and respond to climate change impacts; implement an ecosystem approach; reduce uncertainty generated by observations and modelling; improve safety at sea, human health and well-being; the identification and use of new and emerging technologies; standardisation of sampling protocols; data access and use (and reuse) and the harmonisation of habitat classification systems. This wealth of data will be retained to support and inform the more in-depth studies and initiatives that must follow if we are to realise the vision of an integrated North Atlantic Ocean Observation and Forecasting System.

Key Challenges:

- > The integration of historical and paleo data, ocean observing and forecasting systems to provide better indicators of past, current and future environmental status.
- > Advance existing technologies (including approaches emerging from other disciplines), ecosystem and biogeochemical models, as well as developing empirical and modelling approaches to enable the quantification of evolutionary change in ocean systems.
- > Quantify the effects of multiple stressors on biogeochemistry, organisms and ecosystems.
- > Proactively translate knowledge, based on an ecosystem approach, to improve the stewardship of natural resources.
- > Mainstreaming of cost effective chemical and biological (including genomic) sensors as well as robotic and autonomous systems for ocean observation.
- > Evaluate the role of biodiversity in the health and functioning of ecosystems and the maintenance of ecosystem services.
- > Determine the mechanisms initiating hazardous events and identify indicators to improve the forecast of the spatial-temporal occurrence of these events.
- > Develop and maintain the capacity for rapid response to unanticipated and episodic events that require immediate scientific investigation to advance knowledge.
- > Build an industry, academia and government cross sector vision of a shared data collection, management and information infrastructure.
- > Engage with existing international networks (e.g. GEO – Blue Planet Initiative) to set the Atlantic in a global context.
- > Standardisation of sampling and observation techniques, common data standards and harmonised habitat classification systems to facilitate open data access and the use and reuse of data.

In response to the question posed to the Workshop “Are current Ocean Observation Systems fit for purpose to address key societal

challenges? The consensus opinion was that the current patchwork of ocean and coastal observing capabilities, though providing a basis for a fit for purpose ocean and coastal observation and forecasting infrastructure, lacks the required spatial and temporal coverage, inter-operability and the full range of chemical and biological sensors needed to realise and deliver the shared vision.

Recommendations

Rapid progress towards this vision can be achieved by integrating current programmes and infrastructures on a trans-Atlantic basis. In this context, we recommend a series of Trans-Atlantic Workshops to:

- > Elaborate and distil the many suggestions put forward at the Conference and further refine a set of key Atlantic / Arctic scientific challenges that would benefit from a joint approach.
- > Evaluate the basis for and feasibility of a jointly funded and competitive research programme to address North Atlantic research issues of mutual interest.
- > Undertake a more detailed review of existing North Atlantic ocean observation capacities, address identified gaps and challenges and deliver the required predictive capacity by 2020.
- > Establish mechanisms to promote trans-Atlantic data sharing, using as a test case seabed mapping.
- > Make recommendations on the optimum approach to habitat mapping such that mapping initiatives, carried out separately or jointly, can be seamlessly merged. This will include a review of existing and emerging mapping techniques, common standards and habitat classification systems
- > Examine options for trans-Atlantic joint actions on ocean literacy and engagement with societal stakeholders.

Session Reports:

Session 3.1. Sea and Seabed Habitat Mapping

- > Establish a mechanism to examine and expand communications to bring together existing seabed and seabed habitat mapping groups and develop procedures to (a) map national territories and (b) the high seas, possibly on a cost shared basis.
- > Complete a preliminary phase of mapping the Atlantic seafloor (multibeam, backscatter and bathymetry). This mapping will underpin the accuracy of prediction models and forecasts, the accuracy of their outputs and identify areas requiring secondary phase (follow-up) mapping to include key tectonic / volcanic sites, critical habitats, seabed and water column habitats and time series mapping.
- > Establish universal standards/classification systems for seabed and seabed habitat mapping.

Session 3.2: Atlantic-Arctic trans boundary issues

- > Identify and quantify two-way Arctic-Atlantic physical, chemical and biological interactions.
- > Enhance capacity for year round multidisciplinary observations.
- > Incorporate key Arctic processes, such as sea ice in North Atlantic/ Arctic prediction systems

Session 3.3: Operational Oceanography /Forecasting

- > Operations are continually evolving so maintaining existing observation networks and associated modelling capacity (system) is critical – do not allow decline to creep in. New observational technologies should not lead to a decline in existing capabilities but should be continually assessed for their fitness for purpose.
- > Operational oceanography needs to develop and evolve. Research and innovation are continually needed to improve output, improve efficiency and lower costs of 'input' and extend capacity to new domains, for example ecosystem services.
- > A mechanism to codevelop and design future operational oceanographic services is needed. Collaboration using established fora has proven valuable in the global context (e.g. climate).
- > An Alliance of operational oceanographic services would ensure more coherent and effective monitoring and forecasting of the North Atlantic.
- > A goal over the next ten years is to improve the responsive capability (e.g. ability to deal with crises such as Deep Water Horizon).

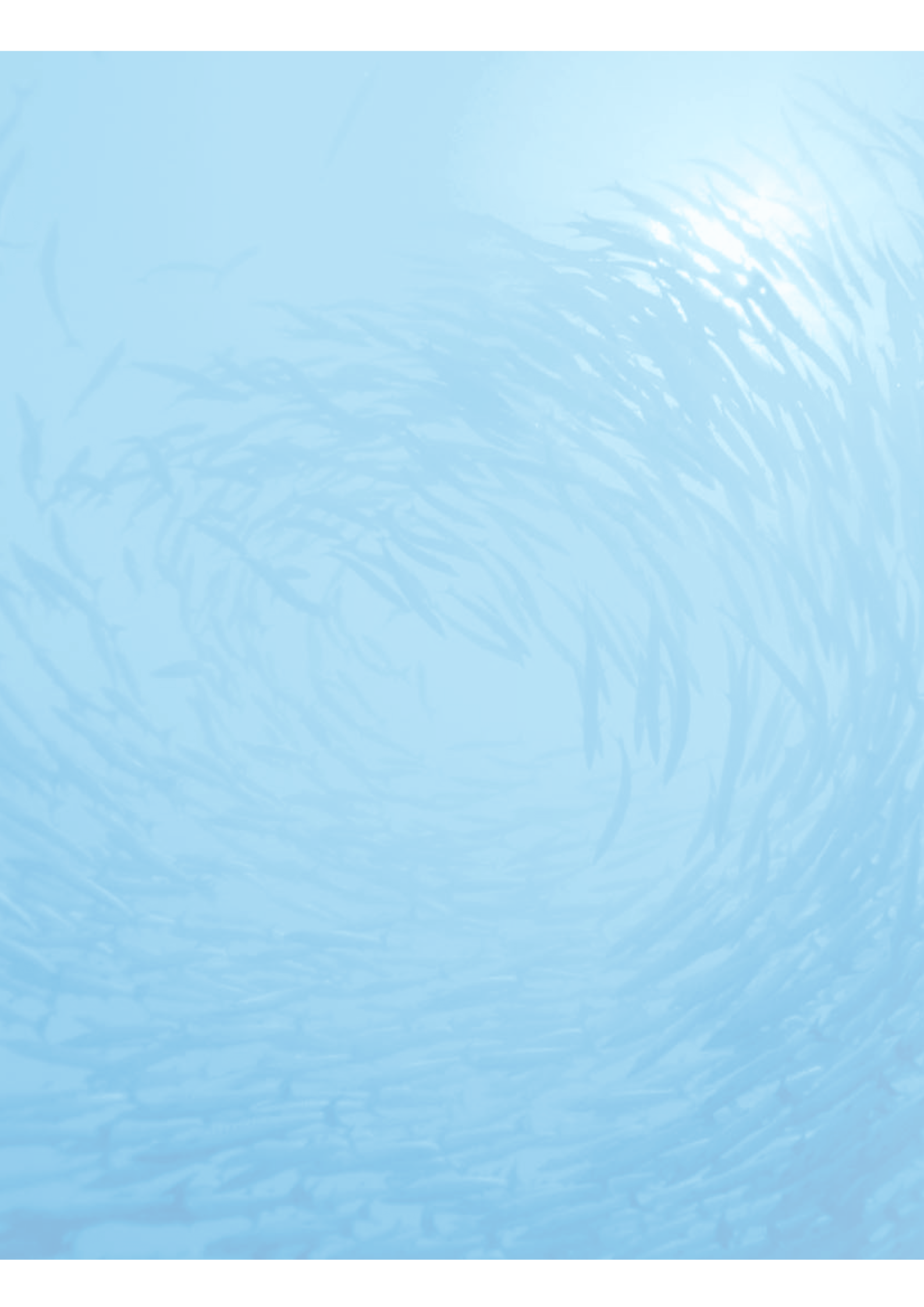
Session 3.4. Current Ocean Observing Systems

- > Improved deployment of human resources: While our technological resources are considerable and rapidly improving, we need to improve our abilities to work across disciplines and with the aid of local/user communities. Our improved ability to make observational data rapidly available has been an important step forward, but to take synthesis and understanding to the next level, we also need better integration across disciplines.
- > Adaptive Rapid Response: Responding rapidly to disasters or other episodic events requires flexible funding opportunities (e.g., the U.S. National Science Foundation's RAPID awards program) and also networks of responders ready to deploy quickly. Planning for the unexpected should include considering how models could be quickly converted to apply to systems other than the ones for which they were developed.
- > Prioritization: The observing community as a whole needs to better confront the difficult task of prioritizing observations to ensure that –in the long term–the most critical observations are made. A baseline structure should be established for the most critical observations. Designed properly, the structure could serve as a magnet for process studies.

Glossary of Abbreviations

AA	Appropriate Assessments	FEAS	Fisheries Ecosystem Advisory Services (of the Marine Institute)
ACA	Association of chartered accountants	FIRM	Food Industry Research Measure
ACEobs	Atlantic Centre for Earth Observations	FIX03	linking EU activities on fixed point marine observations
ACRUNET	Atlantic Crab Resource Network	FP7	Seventh Framework Programme
AMS	Advanced Mapping Services	FSAI	Food Safety Authority of Ireland
AMTP	Advanced Marine Technology Programme		
ASIMUTH	Applied Simulations and Integrated Modelling for the Understanding of Toxic and Harmful Algal Blooms	GEO	Group on Earth Observations
ASTOX	Azaspiracids Toxicological Evaluation, Test Methods and Identification of the Source Organism	GEPETO	Fisheries Management & Transnational Objectives
		GMIT	Galway-Mayo Institute of Technology
		GSI	Geological Survey of Ireland
BA	Bachelor of the Arts		
BENTHIS	Benthic Ecosystems Fisheries Impact Study	HAB	Harmful Algal Blooms
BSc	Bachelor of Science	HEA	Higher Education Authority
BSc Arch	Bachelor of Science – Architecture	HEAnet	Ireland National Education and Research Network
BSH	Bundesamt für Seeschifffahrt und Hydrographie – German Federal Maritime and Hydrographic Agency		
CEO	Chief Executive Officer	ICES	International Council for the Exploration of the Seas
CFP	Common Fisheries Policy	ICT	Information Communications Technology
CITES	Convention of International Trade in Endangered Species	ILV	Irish Lights Vessel
CoFASP	Fisheries aquaculture and seafood processing network	IMDO	Irish Maritime Development Office (of the Marine Institute)
CoOPEUS	Cooperation between the US and the EU in the field of environmental research infrastructures	IMTE	Irish Maritime Transport Economist
CPMR	Conference of Peripheral Maritime Regions	INAB	Irish National Accreditation Board
		INFOMAR	Integrated Mapping for the Sustainable Development of Ireland's Marine Resources
		INIS	Ireland Northern Ireland Scottish
DAFM	Department of Agriculture, Food and Marine	INTERREG	Inter-Regional Co-operation Programme
DAHG	Department of Arts, Heritage and Gaeltacht	IS&D	Information Services and Development
DAMARA	Scientific Support for the Development of a Management Plan in the Celtic Sea	ISEAS	Irish Seafarers Educational Assistance Scheme
DCENR	Department of Communications and Environment and Natural Resources	ISGEI	International Smart Ocean Graduate Enterprise Initiative
DCF	Data Collection Framework	ISSC	Irish Shipping Service Centre
DCU	Dublin City University		
DG Mare	Directorate General for Maritime Affairs and Fisheries	JERICO	Towards a joint European research infrastructure network for coastal observatories
DOMMRS	Daithi O'Murchu Marine Research Station		
DTTAS	Department of Transport, Tourism and Sport	MA	Master of Arts
		MCG	Marine Coordination Group
ECOKNOWS	Effective Use of Ecosystem and Biological Knowledge in Fisheries	MEFS	Marine Environment and Food Safety Services (of the Marine Institute)
EIA	Environmental Impact Assessment	MESH	Mapping European Seabed Habitats
EMEA	Europe Middle East and Africa	MPlan	Masters in Planning and Sustainable Development
EMSO	European Multidisciplinary Seafloor Observatory	MSc	Master of Science
EPA	Environmental Protection Agency	MSFD	Marine Strategy Framework Directive
ERIC	European Research Infrastructure Consortium	MLVC	Marine Licence Vetting Committee
ESA	European Space Agency	MRIAI	Member of the Royal Institute of the Architects of Ireland
ETP	Excellence Through People Accreditation	MYFISH	Maximum Sustainable Yield
EU	European Union		
EUROBASIN	Integrated Project on Basin – Scale Analysis	NATURA	NATURA 2000 sites are protected for flora and fauna of European importance
		NDP	National Development Programme

NOC	National Oceanographic Centre
NPWS	National Parks and Wildlife Service
NSAI	National Standards Authority of Ireland
NUIG	National University of Ireland, Galway
NYSE:SWI	SolarWinds Inc
OJEU	Official Journal of the European Union
OsHV-1 μ var	Herpes Virus
OSPAR	Oslo and Paris Convention (1992)
OSIS	Ocean Science and Information Services (of the Marine Institute)
PhD	Doctor of Philosophy
PMDS	Performance Management Development Systems
PWC	Price Waterhouse Coopers
R&D	Research and Development
RAC	Regional Advisory Council
RIAN	National Open Access portal for Irish Research Publications
RIBA	Royal Institute of British Architects
ROV	Remotely Operated Vehicle
RV	Research Vessel
RVops	Research Vessel Operations
SACs	Special Areas of Conservation
SBM	Single Bay Management
SEAI	Sustainable Energy Authority of Ireland
SECA	Sulphur Emission Control Area
SFI	Science Foundation Ireland
SFPA	Sea Fisheries Protection Authority
SIDERI	Strengthening International Dimension of Euro-Argo
SMART	Strategic Marine Alliance for Research and Training
SME	Small to Medium Sized Enterprise
SPA	Special Protection Areas
SSCE	Standing Scientific Committees for Eel
SSCS	Standing Scientific Committees for Salmon
STAMAR	Showcasing Technology Applicable to Maritimes SMEs
STECF	Scientific, Technical and Economic Committee on Fisheries
STOCKMAN	Application for monitoring the pelagic and demersal fish stocks in Irish waters
TD	Teachta Dála
TEU	Twenty Foot Equivalent Unit which denotes one container unit
UK	United Kingdom
US	United States
USA	United States of America



Financial Statements

Report of the Comptroller and Auditor General

For Presentation to the Houses of the Oireachtas

I have audited the financial statements of the Marine Institute for the year ended 31 December 2013 under the Marine Institute Act 1991. The financial statements, which have been prepared under the accounting policies set out therein, comprise the accounting policies, the income and expenditure account, the statement of total recognised gains and losses, the balance sheet, the cash flow statement and the related notes. The financial statements have been prepared in the form prescribed under Section 12 of the Act, and in accordance with generally accepted accounting practice in Ireland.

Responsibilities of the Members of the Board

The Board is responsible for the preparation of the financial statements, for ensuring that they give a true and fair view of the state of the Institute's affairs and of its income and expenditure, and for ensuring the regularity of transactions.

Responsibilities of the Comptroller and Auditor General

My responsibility is to audit the financial statements and report on them in accordance with applicable law.

My audit is conducted by reference to the special considerations which attach to State bodies in relation to their management and operation.

My audit is carried out in accordance with the International Standards on Auditing (UK and Ireland) and in compliance with the Auditing Practices Board's Ethical Standards for Auditors.

Scope of Audit of the Financial Statements

An audit involves obtaining evidence about the amounts and disclosures in the financial statements, sufficient to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or error. This includes an assessment of

- > whether the accounting policies are appropriate to the Institute's circumstances, and have been consistently applied and adequately disclosed
- > the reasonableness of significant accounting estimates made in the preparation of the financial statements, and
- > the overall presentation of the financial statements.

I also seek to obtain evidence about the regularity of financial transactions in the course of audit.

In addition, I read the Institute's annual report to identify material inconsistencies with the audited financial statements. If I become aware of any apparent material misstatements or inconsistencies, I consider the implications for my report.

Opinion on the Financial Statements

In my opinion, the financial statements, which have been properly prepared in accordance with generally accepted accounting practice in Ireland, give a true and fair view of the state of the Institute's affairs at 31 December 2013 and of its income and expenditure for the year then ended.

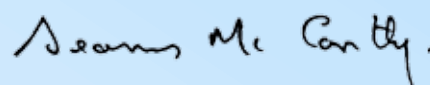
In my opinion, proper books of account have been kept by the Institute. The financial statements are in agreement with the books of account.

Matters on which I report by exception

I report by exception if

- > I have not received all the information and explanations I required for my audit, or
- > my audit noted any material instance where money has not been applied for the purposes intended or where the transactions did not conform to the authorities governing them, or
- > the information given in the Institute's annual report is not consistent with the financial statements, or
- > the statement on internal financial control does not reflect the Institute's compliance with the Code of Practice for the Governance of State Bodies, or
- > I find there are other material matters relating to the manner in which public business has been conducted.

I have nothing to report in regard to those matters upon which reporting is by exception.



Seamus McCarthy

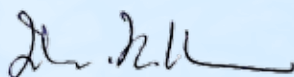
Comptroller and Auditor General
18th December 2014

Statement of Responsibilities of the Board

Section 12 of the Marine Institute Act, 1991, requires the Institute to prepare financial statements in such a form as may be

approved by the Minister for Agriculture, Food and the Marine. In preparing those financial statements, the Board of the Institute is required to:

- Select suitable accounting policies and apply them consistently;
- Make judgements and estimates that are reasonable and prudent;
- State whether applicable accounting standards have been followed, subject to any material departures disclosed and explained in the financial statements;
- Prepare the financial statements on a going concern basis unless it is inappropriate to presume that the Institute will continue in operation.



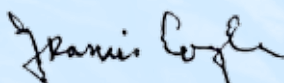
Mr John Killeen

Board Member

9th December 2014

The Institute is responsible for keeping proper books of account which disclose with reasonable accuracy at any time the financial position of the Institute and which enable it to ensure that the financial statements comply with Section 12(1) of the Act.

The Institute is also responsible for safeguarding its assets and for taking reasonable steps for the prevention and detection of fraud and other irregularities.



Mr Francis Coyle

Board Member

9th December 2014

Statement on Internal Financial Control

On behalf of the Board of the Marine Institute I acknowledge our responsibility for ensuring that an effective system of internal financial control is maintained and operated.

The system can only provide reasonable and not absolute assurance that assets are safeguarded, transactions authorised and properly recorded, and that material errors or irregularities are either prevented or would be detected in a timely period.

The Board has taken steps to ensure an appropriate control environment is in place by:

- > Clearly defining management responsibilities and powers ;
- > Establishing formal procedures for monitoring the activities and safeguarding the assets of the organisation ;
- > Developing a culture of accountability across all levels of the organisation.

A review of risk management was carried out in 2013 which included:

- > An evaluation of the appropriateness and effectiveness of the existing policy and procedures in identifying and evaluating business risks;
- > The identification of the nature, extent and financial implication of risks facing the body including the extent and categories which it regards as acceptable;
- > The assessment of the likelihood and impacts of identified risks occurring;
- > An undertaking that the risk framework addresses the requirements of the Code of Practice for the Governance of State Bodies (2009)

The system of internal financial control is based on a framework of regular management information, administration procedures including segregation of duties, and a system of delegation and accountability.

In particular it includes:

- > A comprehensive budgeting system with an annual budget which is reviewed and agreed by the Board;
- > Regular reviews by the Board of periodic and annual financial reports which indicate financial performance against forecasts;
- > Setting targets to measure financial and other performance;
- > Formal project management disciplines.

The Marine Institute has established an internal audit function that operates in accordance with the Framework Code of Best Practice set out in the Code of Practice on the Governance of State Bodies. The work of internal audit is informed by analysis of the risk to which the body is exposed, and annual internal audit plans are based on this analysis. The analysis of risk and the internal audit plan for 2013 was endorsed by the Audit Committee and approved by the Board. The Audit Committee has received the report of internal audit activity in 2013, and this was presented to the Board. The report included the Internal Auditor's opinion on the adequacy and effectiveness of the system of internal financial control. The Board's monitoring and review of the effectiveness of the system of internal financial control is informed by the work of the internal auditor, the audit committee which oversees the work of the internal auditor, the executive managers within the Marine Institute who have responsibility for the development and maintenance of the financial control framework, and comments made by the Comptroller and Auditor General in his management letter.

The Board reviewed and approved the effectiveness of the system of internal financial controls for 2013.

On behalf of the Board:



Mr John Killeen

Chairman

9th December 2014

Accounting Policies

Year Ended 31 December 2013

1. General

The financial statements have been prepared under the accruals method of accounting, except as stated below, and in accordance with generally accepted accounting principles. Financial reporting standards recommended by the recognised accounting bodies are adopted as they become operative.

2. Income

Income arising from Oireachtas Grant in Aid is recognised on a cash receipts basis.

3. Deferred Income

Income and advance payments received from EU and other contract research projects is treated as deferred income where the research project is ongoing and there is future expenditure to charge against the project. This income is recognised in the accounting period in which the related expenditure is charged. On completion of a project any unutilised balance on the deferred income account for that project is also brought to account as income.

4. Fixed Assets and Depreciation

Depreciation is provided for on a straight line basis at rates estimated to reduce the assets to their realisable value by the end of their expected lives. The rates in use are as follows:

Buildings	2%
Plant and Equipment	25%
Fixtures and Fittings	25%
Computers	33%
Research Vessel	4%
Research Vessel Equipment	25%
Research Vessel Refit	20%
Motor Vehicles	20%

Land is not depreciated

5. Leased Assets

Payments under operating leases (Note17) are charged to the income and expenditure account in the year to which they relate.

6. Capital Account

The Capital Account represents the unamortised value of income applied for capital purposes.

7. Foreign Currencies

Monetary assets and liabilities denominated in foreign currencies are translated at the exchange rates ruling at the Balance Sheet date. Revenues and costs are translated at the exchange rates ruling at the dates of the underlying transactions.

8. Marine Research Technology Development Innovation Projects (RTDI)

The Marine Institute enters into commitments in respect of contracts awarded for Marine RTDI projects. Expenditure is charged in the financial statements on the basis of initial payments made on signing of the project contract, an interim payment may be made subject to satisfactory performance and further payments are charged on receipt and verification of claims in respect of work completed. Costs incurred by the Institute in the administration of RTDI projects are funded by the National Development Plan (NDP) and charged to the financial statements as they are incurred.

9. Deferred Funding Asset for Pensions

The Marine Institute operates defined benefit pension schemes which are funded annually on a pay as you go basis from monies available to it, including monies provided by the Department of Agriculture, Food and the Marine.

Pension costs reflect pension benefits earned by employees in the period and are shown net of staff pension contributions which are remitted to the Department of Agriculture, Food and the Marine. An amount corresponding to the pension charge is recognised as income to the extent that it is recoverable, and offset by grants received in the year to discharge pension payments.

Actuarial gains or losses arising on scheme liabilities are reflected in the Statement of Recognised Gains and Losses and a corresponding adjustment is recognised in the amount recoverable from the Department of Agriculture, Food and the Marine.

Pension liabilities represent the present value of future pension payments earned by staff to date. Deferred pension funding represents the corresponding asset to be recovered in future periods from the Department of Agriculture, Food and the Marine.

Income and Expenditure Account

Year Ended 31 December 2013

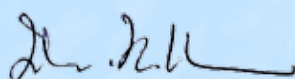
		2013		2012	
	Note	€'000	€'000	€'000	€'000
Income					
Oireachtas Grants	2		22,916		23,523
Other Income	3		12,764		11,882
Net Deferred Funding For Pensions	16		3,038		2,857
			38,718		38,262
Transfer (to)/from Capital Account	10		1,364		738
			40,082		39,000
Expenditure					
Corporate Services	4	4,419		4,488	
Marine Environment and Food Safety Services	5	6,798		7,665	
Fisheries Ecosystem Advisory Services	6	4,786		4,815	
Ocean Science and Information Services	7	12,524		11,900	
Irish Maritime Development Office	8	665		895	
Marine RTDI and SSTI Programme	12	7,750		6,772	
Pensions Costs	16	2,966		2,878	
Refund to Exchequer		0		270	
Total Expenditure	13		39,908		39,683
Surplus (Deficit)/ for the year			174	(683)	
Surplus at 1 January			1,781	2,464	
Surplus at 31 December			1,955	1,781	

Statement of Total Recognised Gains and Losses

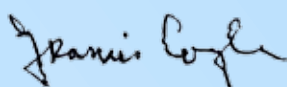
Surplus/(Deficit) for the year	174	(683)
Actuarial Gains/(Losses) on Pension Scheme Liabilities	2,339	1,360
Changes in Assumptions		
Adjustment to Deferred Pension Funding	(2,339)	(1,360)
Total Recognised Gains and Losses for the year	174	(683)

The results for the year relate to continuing operations.

The Statement of Accounting Policies and Notes 1 – 22 form part of these financial statements.



Mr John Killeen
Board Member
9th December 2014



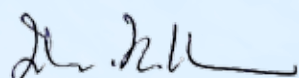
Mr Francis Coyle
Board Member
9th December 2014

Balance Sheet

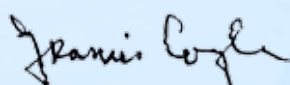
Year Ended 31 December 2013

		2013	2012
	Note	€'000	€'000
Fixed Assets	11	21,188	22,552
Current Assets			
Debtors and Prepayments	14	3,966	3,045
Banks and Cash		458	1,211
		4,424	4,256
Current Liabilities			
Creditors and Accruals	15	2,469	2,475
Net Current Assets		1,955	-
Total Assets Less Current Liabilities before Pensions			
Deferred Pension Funding		28,200	27,501
Pension Liabilities		(28,200)	(27,501)
Total Assets less Current Liabilities		23,143	24,333
Financed By:			
Capital Account	10	21,188	22,552
Income and Expenditure Account		1,955	1,781
		23,143	24,333

The Statement of Accounting Policies and Notes 1 – 22 form part of these financial statements.



Mr John Killeen
Board Member
9th December 2014



Mr Francis Coyle
Board Member
9th December 2014

Cash Flow Statement

for the Year Ended 31 December 2013

Reconciliation of operating surplus/(deficit) to net cash flow from operating activities			
	Note	2013 €'000	2012 €'000
Surplus/(Deficit) per Income and Expenditure Account		174	(683)
Interest received		0	0
Transfer to/(from) Capital Account	10	(1,364)	(738)
Depreciation	11	3,726	2,906
(Increase) /Decrease in Debtors and Prepayments	14	(921)	3,515
Increase /(Decrease) in Creditors and Accruals	15	(6)	(2,217)
Net cash inflow from operating activities		1,609	2,783

Cash Flow Statement			
		2013 €'000	2012 €'000
Net cash inflow from operating activities		1,609	2,783
Returns on investments and servicing of finance			
Interest received		0	0
Net capital expenditure			
Acquisition of fixed assets	11	(2,362)	(2,168)
Increase / (Decrease) in cash		(753)	615

Reconciliation of net cash flow to movement in net funds			
		2013 €'000	2012 €'000
Increase / (Decrease) in cash		(753)	615
Net funds at 1 January		1,211	596
Net funds at 31 December		458	1,211

Notes to Financial Statements

Year Ended 31 December 2013

1. General

The Marine Institute was established on 30 October, 1992 in accordance with the provisions of the Marine Institute Act, 1991,

“to undertake, to co-ordinate, to promote and to assist in marine research and development and to provide such services related to marine research and development, that in the opinion of the Institute will promote economic development and create employment and protect the marine environment”.

The Financial Statements cover the Year Ended 31 December 2013

2. Grant in Aid

	€'000	€'000	€'000	€'000
Current purposes				
Marine Institute – Vote 30, Subhead A.7	13,920		14,449	
Less Superannuation contributions repayable*	(433)	13,487	(421)	14,028
Capital purposes				
National Seabed Survey – Vote 29, Subhead D.7	1,404		1,495	
Marine Institute – Vote 30, Subhead A.7	1,650		1,500	
Beaufort (Note 12) – Vote 30, Subhead A.7	2,167		2,167	
Research and Technical Development Infrastructure (RTDI) (Note 12) – Vote 30, Subhead A.7	4,208	9,429	4,333	9,495
		22,916		23,523

* By agreement with the Department of Agriculture, Food and the Marine this amount is refundable in respect of employee pension contributions.

Notes to Financial Statements

Year Ended 31 December 2013

3. Other Income

	2013		2012	
	€'000	€'000	€'000	€'000
EU Contract Research				
Data Collection Framework (see note below)	3,340		2,841	
Other	800		1,258	
		4,140		4,099
Other Income				
Research Vessel Charterage	2,028		2,542	
Databuoy – Department of Transport	418		370	
Marine Strategy Framework Directive (DECLG)	479		996	
Natura (DAFM and DECLG)	333		571	
Water Framework Directive funded by EPA	940		956	
Marine NDP project co-funded by EPA	107		0	
Marine NDP project co-funded by Teagasc	893		288	
Wave Energy Test Sites Funded by SEAI	1,085		766	
Galway Bay Cable Project – Funded by HEA	300		0	
Sundry and Other Contract Income	2,041	8,624	1,294	7,783
TOTAL		12,764		11,882

The Data Collection Framework is a European wide framework for the collection, management and use of data in the fisheries sector and support for scientific advice regarding the Common Fisheries Policy.

4. Corporate Services

	2013	2012
	€'000	€'000
Wages and salaries	1,232	1,209
Administration	2,713	3,014
Depreciation	474	265
TOTAL	4,419	4,488

Administration costs include an audit fee of €19,270 in 2013 (2012: €19,270)

Notes to Financial Statements

Year Ended 31 December 2013

5. Marine Environment and Food Safety Services

	2013	2012
	€'000	€'000
Wages and Salaries: Core staff	2,749	2,736
EU Contract Staff	42	78
	2,791	2,814
Research & Development Programmes	3,749	4,595
Depreciation	258	256
TOTAL	6,798	7,665

6. Fisheries Ecosystems Advisory Services

	2013	2012
	€'000	€'000
Wages and Salaries: Core Staff	1,913	1,926
EU Contract Staff	1,412	1,378
	3,325	3,304
Research & Development Programmes	1,383	1,401
Depreciation	78	110
TOTAL	4,786	4,815

7. Ocean Science and Information Services

	2013	2012
	€'000	€'000
Wages and Salaries	1,289	1,339
Administration & Development Programmes	8,320	8,288
Depreciation	2,915	2,273
TOTAL	12,524	11,900

The total running costs of the Research Vessels and the ROV (remote operating vehicle) in 2013 was €7.520m (2012: €8.060m). €7,179m of this expenditure has been recognised in the Income and Expenditure account. €4,679m is charged to the Ocean Science and Information Services (note 7) and the remaining €2.5m is charged to the Marine RTDI and SSTI Programme (note 12). €0.341m relates to expenditure which has been capitalised and is included in fixed assets (note 11).

Notes to Financial Statements

Year Ended 31 December 2013

8. Irish Maritime Development Office

	2013	2012
	€'000	€'000
Wages and Salaries	230	326
Administration & Development Programmes	435	569
Depreciation		0
TOTAL	665	895

9. Salary Costs

	2013	2012
	€'000	€'000
Wages and Salaries: Core Staff	134 7,414	136 7,538
Pensioners and Pension Costs	15 2,966	14 2,878
Contract Staff and other payroll costs	43 3,073	47 3,104
	192 13,453	197 13,520

Pension related deductions of €0.433m were made from salaries and remitted to the Department of Agriculture, Food and the Marine.

10. Capital Account

	2013	2012
	€'000	€'000
Balance at 1 January	22,552	23,290
Transfer (to) /from Income and Expenditure Account		
Capital funding	2,362	2,168
Amortisation in line with asset depreciation	(3,726) (1,364)	(2,906) (738)
Balance at 31 December	21,188	22,552

Notes to Financial Statements

Year Ended 31 December 2013

11. Fixed Assets

Fixed Assets as stated in the financial statements are made up as follows:

	Land & Buildings	Research Vessels	Vessel Equipment	Fixtures & Fittings	Computers	Motor Vehicles	TOTAL
	€'000	€'000	€'000	€'000	€'000	€'000	€'000

Cost or Valuation

Balance at 1 January 2013	3,743	32,391	4,127	20,330	8,039	358	68,988
Additions at cost		140	251	1,559	416	14	2,380
Disposals at Cost						(18)	(18)
Cost at 31 December 2013	3,743	32,531	4,378	21,889	8,455	354	71,350

Depreciation

Balance at 1 January 2013	926	14,686	3,656	19,048	7,820	300	46,436
Charge for the year	75	1,918	296	1,141	282	32	3,744
Disposal at Cost						(18)	(18)
Balance at 31 December 2013	1,001	16,604	3,952	20,189	8,102	314	50,162

Net Book Value

At 31 December 2013	2,742	15,927	426	1,700	353	40	21,188
At 31 December 2012	2,817	17,705	471	1,282	219	58	22,552

The Marine Institute main premises are at Rinville, Oranmore, County Galway. This building is owned by the OPW. No rent is paid to the OPW for these premises.

Notes to Financial Statements

Year Ended 31 December 2013

12. Marine NDP (2000–2006), Beaufort and Marine NDP (2007–2013)

The total funding and amounts applied in 2013 was as follows:

	2013	2012
	€'000	€'000
	NDP	NDP
	2007–2013	2007–2013
Oireachtas Income (Note 2)	6,375	6,500
Other Income (Note 3)	1,000	288
Total Income	7,375	6,788
Expenditure:		
Amounts paid to third parties	6,659	5,546
Amounts paid to the Marine Institute	913	919
Administration	178	307
Total Programme Expenditure	7,750	6,772
(Deficit)/Surplus in year	(375)	16

Marine NDP 2007–'13

Under the NDP Marine Research Sub-Programme 2007–2013, investment in marine research over the period 2007–2013 is targeted at meeting objectives, research activities and outputs of Sea Change, the national marine knowledge, research and innovation strategy. Funding is targeted at the Research Measures and Programmes of the strategy via a range of mechanisms, including competitive calls for research proposals (project-based awards, desk studies, PhDs, Post-Docs etc) and tendering for the provision of infrastructure/services. A total of 142 projects have been supported up to the end of 2013 under the Marine Research Sub-Programme of the NDP with 80 of these projects still ongoing.

The total expenditure under the Marine Research Sub-Programme up to 31 Dec 2013 was €57.5m. Commitments at 31 Dec 2013 were €12.6m.

Research Projects awarded are subject to contract which specifies that an initial payment will be made on signing of the contract; an interim payment may be made subject to satisfactory performance with final payment made on receipt of and verification of claims. Expenditure is charged in the financial statements in accordance with Accounting Policy 8.

At 31 December 2013 payments were outstanding on amounts charged to the financial statements as follows (note 15).

	2013	2012
	€'000	€'000
Amounts Outstanding	218	0

At 31st December 2013 commitments entered into but not yet charged to the financial statements in respect of RTDI projects were €12.6m with the following breakdown.

	Total
	€'000
Commitments as at 01 January 2013	14,233
Committed in 2013	6,147
Decommitted in 2013	(67)
Paid in 2013	(7,750)
Commitments as at 31 December 2013	12,563

Notes to Financial Statements

Year Ended 31 December 2013

13. Expenditure

	2013	2012
	€'000	€'000
Payroll Costs	10,330	10,496
Pension Costs	2,966	2,878
Board Costs	63	39
Annual Audit Fee	19	19
Insurance	219	240
Rent, Rates and Service Charges	328	368
Facility Costs	1,657	1,766
Telephone and Data Communications	170	211
IT Costs	704	627
Laboratory and Field Costs	786	878
Other Admin Costs	918	1,687
Travelling Expenses	867	917
Statutory Testing, Research and Surveys	3,710	4,195
Marine NDP (2007–2013)	5,250	4,272
NDP Shiptime Programme	2,500	2,500
Vessel Operation Costs	4,679	5,394
Other Sundry Equipment	69	131
Hire of Equipment and Vessels	947	159
Depreciation (Note 11)	3,726	2,906
Total Expenditure Per Income and Expenditure Account	39,908	39,683

The figures in the note excludes capital expenditure of €2.38m.

Foreign travel costs included under travelling expenses in 2013 amounted to €338,492.

14. Debtors and Prepayments

	2013	2012
	€'000	€'000
Trade Debtors	359	140
Contract Income	2,961	2,604
Prepayments	646	301
	3,966	3,045

Notes to Financial Statements

Year Ended 31 December 2013

15. Creditors and Accruals

	2013	2012
	€'000	€'000
Trade Creditors	1,017	981
Deferred Income	856	837
RTDI Accrual (Note 12)	218	0
Accruals	292	565
Payroll and Revenue Accruals	86	92
	2,469	2,475

16. Superannuation Scheme and Spouse & Children's Contributory Pension Scheme

The Marine Institute is a statutory State agency, established under section 3(1) of the Marine Institute Act, 1991 (No. 2 of 1991). Section 9(1) of the Act provides that the Institute shall make schemes for the granting of superannuation benefits to and in respect of staff members, subject to Ministerial approval. Two such approved schemes – the Marine Institute Staff Superannuation Scheme 1998 and the Marine Institute Spouses' and Children's Contributory Pension Scheme 1998 – are being operated by the Institute. The former scheme provides retirement benefits (lump sum and pension) to staff members, and death gratuity benefits in respect of death in service. The latter scheme provides pension benefits for the surviving spouses and dependant children of deceased members. Normal retirement age is a member's 65th birthday. Both schemes are defined benefit superannuation schemes. Staff Superannuation contributions are paid over to the Department of Agriculture, Food and the Marine.

In common with the generality of public service superannuation schemes, no separate fund is maintained, or assets held, to finance the payment of pensions and gratuities.

For the purposes of reporting in accordance with Financial Reporting Standard 17 (revised) – Retirement Benefits, the Institute has been advised by a qualified actuary. A valuation has been prepared by the actuary in order to assess the liabilities of the superannuation schemes at 31 December 2013.

The major actuarial assumptions are as follows:

	2013	2012	2011
Inflation rate increase (a)	2% per annum	2% per annum	2% per annum
Salary rate increase	4% per annum	4% per annum	4% per annum
Pension rate increase	4% per annum	4% per annum	4% per annum
Scheme liabilities discount rate	5.5% per annum	5.5% per annum	5.5% per annum

Average **remaining** future life expectancy according to the mortality tables used to determine pension liabilities, is as follows:

	2013	2012
Male aged 65	22	22
Female aged 65	25	25

Notes to Financial Statements

Year Ended 31 December 2013

On the basis of these and other assumptions and applying the projected unit method prescribed in FRS 17 (Revised), the pension deferred funding asset and pension liability are as follows:

	2013	2012
Total accrued pension liability	€28.2m	€27.5m

As pension increases under the Marine Institute schemes are based on salary increases rather than on price increases, a price inflation assumption is not necessary for the purposes of this valuation. However, since FRS 17 requires reference to an assumed rate of inflation, the above rate would be appropriate for this purpose.

Analysis of the Total Pension Costs charged to Expenditure

	2013	2012
	€'000	€'000
Current Service Cost	1,900	1,900
Interest on pension scheme liabilities	1,500	1,400
Employee Contributions	(434)	(422)
	2,966	2,878

Analysis of the amount recognised in a statement of total recognised gains and losses (STRGL)

	€'000	€'000
Experience gains and (losses)	2,339	1,360
Changes in assumptions underlying the present value of scheme	0	0
Actuarial gain and (loss) recognised in STRGL	2,339	1,360

Net Deferred Funding for Pensions Recognised in the year

	2013	2012
	€'000	€'000
Current Service and Interest Cost	3,400	3,300
Less benefits paid in the year	(362)	(443)
	3,038	2,857

The Marine Institute recognises amounts owing from the State as an asset corresponding to the unfunded deferred liability for pensions on the basis of the set of assumptions described above and a number of past events. These events include the statutory basis for the establishment of the superannuation scheme and the policy and practice in relation to funding public service pensions, including contributions from employees and the annual estimates process. The Marine Institute has no evidence that this funding policy will not continue to meet such sums in accordance with current practice. The deferred funding asset for pensions as at 31 December 2013 amounted to €28.2million (2012: €27.5million). The quantification of the liability is based on the Financial assumptions set out in this note. The assumptions used, which are based on professional actuarial advice, are advised to the Department of Agriculture, Food and the Marine but are not formally agreed with the Department.

Notes to Financial Statements

Year Ended 31 December 2013

Analysis of movement in net pension liability during the year

	2013	2012	2011	2010	2009	2008
	€'000	€'000	€'000	€'000	€'000	€'000
Deficit at the beginning of the year	27,501	26,004	25,900	24,700	19,300	18,300
Current Service Cost	1,900	1,900	2,200	2,100	1,900	1,900
Interest on Scheme Liabilities	1,500	1,400	1,400	1,400	1,100	1,000
Actuarial (Gain) Loss recognised in the STRGL	(2,339)	(1,360)	(3,080)	(2,075)	2,625	(1,679)
Benefits paid in the year	(362)	(443)	(416)	(225)	(225)	(221)
Deficit at the end of the year	28,200	27,501	26,004	25,900	24,700	19,300

History of Defined Benefit Obligations

	2013	2012	2011	2010	2009	2008
	€'000	€'000	€'000	€'000	€'000	€'000
Defined benefit obligations	28,200	27,501	26,004	25,900	24,700	19,300
Experience Gains/(Losses) on Scheme Liabilities	2,339	1,360	3,080	2,075	(2,625)	1,679
Percentage of Scheme Liabilities	8.29%	4.96%	11.8%	8.0%	(10.6%)	8.7%
Assumption Gains/(Losses) on Scheme Liabilities	0	0	0	0	0	0
Percentage of Scheme Liabilities	0%	0%	0%	0%	0%	0%

The cumulative actuarial gain recognised in the statement of total recognised gains and losses amounts to €6,436,000.

17. Lease commitments

Operating Leases

The Marine Institute occupies leased premises at the following locations:

Lease 1: 80 Harcourt Street, Dublin 2 commenced in 1993 for a period of 22 years with five yearly rent reviews. There is a rent review every 5 years, with no more lease breaks until the conclusion of the lease in 2015.

Lease 2: Parkmore Office Park, Galway, commenced in 1999 for a period of 25 years with five yearly rent reviews.

Lease 3: Red Sail Warehouse, Galway Harbour, commenced in 2013 for a period of 11 years with a rent review in 2018.

The current annual rental charge of these leases amounts to €375,002 (2012 €327,720).

	2013	2012
Expiring within 1 year	0	0
Expiring during the years 2 to 5	235,735	235,735
Expiring thereafter	139,267	91,985

Notes to Financial Statements

Year Ended 31 December 2013

18. Investment

The Marine Institute had a 1.3% fully diluted shareholding in a company called Wavebob Ltd. This company was established to develop a concept in delivering Wave Energy. The total cost of the investment grant by the Marine Institute was €127,000. As it was not possible to accurately assess the value of the investment, the shares were not capitalised in the Balance Sheet. The company was wound up on the 26th March 2013. There was no further costs incurred by the Marine Institute.

19. Related Party Transactions

Smartbay Ltd, was established as a company limited by guarantee by the Marine Institute, DCU and NUI Galway, during February 2012 to manage Ireland's marine test and demonstration facility at Galway Bay. The company receives funding from the HEA which is used to fund a team to cover the company's operational costs for the period 2012 to 2015. Dublin City University is the lead research organisation which provides the HEA funding to Smartbay. The income received from the HEA and the expenditure incurred by Smartbay Ltd is accounted for by Dublin City University.

The Institute's CEO is a Board member and the Head of Corporate Services of the Institute is Company Secretary. During 2013, the Institute advanced funding of €38,016 to Smartbay Ltd (2012 €320,814). This expenditure is included under Ocean Science and Information Services expenditure in Note 7 in the accounts.

20. Register of interests

The Institute has adopted procedures in accordance with the guidelines issued by the Department of Public Expenditure and Reform in relation to the disclosure of interest by Board members and the Institute has adhered to these procedures. There were no transactions in the year in relation to the Institute's activities in which board members had a beneficial interest.

21. Board Fees, Board Attendance and Chief Executive Salary

The Institute has adhered to the updated Code of Practice for the Governance of State Bodies which was published by the Minister for Finance on 15 June 2009. The total remuneration paid to Chief Executive of the Marine Institute for 2013 was €141,358. There were no payments made to the Chief Executive under a performance related pay scheme or no other benefits paid as part of the remuneration package. The CEO pension entitlements do not extend beyond those of the model public sector scheme. The total expenses for business purposes paid to the CEO for 2013 was €14,604 which includes foreign travel expenses of €1,328.

Payments to the 2013 Marine Institute Board members were as follows

Board Member	Category 3	Gross Fees 2013	Expenses 2013	Total 2013
Jim Fennell	Chairperson	0	1,697	1,697
Michael Walsh	Director	0	1,568	1,568
Lorcan O Cinneide	Director	7,695	6,755	14,450
Francis Coyle	Director	7,695	6,308	14,003
Paul Hyde	Director	7,695	7,049	14,744
David Owens	Director	7,695	1,865	9,560
Patricia Barker	Director	2,073	282	2,355
Donal Kelly	Director	4,488	0	4,488
		37,341	25,524	62,865

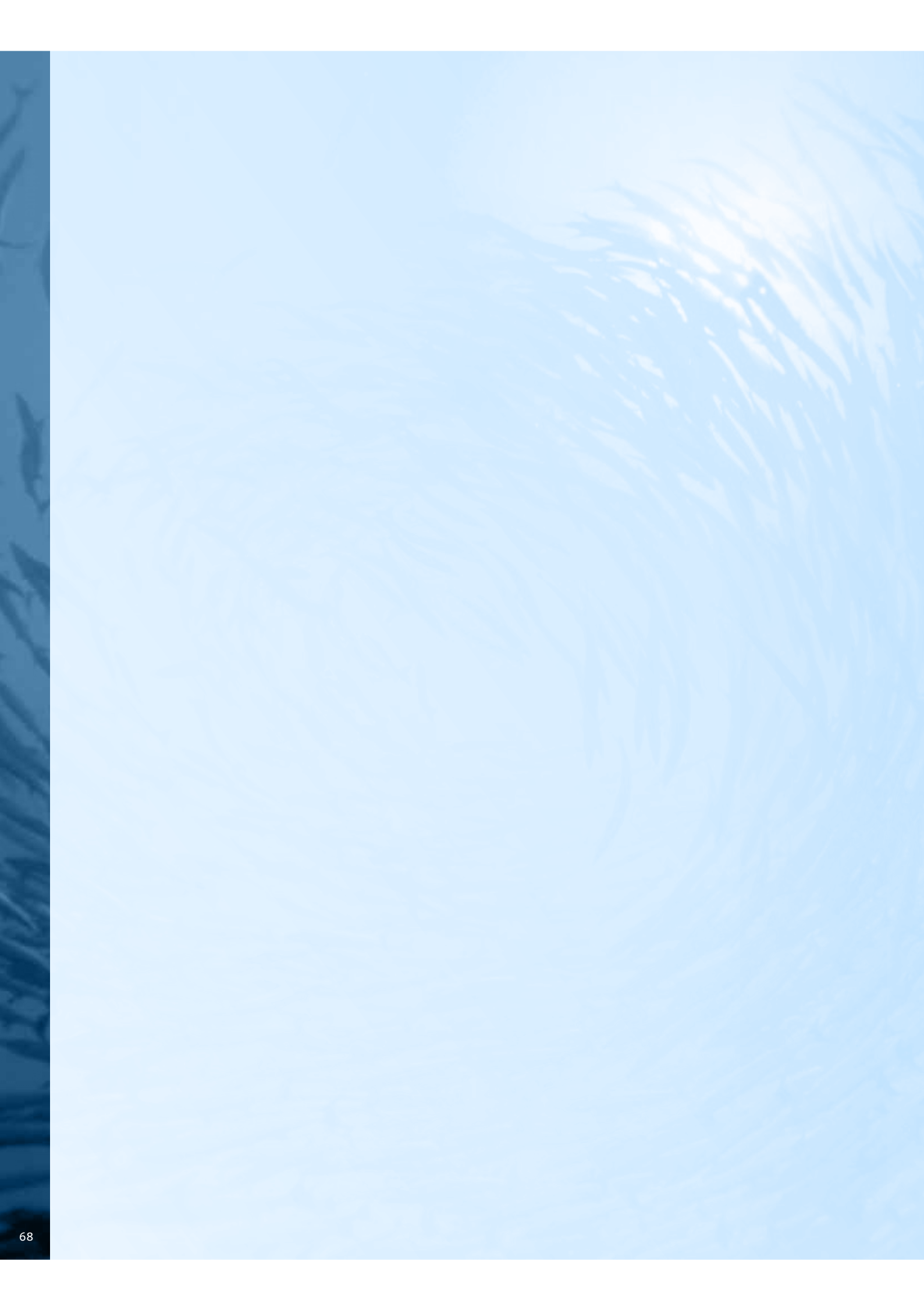
Notes to Financial Statements

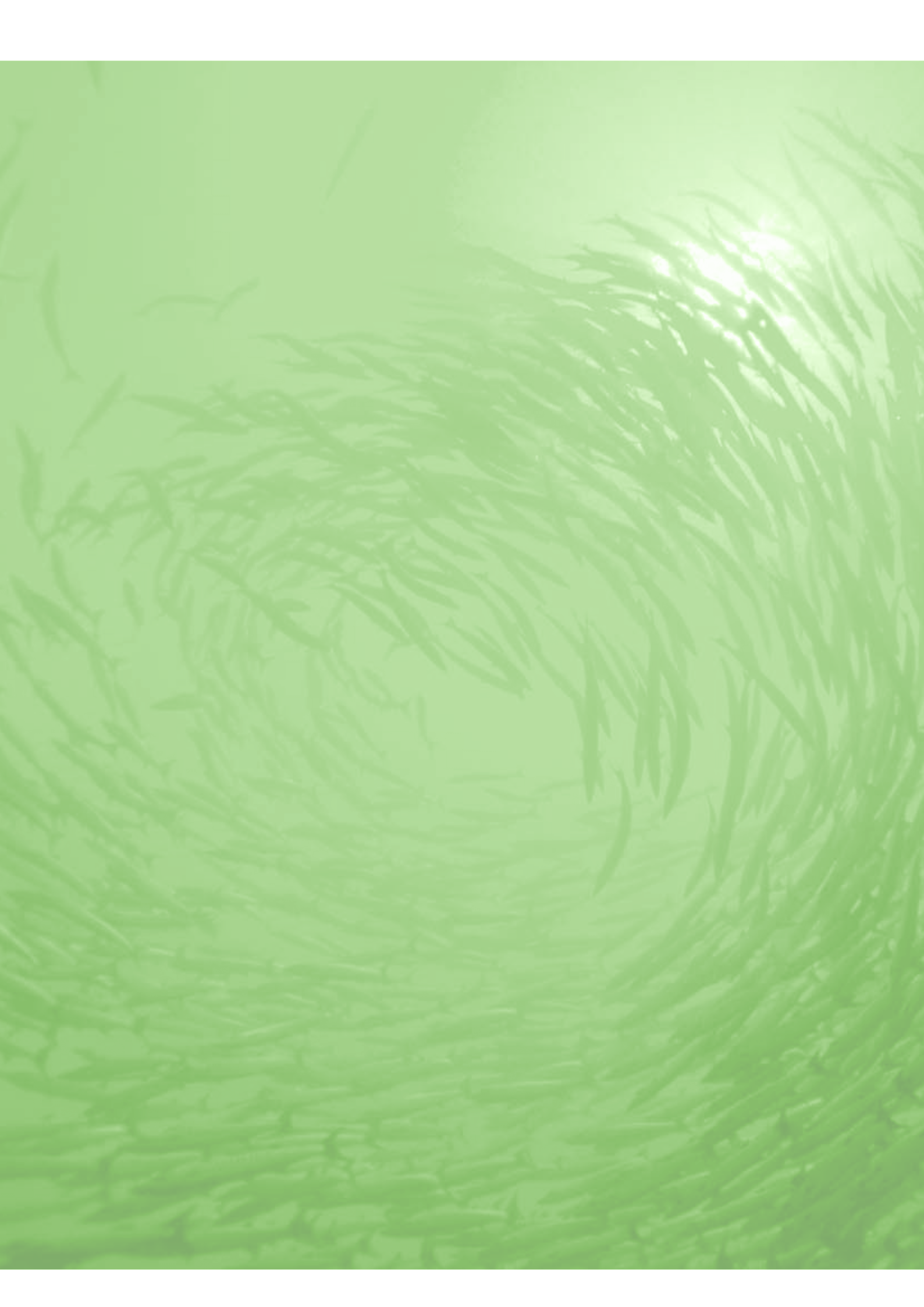
Year Ended 31 December 2013

Board Member	Category 3	Board Meetings 2013	Board Meetings Attended 2013	Term Commenced/Ended
Jim Fennell	Chairperson	10	10	Term Ended Nov 2013
Lorcan O Cinneide	Director	10	10	
Francis Coyle	Director	10	10	
Paul Hyde	Director	10	10	
David Owens	Director	10	9	
Patricia Barker	Director	10	3	Term Commenced April 2013
Donal Kelly	Director	10	5	Term Commenced May 2013

22. Board Approval

The financial statements were approved by the Board on the 09/12/2014.





The Marine Institute Annual Report is available in Irish and can be downloaded from www.marine.ie

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@marineInst

Headquarters & Laboratories

Marine Institute
Rinville
Oranmore
Co. Galway
T: +353 91 387 200
F: +353 91 387 201
E: institute.mail@marine.ie

Marine Institute Regional Offices & Laboratories

Marine Institute
80 Harcourt Street
Dublin 2
T: +353 1 476 6500
F: +353 1 478 4988

Marine Institute
Furnace
Newport
Co. Mayo
T: +353 98 42300
F: +353 98 42340



TUARASCÁIL BHLIANTÚIL 2013



Foras na Mara
Marine Institute

An Eolaíocht agus an Mhuir a Fhónamh

Chuig an Aire Talmhaíochta, Bia agus Mara

De réir cheanglais an Achta um Fhoras na Mara, 1991, is mór an onóir dom Tuarascáil Bhliantúil agus Ráiteas Airgeadais Fhoras na Mara don bhliain dar críoch an 31 Nollaig 2013 a chur ar fáil.

An tUas. John Killeen

Cathaoirleach (2014 - 2019)

Is é Foras na Mara an ghníomhaireacht náisiúnta ag a bhfuil na feidhmeanna seo a leanas:

‘chun taighde agus forbairt mhuirí a ghabháil de láimh, a chomhordú, a chur chun cinn agus chun cur leo agus na seirbhísí sin a bhaineann le taighde agus forbairt mhuirí a chur ar fáil ar bhealach, i dtuairim Fhoras na Mara, a chuirfidh forbairt eacnamaíoch chun cinn agus a chruthóidh fostaíocht agus a thabharfaidh cosaint don timpeallacht mhuirí.’

An tAcht um Fhoras na Mara, 1991

Ár bhFís

Geilleagar mara a mbeidh borradh faoi gan dochar don éiceachóras agus a mbeidh ár gcuid sársheirbhísí mar thaca aige

Tá grianghraif ar fud an fhoilseacháin seo faoi chóipcheart Fhoras na Mara agus na ngrianghrafadóirí seo a leanas:

Andrew Downes Photography

Jason Clarke Photography

Cushla Dromgool-Regan (Foras na Mara)

Tá grianghraif bhreise curtha ar fáil ag na daoine seo a leanas:

Tomasz Szumski

Joanne O'Brien, Institiúid Teicneolaíochta na Gaillimhe-Mhaigh Eo

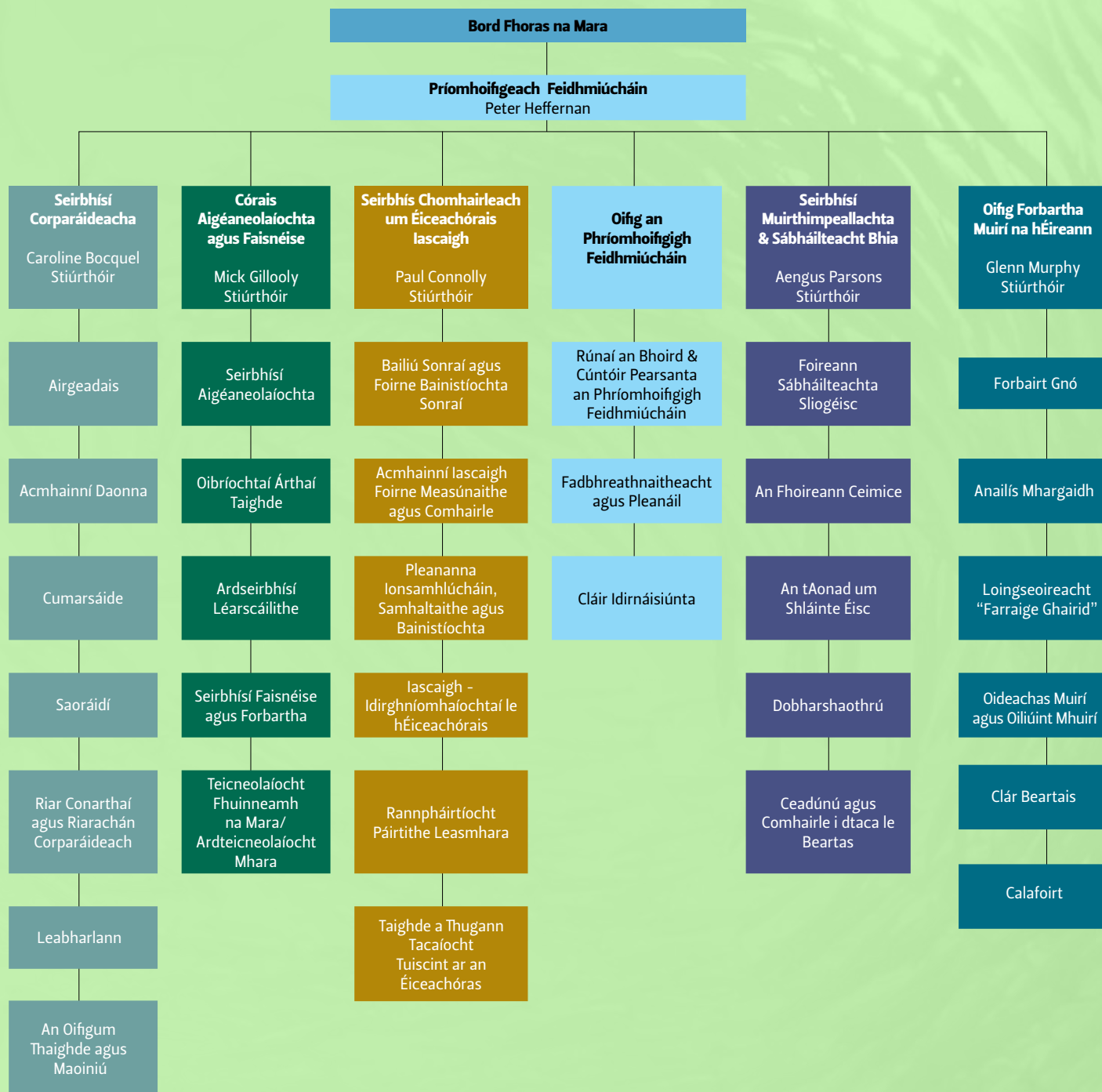
William Cherry, Presseye, Tuaisceart Éireann

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Is féidir leagan Gaeilge nó Béarla de Thuarascáil Bhliantúil Fhoras na Mara a íoslódáil ó www.marine.ie

Struchtúr Eagrúcháin Fhoras na Mara 2013



Réamhrá agus Struchtúr Eagrúcháin

Is é Foras na Mara an ghníomhaireacht náisiúnta um thaighde, teicneolaíocht, forbairt agus nuálaíocht mhara. Tá sé de chuspóir againn cumas geilleagrach acmhainní mara na hÉireann a mheas agus a bhaint amach; forbairt inbhuanaithe an tionscail mara a chur chun cinn trí chláir straitéiseacha mhaoinithe agus trí sheirbhísí eolaíochta bunriachtanacha; agus acmhainní nádúrtha mara na hÉireann a chosaint trí thaighde agus trí mhonatóireacht a dhéanamh ar an gcomhshaol.

Tá acmhainn mhara suas le 220 milliún acra (thart ar 880,000 km²) ag Éirinn amach faoin bhfarraige mhór, atá níos mó ná deich n-oiread a hachair thalún. Cuireann Foras na Mara forbairt inbhuanaithe na hacmhainne ollmhóire mara sin chun cinn trí thaighde, trí theicneolaíochtaí nua a chur i bhfeidhm, agus trí chomhairle bhainistíochta a sholáthar don tionscal, don Rialtas agus don Aontas Eorpach (AE).

Soláthraíonn an Foras seirbhísí bunriachtanacha um thaighde mara, lena n-áirítear:

- > Cláir náisiúnta mhaoinithe do thaighde agus d'fhorbairt
- > Measúnú na stoc éisc agus comhairle bainistíochta
- > Seirbhísí sláinte éisc
- > Monatóireacht ar shábháilteacht bhia mara
- > Monatóireacht chomhshaoil

- > Oibríochtaí Árthaí Taighde
- > Léarscáiliú ghrinneall na farraige
- > Bainistíocht sonraí
- > Seirbhísí forbartha muirí

Cuimsíonn Foras na Mara cúig réimse seirbhíse agus Oifig an Phríomhoifigigh Feidhmiúcháin. Áirítear ar na réimsí seirbhíse:

- > Seirbhísí Corparáideacha
- > Seirbhísí Eolaíochta Aigéin
- > Seirbhísí Muirthimpeallachta agus Sábháilteacht Bhia
- > Seirbhísí Comhairleacha um Éiceachórais Iascaigh
- > Oifig Forbartha Muirí na hÉireann

Nearthaítear an eagraíocht trí bhéim láidir ar rialachas corparáideach agus trí bhéim ar bhainistíocht stuama airgeadais, rud a bhí tábhachtach maidir le rathúlacht an Fhorais le linn tréimhse a bhí dúshlánach ó thaobh an gheilleagair de le linn 2013.

Leagtar béim sa tuarascáil seo ar na bunspríocanna inghnóthaithe agus ar an dul chun cinn a rinneadh i leith ár bhfíse i rith na bliana 2013.



Comhaltaí an Bhoird



An tUasal Jim Fennell - Cathaoirleach (2008–2013)

Ceapadh an tUas. Jim Fennell i mí na Samhna 2008, agus is comhalta de chuid Chomhlachas na gCuntasóirí Deimhnithe Cairte é. Is Rúnaí agus Rialtóir Airgeadais é i gComhlacht Ceannais Institiúid Teicneolaíochta na Gaillimhe–Maigh Eo (GMIT). I dteannta lena ról i GMIT tá roinnt stiúrtóireachtaí faoina chúram freisin lena n-áirítear: Uachtarán Chumann Tráchtála na Gaillimhe, ‘An Chéim’ (Bainistíocht Faisnéis Ardoideachais Chomhoibríoch), Gréasán Náisiúnta Oideachais agus Taighde na hÉireann (HEAnet), agus Cathaoirleach ar Fhochoiste Airgeadais HEAnet; agus Coiste Iniúchta Chomhairle Contae Mhaigh Eo.



An tOllamh Patricia Barker (2013–2018)

Tá an tOll. Patricia Barker ina Comhalta d’Institiúid Chuntasóirí Cairte na hÉireann, agus bhain sí a cáilíocht amach i 1973. Rinne an tOll. Barker MPhil i Staidéar Inscní i gColáiste na Tríonóide. D’fhorbair a PhD paraidím nocht faisnéis airgeadais d’fhostaithe eagraíochtaí. Chuir sí isteach a hairteagail le Stokes Bros. & Pim i mBaile Átha Cliath agus d’oibrigh sí in Peat, Marwick Mitchell i Manchain. Bhí an tOll. Barker ina comhpháirtí ansin i gcleachtas cuntasáíochta i Manchain ar feadh sé bliana agus d’oibrigh sí in Ollscoil Mhanchain mar phríomhléachtóir.

Ceapadh an tOll. Barker mar léachtóir in Ollscoil Chathair Bhaile Átha Cliath (DCU) i 1980 agus bhí sí ina léachtóir sinsearach, ina Déan Comhlach (Scoil Ghnó) agus ina Leas-Uachtarán Ollscoile (Acadúil) i DCU. D’oibrigh sí mar ollamh ar cuairt in ollscoileanna i Nua-Eabhrac, i mBostún, in Angers, sa Mhaláiv, i nDárasalám, in Sydney agus in Cape Town agus bhí sí ina scrúdaitheoir seachtrach ar ollscoileanna agus ar chomhlachtaí gairmiúla. D’fhónaimh sí mar Chathaoirleach ar Choiste Cuntasáíochta Institiúid Chuntasóirí Cairte na hÉireann ar feadh ocht mbliana agus ar Chomhairle Institiúid na gCuntasóirí Cairte ar feadh ceithre bliana sna 1990idí. Is ball den Chomhairle í faoi láthair. Rinne sí ionadaíocht ar Éirinn ar Bhord na gCaighdeán Cuntasáíochta i Londain ar feadh naoi mbliana. Bhí sí mar chathaoirleach ar an sainghrúpa a bhí ag tuairisciú don Aontas Eorpach maidir

le ról, le struchtúr agus le feidhmeanna Chúirt Iniúcháir na hEorpa. Bhí sealanna dualgaí aici mar Mhaoirseoir Toghcháin le haghaidh na hEagraíochta um Shlándaíl agus Comhar san Eoraip (OSCE) i mBoisnia agus an Heirseagaivéin, i bPoblacht Serpska, san Afraic Theas, sa Chosaiv, sa Chasacstáin agus sa Bhealarúis.

D’oibrigh an tOll. Barker mar Fhairí ar Chearta Daonna in Iosrael agus sa Phalaistín. Bhí sí mar bhall de na Boird do Chúnamh do Mhná, do Chumann Tithíochta Sonas, don Chór Aireagail Náisiúnta agus don Údarás um Ard-Oideachas (ina cathaoirleach ar an gCoiste Iniúcháiríochta), agus bhí sí mar Chathaoirleach ar Sheirbhís Fuilaisríocháin na hÉireann ar feadh trí bliana.

Tá an tOll. Barker ina Stiúrtóir ar Bhus Átha Cliath Teo. faoi láthair agus ar Veritas Ltd (mar chathaoirleach ar Choistí Iniúcháiríochta an dá eagraíocht sin). Is comhairleoir deonach agus oiliúnóir í faoi láthair d’Ionad Éigeandála um Éigniú Bhaile Átha Cliath. Scríobh sí leabhair maidir le Cuntasáíocht Grúpa, Obair Sholúbtha sa Ghairm agus níos déanaí anuas scríobh sí faoi mhná ar éirigh leo sa ghairm Cuntasáíochta agus maidir le Rialachas Corparáideach agus Eitic Ghairmiúil.



An tUasal Francis Coyle (2010–2015)

D’oibrigh an tUas. Francis Coyle le Comhairle Contae Dhún na nGall i bpoist éagsúla ó 1974 go 2010. Ó 2001, bhí sé ina Stiúrtóir Seirbhísí maidir le Pleanáil agus Forbairt Eacnamaíochta. D’oibrigh an tUas. Coyle le Comhairle Baile Leitir Ceanainn agus bhí sé ina Bhainisteoir ar Chomhairle Baile Bhéal Átha Seanaidh ó 2005 go 2010 freisin. Bhí an tUas. Coyle ina Oifigeach Idirchaidrimh Eorpaigh ar an gComhairle le Comhdháil na Réigiún Muirí Forimeallach (CPMR) ar feadh sé bliana déag.

Sa tréimhse idir 1995 agus 1999, rinne sé bainistiú ar mhaoiniú ilmhilliúin Síochána agus Athmhuintearais na Comhairle agus bhí sé ina Rúnaí ar Thascfhórsa Dhún na nGall um Shíocháin agus Athmhuintearas. D’oibrigh an tUas. Coyle go dlúth leis an gCiste Idirnáisiúnta d’Éirinn freisin agus le meicníochtaí maoiniúcháin eile amhail Clár an AE maidir le Comhar Idir-Réigiúnach (INTERREG), agus PEACE III chun forbairt a dhéanamh ar

thionscadail ilghnéitheacha phobail agus athbheochana a bhí ceaptha chun feabhas a chur ar bhailte agus ar shráidbhailte, i nDún na nGall agus ar bhonn trasteorann araon. Is iar-Stiúrthóir é le Cuideachta Aerfort Dhún na nGall Teo. agus tá sé i mbun bainistíocht agus comhordú tionscadal faoi láthair.



An tUasal Paul Hyde (2012–2017)

Is é an tUas. Paul Hyde (BSc Arch, MA, MPlan, MRIBA, RIBA) an comhpháirtí bainistíochta in The Hyde Partnership, Architects and Town Planners, gnó ildisciplíneach deartha agus pleanála. Tá céimeanna bainte amach aige san Ailtireacht agus sa Phleanáil agus Forbairt Inbhuanaithe araon. Is ball é d'Institiúid Ríoga Ailtirí na hÉireann (RIAI), Institiúid Ríoga Ailtirí na Breataine (RIBA) agus Institiúid Pleanála na hÉireann (IPI)

Tá taithí ghairmiúil os cionn sé bliana déag ag an Uas. Hyde i ndáil le cúrsaí tógála lena n-áirítear forbairt talmhaí agus cósta araon chomh maith le pleanáil spásúlachta. I dteannta lena ról in The Hyde Partnership tá sé ina bhall de roinnt coistí lena n-áirítear: Institiúid Pleanála na hÉireann, Craobh an Deiscirt agus Institiúid Ríoga na nAiltirí in Éirinn, Craobh an Deiscirt agus Cumann Tráchtála Chorcaí.



An tUasal Lorcán Ó Cinnéide (2010–2015)

Is iar-Phríomhfheidhmeannach é an tUasal Lorcán Ó Cinnéide (BA) d'Eagras Táirgeoirí Éisc na hÉireann, príomhchomhlacht ionadaíoch de chuid thionscal na hiascaireachta. Bhain an tUas. Ó Cinnéide céim amach san Eacnamaíocht agus sa Pholaitíocht i gColáiste na Tríonóide, Baile Átha Cliath agus bhíodh long iascaireachta aige freisin.

Ba bhall gníomhach an tUas. Ó Cinnéide de Chomhairle Chomhairleach Réigiúnach Uisce Iar-Thuaisceart an Aontais Eorpaigh agus réimse leathan de bhainistíocht iascaigh agus de chomhlachtaí comhairleacha eile in Éirinn agus ar leibhéal an Aontais Eorpaigh. Thug sé sainchomhairle don AE ar mheasúnú



An tUasal David Owens (2012–2017)

Tá an tUas. David Owens (ACA) ina Leas-Uachtarán, Airgeadas agus Oibríochtaí le SolarWinds (NYSE: SWI) i láthair na huaire. Sular thosaigh sé le SolarWinds, chaith an tUas. Owens breis is seacht mbliana ag obair leis an eagraíocht bogearraí fiontraíochta Red Hat, Inc., áit ar oibrigh sé ar dtús mar Stiúrthóir ar Lóistíocht agus Táirgeadh Domhanda agus ansin mar Stiúrthóir Sínearach Airgeadais – EMEA. Tá an tUas. Owens cáilithe mar chuntasóir cairte le Ernst & Young agus is ball é d'Institiúid Chuntasóirí Cairte na hÉireann.



An tUasal Donal Kelly (2013–2018)

Tá an tUas. Donal Kelly ina Stiúrthóir Bainistíochta le Fast Fish Ltd, gnó rathúil a dhíolann agus a sholáthraíonn iasc agus ola agus atá lonnaithe i mBaile Chaisleáin Bhéarra.

Bhí an tUas. Kelly ag fónamh ar Choiste Bainistíochta Celtic Sea Herring ar feadh 10 mbliana agus ar Choiste West Pelagic ar feadh 3 bliana.

D'fhónaimh an tUas. Kelly ar roinnt bord, san earnáil phríobháideach agus san earnáil dheonach. D'oibrigh sé go deonach ar son Phobal Chontae Chorcaí agus ar fhóiraim dheonacha, ar Bhord Forbartha Chontae Chorcaí agus ghníomhaigh sé mar Chathaoirleach ar CLG Bhaile Chaisleáin Bhéarra, agus ar Choiste Bainistíochta Chlub Gailf Phlás Bhaile Chaisleáin Bhéarra agus ar Chumann Forbartha Pobail Bhaile Chaisleáin Bhéarra.

Ráiteas an Chathaoirligh



Ba é an tUas. Jim Fennell a bhí i mbun maoirseachta ar rialachas corparáideach san Fhoras; chuir seisean a théarma mar Chathaoirleach i gcrích in 2013 agus ba mhaith liom mo bhuíochas a chur in iúl dó as a dhúthacht agus as a thiomantas, agus cuma mhaith ar an bhForas ina dhiaidh.

Cuireadh bailchríoch in 2013 ar an bPlean Straitéiseach le haghaidh Fhoras na Mara 2013–2016. Bhí sé seo riachtanach i gcomhair na pleanála inmheánaí a dhéanann gach réimse

seirbhíse síos go dtí cuspóirí feidhmíochta daoine aonair atá leagtha amach mar chuid de Córas Bainistíochta agus Forbartha Feidhmíochta an Fhorais.

Nuair a bhí an plean á réiteach, bhreithnigh bord Fhoras na Mara go mion na cúig Sprioc Ardleibhéil a chuir seofaí ann; 17 gcuspóir agus 88 gníomh tosaíochta agus KPlanna gaolmhara (feic Aghuisín 8). Ó thús na bliana 2013, bhí roinnt cruinnithe ag an mBord mar aon le ceardlann thiomanta chun forbairt bhreise a dhéanamh ar an bplean i gcomhar leis an bPríomhoifigeach Feidhmiúcháin agus le hardbhainistíocht an Fhorais. Beidh sé mar phríomhról ag an mbord maoirseacht a dhéanamh ar chur i bhfeidhm an phlean agus tacú leis an bhfeidhmeannas agus é ag dul i ngleic leis an éileamh méadaithe ar sheirbhísí tráth a bhfuil acmhainní ón státchiste laghdaithe go mór.

Rinneadh roinnt athruithe ar an bhfoireann bainistíochta feidhmiúcháin agus líonadh an folúntas le haghaidh Stiúrthóir ar na Seirbhísí Muirthimpeallachta agus Sábháilteacht Bhia agus an post mar Stiúrthóir ar Oifig Forbartha Muirí na hÉireann a fógraíodh i mí na Nollag.

Síníodh Ráiteas na Gaillimhe ar Chomhar an Aigéin Atlantaigh ag seoladh Chomhaontas Taighde an AE - Ceanada - SAM anseo ag Foras na Mara an 24 Bealtaine 2013. D'fhreastail an Taoiseach, an tUasal Enda Kenny, T.D., ar an ócáid a tharraing aird ar an obair a rinneamar ar chlár oibre um thaighde mara na hEorpa le linn Uachtaránacht na hÉireann ar an AE (Eanáir–Meitheamh 2013).

Lean Foras na Mara lena ról tábhachtach ag tacú le hobair Ghrúpa Comhordaithe Muirí (MCG) an Rialtais agus é i mbun maoirseachta ar chur i bhfeidhm an Phlean Chomhtháite Muirí d'Éirinn, Feidhm a Bhaint as Saibhreas ár nAigéin, a seoladh in 2012. Bhí ár bPríomhoifigeach Feidhmiúcháin ina chathaoirleach ar an Tascfhórsa Cumasóra agus é mar chúram tábhachtach air tuarascáil a ullmhú le haghaidh an MCG maidir le cur i bhfeidhm na pleanála spásúlachta muirí in Éirinn.

Lean an Foras ag déanamh scoth na hoibre ina chuid seirbhísí agus d'éirigh leis cláir mhonatóireachta reachtúla, seirbhísí taighde agus seirbhísí comhairleacha a chur ar fáil do raon cliant.

Thionóil Foras na Mara an 10ú comhdháil ar Shábháilteacht Sliogéisc agus chuir sé raon cláir náisiúnta monatóireachta ar fáil le sábháilteacht tomhaltóirí a chinntiú maidir le bia mara agus cosaint na muirthimpeallachta, lena n-áirítear iarmharaigh agus truailléain, míolta farraige, bitocsainí, chomh maith le cigireachtaí agus monatóireacht ar ghluaiseacht stoic éisc agus sliogéisc faoi Threoir an AE maidir le Sláinte Éisc agus ceanglais na Creat-Treorach Uisce.

Chuir na hárthaí taighde náisiúnta dianchlár suirbhé i gcrích ag soláthar ardán náisiúnta taighde atá bunriachtanach i dteannta le deiseanna tábhachtacha oiliúna do mhic léinn tríú leibhéal tríd an gclár 'Scientists at Sea' a d'eagraigh an Comhaontas Straitéiseach Mara um Thaighde agus Oiliúint (SMART). Thug an Fhoireann Ardseirbhísí Léarscáilíochta faoi léarscáilíu ghrinneall na farraige chomh maith le fáil sonraí don chlár INFOMAR i limistéir tosaíochta amach ó chósta an deiscirt agus an



Shínigh ionadaithe ón Aontas Eorpach, ó na Stáit Aontaithe agus ó Ceanada 'Ráiteas na Gaillimhe ar Chomhar an Aigéin Atlantaigh' a chomhaontaigh teacht le chéile i dtaca le Taighde an Aigéin Atlantaigh.

iarthair agus rinneadh suirbhé ar limistéir amach ó chósta an Chláir chun tacú le forbairt na hearnála fuinnimh in-athnuaite mhuirí.

Chuireamar an Leabhar bliantúil ar Stoc Iascaigh i dtoll a chéile, a úsáidtear chun comhairle maidir le stoc iascaigh a thabhairt don Chomhairle Idirnáisiúnta um Thaiscéaladh na Mara agus é mar thagairt lárnach i gcaibidlíocht na Comhairle Iascaigh a bhíonn ar siúl gach bliain sa Bhruiséil; bhí ionchur eolaíochta againn maidir le hoibleagáidí nua gabhálacha (cosc ar iasc aischurtha) agus fócas nua réigiúnach bainistíochta a tugadh isteach mar chuid den Chomhbheartas Iascaireachta nua; tugadh tacaíocht don Roinn Ealaíon, Oidhreacht agus Gaeltachta chun cúig speiceas leochaileacha siorcanna a liostáil ar an gcoinbhinsiún maidir le Trádáil Idirnáisiúnta ar Speicis i mBaol.

D'fhoilsigh Oifig Forbartha Muirí na hÉireann dár gcuid an 10ú leagan bliantúil de The Irish Maritime Transport Economist a bhfuil ardmheas air agus sholáthair sí príomhsheirbhísí comhairleacha don Roinn Iompair, Turasóireachta agus Spóirt maidir leis an athbhreithniú is déanaí ar Bheartas an Rialtais i leith Calafort agus lean sí dá seirbhísí tábhachtacha sna réimsí forbartha agus oiliúna gnó muirí.

Choinníomar ár gCreidiúnú maidir le Scothsheirbhís ó Scothfhostaithe le linn na bliana. Léiríonn sé sin, i dteannta an fhócais láidir atá againn ar an bhfoireann a spreagadh agus ar rannpháirtíocht inár bplean straitéiseach, go leagann Foras na Mara luach mór ar an ról riachtanach atá ag ár bhfoireann i mbaint amach spriocanna na heagraíochta seo. Leanamar ag infheistiú (€2.9m) i gcur i bhfeidhm na Straitéise Casadh na Taoide (Straitéis Nuálaíochta, Taighde agus Faisnéise Mara d'Éirinn 2007–2013) thar raon réimsí taighde.

Rinne ár gCoiste Iniúchta Inmheánaigh agus an Feidhmeannas sraith iniúchtaí inmheánacha déine inar tuairiscíodh uasleibhéil dearbhaithé maidir le raon leathan rialuithe do Bhord Foras na Mara.

Ní fhéadfaí éachtaí den sórt sin a bhaint amach murach tiomantas an Phríomhfheidhmeannaigh, lucht bainistíochta agus fhoireann an Fhorais, a choinnigh fócas agus tiomantas iontach i leith ár gcomhfhíse, is é sin “geilleagar mara a mbeidh borradh faoi gan dochar don éiceachóras agus a mbeidh ár gcuid scothsheirbhísí mar thaca aige.”

John Killeen.

An tUasal John Killeen
Cathaoirleach
(2014–2019)



Chuir an tUas. Jim Fennell a théarma mar Chathaoirleach ar bhord Foras na Mara i gcrích.

Síníodh Ráiteas na Gaillimhe ar Chomhar an Aigéin Atlantaigh ag seoladh Chomhaontas Taighde an AE – Cheanada – SAM anseo ag Foras na Mara... a tharraing aird ar an obair a rinneamar ar chlár oibre um thaighde mara na hEorpa le linn Uachtaránacht na hÉireann ar an AE.”



Leabhar na Stoc 2013 á thabhairt ag an Dr Peter Heffernan, Príomhoifigeach Feidhmiúcháin Fhoras na Mara don Uasal Simon Coveney T.D., an tAire Talmhaíochta, Bia agus Mara

Tuarascáil an Phríomhfheidhmeannaigh



Bhí Uachtaránacht na hÉireann ar an AE ar siúl ó mí Eanáir go mí an Mheithimh 2013 agus bhí sé de phribhléid ag Foras na Mara ról a bheith aige ag tacú leis an iarracht thábhachtach náisiúnta sin. Bhí baint dhíreach ag ár bhfoireann eolaíochta le tacaíocht a thabhairt don Aire Coveney agus dá Roinn ina ról ceannaireachta ó thaobh bailchríoch rathúil a chur ar athchóiriú an Chomhbheartais lascaireachta, agus bhí ionchur lárnach acu maidir leis an gcosc aschurtha agus tionscnaimh nua bainistíochta réigiúnaí.

Chabhraigh ár n-eolaithe freisin leis an Roinn Ealaíon, Oidhreacht & Gaeltachta ina gcuid oibre ar an gCoinbhinsiún maidir le Trádáil Idirnáisiúnta ar Speicis i mBaol (ina liostaítear cúig speiceas nua leochaileacha siorcanna)

Bhí baint mhór ag Foras na Mara freisin le tacaíocht a thabhairt do phríomhthosaíochtaí eile Uachtaránacht na hÉireann ar an AE, eadhon, Straitéis an Atlantaigh agus an Plean Gníomhaíochta gaolmhar (a seoladh sa Bhruiséil i mí na Bealtaine) agus síniú Ráiteas na Gaillimhe ar Chomhar an Aigéin Atlantaigh ag Seoladh Chomhaontas Taighde an AE - Ceanada - SAM (feic Agusín 9). Fuair Plean Gníomhaíochta an Atlantaigh treoir ó cheithre cheardlann de chuid an Fhóiraim Atlantaigh, agus ba é Foras na Mara a d'eagraigh an ceann deiridh díobh a bhí ar bun i gColáiste na hOllscoile, Corcaigh i mí an Mhárta 2013.

Shínigh ionadaithe polaitiúla as an AE, as Ceanada agus as SAM Ráiteas na Gaillimhe an 24 Bealtaine ag ócáid speisialta i bhForas na Mara agus áiríodh ann ceardlann eolaíochta idirnáisiúnta "An tAtlantach – Acmhainn Chomhroinnte" (feic Agusín 10). Bhí an Foras sásta ról lárnach a bheith aige sa phróiseas sin thar ceann na hÉireann agus Choimisiún an AE.

Léirigh an obair sin a rinneadh go hidirnáisiúnta ról a chomhlíon Foras na Mara i gcomhar le Grúpa Comhordaithe Muirí idir-rannach na hÉireann, ar a raibh an tAire Coveney ina chathaoirleach. Tríd an obair a bhí ar siúl ag an MCG sin, bhí príomhról ag Éirinn i mbunathrú Phlean Gníomhaíochta an Atlantaigh de chuid an AE, Ráiteas na Gaillimhe agus múnla gnéithe suntasacha de thaighde muirí i gclár Horizon 2020 an AE. Seoladh an plean Eorpach um thaighde agus nuálaíocht, Horizon 2020, i mí na Nollag 2013 agus bhí €200m spriocdhírthe ar thaighde mara i gclár Horizon 2020 idir 2014-2015.

Bhí tionscnamh Uachtaránachta eile ar siúl chun léiriúchán den ócáid liteartha nuálach maidir le haigéaneolaíocht, The Longest River, a thabhairt chuig lán an tí de lucht féachana sa Bhruiséil. Bhí an ócáid ar siúl i gcomhpháirtíocht idir Cultúr Éireann agus Turasóireacht Éireann agus faoi phátrúnacht Maria Damanaki, Uasal agus Máire Geoghegan-Quinn, Uasal, Comhaltai den Choimisiún Eorpach. Fuair The Longest River ard-mholadh ina dhiaidh sin ó chlár gradam Allianz Business to Arts.

Lean Foras na Mara dá ról láidir tacaíochta d'obair an Ghrúpa Comhordaithe Mhuirí agus le linn 2012 bhí mé mar chathaoirleach ar an Tascfhórsa Cumasóra a bhunaigh an Grúpa Comhordaithe Muirí chun iniúchadh agus tuairisciú a dhéanamh ar chóras Pleanáil Spásúlachta Muirí d'Éirinn. Chuir an Tascfhórsa Cumasóra a thuarascáil isteach chuig an nGrúpa Comhordaithe Muirí i mí na Samhna. I mí na Nollag bunaíodh Tascfhórsa Forbartha faoi sainchúram an Ghrúpa Comhordaithe Mhuirí chun tuairisciú a dhéanamh ar phríomhghníomhaíochtaí chun sainghnéithe den chlár oibre fiontraíochta ó Feidhm a Bhaint as Saibhreas ár nAigéin a chur chun cinn.

Chuireamar Plean Straitéiseach nua trí bliana i gcrích, a d'fhorbair bord agus feidhmeannas Fhoras na Mara, ina gcuimsítear anois an príomhthosaíocht pleanála agus an creat lena bhfeidhmeoidh Foras na Mara idir seo agus 2016. Leagtar straitéis síos sa phlean chun treoir a thabhairt d'Fhoras na Mara de réir mar a thugaimid aghaidh ar dhúshlán leanúnach agus ar dheiseanna inár gclár oibre, agus de réir mar a chinntimid go ndéanfar ár seirbhísí reachtúla agus lárnacha a sheachadadh go dtí na caighdeáin is airde is féidir linn a bhaint amach. Má leanaimid ag obair le chéile, tabharfaidh an plean seo seans dúinn leanúint dár gcuid oibre sa tréimhse gheilleagrach seo nach bhfuil éasca ar aon duine agus cuideoidh sé linn a bheith réidh nuair a fheabhsóidh an gilleagar arís.

Mar gheall ar thiomantas agus ar ghairmiúlacht na foirne sholáthair Foras na Mara an tsraith iomlán dár seirbhísí tosaigh ónár bhfoirne seirbhísí ar fad agus tá cuntas níos mionsonraithe air sin níos déanaí sa tuarascáil seo. I measc na gclár seirbhísí eolaíochta agus comhairleacha níos mó atá againn tá siad seo a leanas:

- > Measúnuithe bliantúla ar stoc agus comhairle eolaíochta d'iascaigh agus foilsíú Leabhar bliantúil na Stoc mar bhailchríoch air
- > Clár monatóireachta reachtúla maidir le sábháilteacht bhia mara ar bhithcainín; iarmharaigh; sláinte éisc
- > Monatóireacht ar dhobharshaothrú
- > Clár a bhaineann le Creat-Treoir na Straitéise Mara agus leis an gCreat-Treoir Uisce
- > Suirbhé INFOMAR (Léarscáilí Ghrinneall na Farraige) agus clár bhreisluacha agus seirbhísí faisnéise
- > Oibríochtaí áthaí taighde ar an *RV Celtic Explorer* agus ar an *RV Celtic Voyager* agus ar an *ROV Holland I*
- > IMDO - forbairt earnáil na loingseoireachta agus seirbhísí gaolmhara, chomh maith le
- > Rialachas corparáideach; bainistíocht acmhainní daonna agus saoráidí.

Bhíomar mar óstaigh freisin le linn na bliana ar chuairt a thug Acadamh Eolaíocht Iascaigh na Síne, ag tógáil ar na Meabhán Tuisceana a síníodh in 2012, d'fhonn iniúchadh a dhéanamh ar dheiseanna comhoibrithe maidir le taighde muirí, i ndobharshaothrú agus i sábháilteacht bhia agus malairtí foirne.

Bhí Foras na Mara i mbun gníomhaíochtaí tábhachtacha taighde i roinnt réimsí in 2013 agus is é a mhaoine na gníomhaíochtaí sin. I measc na mbuaicphointí thángthas ar ghnáthóg nua i gcóras Chainneon Whittard, a d'aimsigh eolaithe ó Institiúid Muireolaíochta Mháirtín Uí Riain in Ollscoil na hÉireann, Gaillimh ar bord an *RV Celtic Explorer*. Bhí foireann eolaithe in ann iniúchadh a dhéanamh ar an gchainneon go cianda ag úsáid an *ROV Holland I*, chun éadan carraige ingearach a aimsiú leathmhíle faoi dhromchla na farraige, a bhí ag síneadh suas ar feadh thart ar 150 méadar, agus é clúdaithe ag débhlaois agus ag coiréil. Creidtear go bhfuil cuid díobh suas le 200 bliain d'aois.

D'éirigh le Foras na Mara dámhachtainí maoinithe iomaíochta i gcomhar taighde seachtrach (FP7/INTERREG) a bhaint amach arbh fhiú €767k iad le linn 2013. Fágann sé sin ár dtuilleamh carnach idir 2007-2013 ag €5.6 milliún. Is gné thábhachtach é sin d'fheidhmíocht den scoth ó phobal taighde mara na hÉireann a bhfuil iomlán carnach de thart ar €68 milliún faighte acu idir na blianta 2007-2013 ó fhoinsí maoinithe EU FP7 agus INTERREG. D'éirigh le hearnáil mara na hÉireann os cionn €48 milliún i maoiniú iomaíoch a bhaint amach faoin gClár FP7, arb ionann é agus 8% de tharraingt síos iomlán FP7 go náisiúnta.

Chuir eolaithe ónár bhfoireann Sábháilteacht Sliogéisc an tionscadal taighde Astox2 i gcrích inar ndearnadh fionnachtana suntasacha maidir le tocsaineacht, bealaí agus speicis chúiseacha i dtaca leis an tocsain asaispioraigead.

Chuir ár n-eolaithe an sárthionscadal clúiteach ASIMUTH i gcrích freisin, inar forbraíodh táirgí réamhaisnéisithe ag baint úsáide as samhlacha fisiceacha, sataillte agus sonraí in situ le réamhrabhadh ar bhlás algach díobhálach a chur ar fáil, rud a thabharfadh deis d'fheirmeoirí éisc agus sliogéisc a gcultúr agus a gcleachtadh bainte a oiriúnú in am, chun cailteanais fhéideartha a laghdú.

Leanamar lenár gcomhoibriú leis an Lárionad Taighde Iascaigh i dTalamh an Éisc, chun suirbhé trasatlantach a dhéanamh ar an *RV Celtic Explorer*. Thug Ambasadóir Ceanada, a Shoilse Loyola Hearn cuairt ar an *RV Celtic Explorer* chun bualadh le heolaithe agus le criú as Éirinn agus as Ceanada sular sheol sé as Dugaí na Gaillimhe go St. Johns, i dTalamh an Éisc agus Leithinis Labrador.

Tá sé mar phríomhsprioc in *Feidhm a Bhaint as Saibhreas ár nAigéin* – *Plean Comhtháite Muirí d'Éirinn* feasacht a ardú maidir le saibhreas aigéin na hÉireann agus rannpháirtíocht leis an bhfarraige a mhéadú. Tarlaíonn sé sin de bharr na hoibre a dhéanaimid ar an gClár Oideachais do Thaiscéalaithe agus imeachtaí éagsúla (lena n-áirítear léiriú The Longest River thuasluaite).

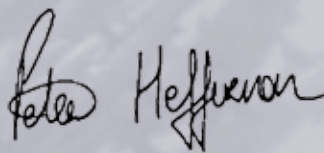
I mí na Nollag 2013 chuireamar fáilte roimh bhreis is 700 scoláire ar an *RV Celtic Explorer* i nDugaí na Gaillimhe ar feadh dhá lá, tráth ar thug siad turas ar an ártach agus ar bhuail siad leis na heolaithe agus leis an gcriú a oibríonn ar bord. Chuireamar leis na leibhéil rannpháirtíochta ar Chlár Oideachais na dTaiscéalaithe i limistéir chósta na Gaillimhe agus an Oirthir, agus fuaireamar tacaíocht ó Ionad Oideachais na Gaillimhe; lean Galway Atlantaquaria leis an gClár do Thaiscéalaithe i Maigh Eo agus sa Chlár agus fuair siad tacaíocht ó na hionaid oideachais áitiúla.

Thug Oifig Forbartha Muirí na hÉireann dár gcuid isteach Innéacs iShip nuálach nua agus é ar an gcéad innéacs tíre ar domhan bunaithe ar shreafaí trádála agus tráchta trína chalafoirt intíre. Tá eacnamaithe na hÉireann ag baint leasa cheana féin as an táscaire ualaithe sin gach ráithe de réir mar a thomhaiseann sé bail thionscal loingseoireachta na hÉireann agus an gheilleagair ghinearálta.

Thugamar an Fóram SmartOcean ó thuaidh go Béal Feirste i mí na Samhna 2013 i gcomhpháirtíocht an-rathúil a bhí againn le Invest NI. Bhí os cionn 180 duine aonair a bhí ag déanamh ionadaíochta ar bhreis is 90 eagraíocht rannpháirteach san fhóram is mó a bhí againn go dtí seo.

Ba mhaith liom mo mhíle buíochas a chur in iúl d'fhoireann Fhoras na Mara agus iad a mholadh as a dtiomantas don tseirbhís phoiblí.

Táim buíoch freisin den bhord as a gcuid iarrachtaí agus a dtreoir leanúnach. Chuir an cathaoirleach a bhí againn le cúig bliana anuas, an tUasal Jim Fennell, a théarma i gcrích i mí na Nollag. Ba mhaith liom tréaslú leis as an treoir, stuaim agus comhairle iontach a thug sé ar feadh a théarma.



An Dr Peter Heffernan
An Príomhfheidhmeannach



Chuir Foras na Mara agus an cór Cois Cladaigh atá lonnaithe i nGaillimh an t-imeacht liteartha agus cumarsáide muireolaíochta "The Longest River" ar taispeántas mar chuid den cheiliúradh ar Uachtaránacht na hÉireann ar Chomhairle an Aontais Eorpaigh, ag an Eglise du Saint-Sacrement sa Bhruiséil. (Ó chlé go deas) An Dr Brendan O'Connor, Stiúrthóir Chois Cladaigh; an tOllamh John Delaney, Ollscoil Washington; Maria Damanaki, Uasal, Coimisinéir an AE um Ghnóthaí Muirí agus na hIascaireachta; an Dr Peter Heffernan, Príomhoifigeach Feidhmiúcháin Fhoras na Mara.

"Bhí príomhról ag Éirinn i mbunathrú Phlean Gníomhaíochta an Atlantaigh de chuig an AE, Ráiteas na Gaillimhe agus múnlu gnéithe suntasacha de thaighde muirí i gclár Horizon 2020 an AE."



Chuaigh Ambasadóir Ceanada in Éirinn, a Shoilse, Loyola Hearn, ar bord an *RV Celtic Explorer* agus Dugaí na Gaillimhe chun bualadh le muintir na hÉireann agus Ceanada a chomhoibriú le chéile ar an turas taiscéalaíochta trasatlantach ó Ghailimh go St. Johns, Talamh an Éisc agus Leithinis Labrador.

Seirbhísí Corparáideacha



Seirbhísí Corparáideacha

Mar gheall ar an lánchosc leanúnach ar earcaíocht san earnáil phoiblí agus ar an timpeallacht a bhí deacair ó thaobh an gheilleagair de, leanadh de bheith ag díriú in 2013 ar luach ar airgead a sholáthar do chustaiméirí ar mhodh an-éifeachtúil. Baineadh é seo amach trí chomhoibriú le comhlachtaí eile agus seirbhís shoffhreagrach agus dhinimiciúil a sholáthar agus aird leanúnach ar rialachas corparáideach láidir.

I measc bhuaicphointí 2013 bhí siad seo a leanas:

- > Choinníomar ár gCreidiúnú 'Scothsheirbhís ó Scothfhostaithe' faoi Chaighdeán - ETP 1000:2012 an Údaráis um Chaighdeáin Náisiúnta na hÉireann (NSAI). Is é seo caighdeán náisiúnta na hÉireann le haghaidh bainistíocht acmhainní daonna. Tá dhá phríomhchuspóir leis: feidhmiú mar uirlis chun gnó a fheabhsú chomh maith le hathrú agus nuálaíocht a spreagadh, agus foghlaim, forbairt agus rannpháirtíocht fostaíthe a chur chun cinn freisin de réir spriocanna na heagraíochta.
- > Leanadh leis an straitéis *Casadh na Taoide (Straitéis Nuálaíochta, Taighde agus Faisnéise Mara d'Éirinn 2007–2013)* a chur chun feidhme le linn 2013 agus bhí infheistíocht bhreise €2.9m faoi Fhochlár Taighde Mara an Phlean Forbartha Náisiúnta arna riar ag Foras na Mara agus leis an méid seo infheistíodh €63.4m san iomlán go dtí seo faoi Fhochlár Taighde Mara an NDP.
- > Le linn 2013, ghlacamar páirt in imeachtaí tábhachtacha for-rochtana agus poiblí ar bhonn náisiúnta agus idirnáisiúnta. Thug na himeachtaí sin deiseanna don Fhoras teagmháil a dhéanamh le pobail nua. Ina measc bhí an t-imeacht An tAtlantach – Acmhainn Chomhroinnte sa Gaillimh tráth ar síníodh an ráiteas stairiúil *Ráiteas na Gaillimhe ar Chomhar an Aigéin Atlantaigh* idir an AE, SAM agus Ceanada.
- > Cuireadh próifíl dhearfach Foras na Mara agus straitéis *Casadh na Taoide* in iúl trí úsáid chuimsitheach a bhaint as cumarsáid leictreonach agus as cumarsáid bunaithe ar an ngréasán, rud a bhí soiléir mar gheall ar an méadú ar líon na gcuaríteoirí ar www.marine.ie.
- > Lean Rialachas Corparáideach de bheith ina thosaíocht thábhachtach do Sheirbhísí Corparáideacha, agus thuairiscigh iniúchtaí inmheánacha rialta uasleibhéil dearbhaithe do Bhord Foras na Mara ar raon leathan rialuithe.

Caroline Bocquel

Caroline Bocquel, Uasal

Stiúrthóir: Seirbhísí Corparáideacha

Acmhainní Daonna

Díríodh in 2013 ar sholáthar seirbhísí agus clár chun tacú lenár bhfoireann agus comhoibriú leo, go háirithe le seachadadh na gclár agus na seirbhísí atá mionsonraithe i bPlean Corparáideach Foras na Mara.

In ainneoin an lánchoisc ar earcaíocht sa tseirbhís phoiblí, dhírigh Foras na Mara a ghníomhaíochtaí Earcaíochta agus Roghnúcháin ar chlár taithí oibre agus forbartha. In 2013, rinneadh ochtar céimithe nua-cháilithe (Oiliúnaithe) a earcú faoi chlár taithí oibre a mhair caoga seachtain agus atá i bhfeidhm thar raon disciplíní eolaíochta, teicniúla agus riaracháin. Tairgeadh seacht gcinn déag de dheiseanna intéirneachta, go príomha thar raon réimsí eolaíochta agus riaracháin, do dhaoine ar an mbeochlár. D'éirigh le 75 faoin gcéad de na hoiliúnaithe agus 67 faoin gcéad de na hintéirnigh fostaíocht a fháil le heagraíochtaí eile tar éis a gcuid socrúcháin linn féin, agus thosaigh 13 faoin gcéad de na hintéirnigh Máistreacht nó PhD i ndiaidh a socrúcháin. Earcaíodh trí ról eile le linn 2013; ba dhá ról shealadacha a bhí maoinithe go seachtach péire díobh ag tacú le tionscadail taighde eolaíochta.

Choinnigh Foras na Mara a Chreidiúnú 'Scothsheirbhís ó Scothfhostaithe' faoi Chaighdeán NSAI - ETP 1000:2012. Léirigh sé sin ár n-infheistíocht i bhforbairt foirne, ár n-iarrachtaí ar cheannaireacht éifeachtach a chinntiú agus fócas ar chumarsáid a fheabhsú, agus feabhas leanúnach ar ghnó a chinntiú ag an am céanna.

I measc an fhócais foghlama agus forbartha a bhí ag Foras na Mara i gcomhair 2013 bhí forbairt phearsanta, forbairt bainistíochta agus sláinte agus sábháilteacht, chomh maith le bainistíocht agus pleanáil straitéiseach agus airgeadas do bhainisteoirí nach bainisteoirí airgeadais iad. Thairgearmar clár éagsúil atá dírithe ar oiliúint bhunriachtanach agus forbartha agus atá saincheaptha chun tacú le clár oibre criticiúla maidir le gnó a sheachadadh, agus cinntíodh forbairt leanúnach ár bhfoirne. Leanamar ag cur ár gclár in oiriúint chun tacú le riachtanais athraitheacha ár gcuid foirne, ag cur luach ar airgead ar fáil, ag baint leasa as clár réamhamhairc ghearra agus as cúrsaí ar líne, mar aon le huirlisí agus ábhar féinfhoghlama.

Bhí ocht gcruinniú ar siúl ag Coiste Sláinte agus Sábháilteachta Foras na Mara a thacaíonn lenár gClár Creidiúnaithe Cáilíochta ETP agus rinneadh ionadaíocht ar gach suíomh agus gníomhaíocht ar fud na heagraíochta. I rith na Seachtaine Feasachta ar Shláinte, Sábháilteacht agus Féinleas Fostaithe i mí na Nollag 2013 bhí seimineáir ar na freagrachtaí atá ar bhainisteoirí agus ar fhoirne; garchabhair ceirde; meabhairshláinte dhearfach ag an obair agus an tábhacht atá le hithe sláintiúil agus le haclaíocht. Is de bharr iarracht agus thacaíocht an Choiste Sláinte agus Sábháilteachta agus na foirne san Fhoras atá an cuntas teiste dearfach againn maidir le sábháilteacht.

Airgeadas

Tá Foras na Mara tiomanta do na caighdeáin is airde rialachais chorparáidigh a choinneáil agus do chomhlíonadh iomlán an Chóid Chleachtais athbheithnithe maidir le Rialachas Comhlachtaí Stáit a foilsíodh in 2009. Rinneadh measúnú neamhspleách ar chomhlíonadh an Fhorais in 2013 agus fuarthas amach go dtugtar tosaíocht ard do chaighdeáin rialachais chorparáidigh laistigh d'Fhoras na Mara.

Faoi mhaoirseacht an Choiste Iniúchta Inmheánaigh, lean Foras na Mara le hiniúchtaí inmheánacha a dhéanamh in 2013, agus dhearbhaigh gach ceann díobh rialachas d'ardchaighdeán san Fhoras arna chinntiú dá réir go bhfuil córas éifeachtach rialaithe inmheánaigh á chothú agus á chur i bhfeidhm. Ina measc sin tá iniúchtaí ar an gcód cleachtais, athbhreithniú ar an gcóras rialaithe inmheánaigh airgeadais, meicníochtaí tuairiscithe ar bhainistíocht airgeadais agus bainistíocht ar shonraí eolaíochta. Déantar athbhreithniú rialta ar an dul chun cinn ar na pleananna cur chun feidhme chun aghaidh a thabhairt ar aon mholtaí ón iniúchadh inmheánach agus tuairiscítear iad don Choiste Iniúchta Inmheánaigh agus do Bhord Foras na Mara.

Tugadh nósanna imeachta agus beartais airgeadais Foras na Mara chun dáta le linn 2013. Rinneadh athbhreithniú ar bhuiséad 2013 agus d'fhaomh an Bord Stiúrthóirí é i mí Eanáir 2013. Tá údarás agus freagracht buiséid sannta le haghaidh feidhmeanna sonracha do bhainisteoirí roghnaithe mar atá leagtha síos sna beartais agus nósanna imeachta maidir le saincheisteanna airgeadais agus soláthair an Fhorais.

Leantar leis an éiteas agus leis an aird láidir ar sholáthar poiblí ar fud Foras na Mara, agus eisíodh 39 tairiscint in 2013, agus foilsíodh deich gcinn díobh in Iris Oifigiúil na gComhphobal Eorpach (IOAE). Tá ceannach láraithe ina mhodh éifeachtach agus éifeachtúil chun costais a laghdú agus beidh an cás amhlaidh in 2014.

Is é beartas Foras na Mara gach sonrasc a íoc go pras. Leagadh síos córais agus nósanna imeachta le go mbeifear in ann sonraisc a leanúint agus lena chinntiú go ndéanfar fócaíochtaí roimh an dáta dlite. Déantar sonraisc a logáil go laethúil sa roinn airgeadais, agus fiosraítear iad go córasach lena n-áirithiú go bhfuil siad deimhnithe agus curtha ar ais lena n-fócaíocht gan mhoill. Eisítear fócaíochtaí de réir mar is gá chun fócaíocht gan mhoill a áirithiú. Rinneadh nuashonrú ar ár gcóras airgeadais in 2013 agus is féidir iontrálacha leictreonacha a dhéanamh ann anois agus orduithe ceannaigh a fhaomhadh ann freisin.

Saoráidí

Déanann an fhoireann Saoráidí bainistiú ar oibríochtaí laethúla na bpríomhsheirbhísí tacaíochta lena n-áirítear glanadh, slándáil, cothabháil agus lónadóireacht taobh istigh de phríomh-oifig agus saotharlanna Foras na Mara. Tá siad bunaithe sa cheanncheathrú in Órán Mór den chuid is mó, agus is é príomhfheidhm na foirne caighdeán na saoráidí a choinneáil agus scothsheirbhísí do chustaiméirí a sholáthar trí na stórtha, fáiltiú agus feidhmeanna cothabhála, do chustaiméirí inmheánacha agus seachtracha araon.

Tugadh freagra ar 12,000 glaogh teileafóin san fháiltiú lárnach in Órán Mór le linn 2013 agus ardaíodh os cionn 406 saincheist cothabhála nach raibh sceidealaithe nó a bhí pleanáilte agus tugadh chun críche iad le linn na bliana. Is é príomhchuspóir na n-innealtóirí speisialaithe agus cothabhála ginearálta ná a chinntiú go leanfar d'oibríochtaí ar fud na saoráidí go léir agus go ndéanfar na foirgnimh, an gléasra agus an trealamh a choinneáil ag imeacht ag caighdeán fíorard oibríocháin.

Ar cheann de phríomhchuspóirí na foirne tá éifeachtúlacht costais a bhaint amach trí chleachtais soláthair éifeachtacha agus nósanna imeachta oibríocháin saoráidí. Tá úsáid tairiscintí oscailte agus creatlacha ón Oifig um Sholáthar Rialtais ina príomhchodanna soláthair don fhoireann. Leantar ag tabhairt poiblíochta do cheannach láraithe ar fud na heagraíochta, agus baill Saoráidí ina gcinn feadhna air.



Grúpa deilfeanna bolgshrónach amach ón gcósta, thart ar 150km siar ó Éirinn, a tógadh le linn an cheathrú suirbhé tiomnaithe ar chéiticigh ar an scairbh ilchríochach imeallach a rinne eolaithe ó Ionad Taighde Muirí agus Fionnuisce Institiúid na Gaillimhe-Maigh Eo. Tá an suirbhé atá á dhéanamh ar an *RV Celtic Explorer* á mhaoiniú trí Chlár Náisiúnta Am Loinge Ártach Taighde Foras na Mara 2013 a fhaigheann tacaíocht ó Fhoclár Taighde Mara an Phlean Forbartha Náisiúnta 2007–2013.

“Díríodh in 2013 ar sholáthar seirbhísí agus clár chun tacú lenár bhfoireann agus comhoibriú leo, go háirithe le seachadadh na gClár agus na Seirbhísí atá mionsonraithe i bPlean Corparáideach Foras na Mara.”



Imelda Hehir ó Foras na Mara ag caint le scoláirí faoina cuid oibre i mbainistíocht iascaigh ar an *RV Celtic Explorer*. Thug os cionn seacht gcéad scoláire as Gaillimh, Ros Comáin agus Maigh Eo cuairt ar an ártach taighde tar éis dóibh cur isteach ar an gcomórtas "Exploring the XTRA-Ordinary Writing Competition".

Seirbhísí Corparáideacha



Seirbhísí Leabharlainne

I mí na Samhna 2013, chuaigh leabharlann Fhoras na Mara isteach sa tairseach náisiúnta um rochtain oscailte le haghaidh foilseachán taighde na hÉireann (RIAN). Bhí 814 foilseachán i Stór Rochtana Oscailte an Fhorais (<http://oar.marine.ie/>) faoi dheireadh 2013 agus tugadh 16,422 cuairt air in 2013 agus 29,752 cuairt san iomlán ó seoladh é i mí an Mhárta 2011. Anuas ar na leaganacha digiteacha iomlána téacs d'fhoilseacháin Fhoras na Mara is cartlann thábhachtach é an Stór chun seantuarascálacha agus seanpháipéir a chaomhnú go leictreonach. Gné shuntasach den stór seo ná go bhfuil táscairí feidhmíochta ar fáil a léiríonn cé chomh minic a fhéachtar ar fhoilseacháin nó a dhéantar iad a íoslódáil agus na tíortha as a ndéantar é sin. Tháinig méadú mór ar infheictheacht agus ar thionchar taighde fhoilseacháin Fhoras na Mara agus ar an dóchúlacht go luafar iad mar is féidir na taifid uile atá sa Stór a chuardach le Google agus innill chuardaigh eile. Le bunú an Stóir, déantar cinnte go bhfuil Foras na Mara ag comhlíonadh sainorduithe ó chomhlachtaí maoiniúcháin, idir náisiúnta agus idirnáisiúnta, a éilíonn go mbeadh na foilseacháin uile a eascraíonn as an maoiniú curtha i stór ar rochtain oscailte.

Shínigh an Foras Meabhrán Tuisceana le hInstitiúid Teicneolaíochta na Gaillimhe-Maigh Eo le linn 2013 chun acmhainní leabharlainne a chomhroinnt agus leagadh síos comhaontú maidir le hiasachtaí cómhálairte.

Cumarsáid

Leanadh de chumarsáid réamhghníomhach le príomhpháirtithe leasmhara Fhoras na Mara le linn 2013 trí chlár éagsúla meán, oideachais agus for-rochtana. Chuireamar tús le tionscadal chun suíomh gréasáin an Fhorais a athfhorbairt agus rachaidh sé beo in 2014 agus leanamar freisin ag forbairt ardáin meán sóisialta Twitter, Facebook agus LinkedIn. Tá líon suntasach daoine ag leanúint ár mblag scientists@sea agus bíonn eolaithe agus an pobal araon rannpháirteach ann.

Chuireamar an Clár Taiscéalaithe ar fáil i nGaillimh, i Maigh Eo, sa Chlár, i mBaile Átha Cliath, i gCill Mhantáin agus i gCorcaigh agus fuaireamar tacaíocht ónár gcomhpháirtithe, lena n-áirítear Galway Atlantiquaria, Sea Life Centre i mBré agus Lifetime Lab i gCorcaigh. Fuair an clár Oideachas do Thaiscéalaithe tacaíocht freisin ó ionaid oideachais na Gaillimhe, Mhaigh Eo, an Chláir agus na Carraige Duibhe. Rinneadh athstruchtúrú ar an gclár i nGaillimh, ag tairiscint ceithre mhodúl dhifriúla ar théarma na mara le haghaidh scoileanna a dhéanann iarratas tríd an Ionad Oideachais. Bhí turais scoileanna ar siúl ar an *RV Celtic Explorer* áit a raibh deis ag os cionn 700 dalta bunscoile agus meánscoile foghlaim faoin taighde a dhéantar ar an ártach, lena n-áirítear léarscáiliú ghrinneall na farraige, taighde iascaigh, aigéaneolaíocht chomh maith le tuiscint a fháil ar an gcineál saoil a bhíonn ag duine a oibríonn ar ártach taighde.

Bhí roinnt scéalta a bhaineann le cúrsaí mara agus a ndearna Foras na Mara poiblíocht orthu le feiceáil sna meáin ar feadh na bliana lena n-áirítear suirbhé bithfhionnachtana a rinne Ollscoil na hÉireann, Gaillimh ar bord an *RV Celtic Explorer* agus thángthas ar ghnáthóga nua domhainfharraige le linn an tsuirbhé sin ag úsáid an *ROV Holland 1*. Maoiníodh an suirbhé faoin straitéis Casadh na Taoide le tacaíocht ó Fhoras na Mara agus ón bPlean Forbartha Náisiúnta 2007-2013. D'éirigh le ASIMUTH, tionscadal arna mhaoiniú ag Creatlach 7 an AE faoi stiúir na hÉireann (faoi stiúir Stáisiún Taighde Mara Dháithí Uí Mhurchú - DOMMRS)

Máistir Dhuais Copernicus a bhuachan (Monatóireacht Dhomhanda don Chomhshaoil agus don tSlándáil) as an tseirbhís faireacháin cruinne is fearr do shaoránaigh na hEorpa 2013. D'fhorbair an tionscadal uile-Eorpach seo córas rabhaidh ar líne chun réamhrabhadh a thabhairt don tionscal dobharshaothraithe maidir le bláthú algáí díobhálacha

Bhí siad seo a leanas i measc imeachtaí eile a tuairiscíodh go minic sna meáin: An t-imeacht *An tAtlantach – Acmhainn Chomhroinnte* a bhí ar siúl ag Foras na Mara, Gaillimh i mí na Bealtaine, tráth ar síníodh an ráiteas stairiúil *Ráiteas na Gaillimhe ar Chomhar an Aigéin Atlantaigh* ag línseáil comhaontú taighde idir an AE, SAM agus Ceanada; an *Fóram SmartOcean* i mBéal Feirste inar ndearnadh poiblíocht ar Éirinn agus ar Thuaisceart Éireann mar cheannairí i bhforbairt táirgí agus seirbhísí teicneolaíochta faisnéise is cumarsáide (TFC) le haghaidh earnálacha mara domhanda; agus cuireadh an tábhacht atá le taighde mara iildisciplíneach chun cinn ag an ócáid *The Longest River – A Marine Science, Literacy and Music event* a bhí ar siúl sa Bhrúiséal agus an bealach a bhfuil obair thar theorainneacha idirnáisiúnta riachtanach chun éiceachórais mhuirí fholháine a bhaint amach. Fuair an ócáid sin ardmholadh ag na gradaim Allianz Business 2 Arts.

Aonad Bainistíochta Chasadh na Taoide agus Oifig Taighde

Ba é 2013 an bhliain dheireanach de théarma *Straitéis Chasadh na Taoide* (*Straitéis Nudálaíochta, Taighde agus Faisnéise Mara d'Éirinn 2007-2013*). I rith na bliana, bhí díreach os cionn €2.9m infheistithe faoi Fhochlár Taighde Mara an NDP arna riar ag Foras na Mara. Tá liosta iomlán d'infheistíochtaí nua in 2013 ar fáil in Aguisín 1. Fágann an infheistíocht in 2013 gurb ionann an infheistíocht iomlán faoi Fhochlár Taighde Mara an NDP agus €63.4m go dtí seo (2007-2013). Úsáideadh formhór (86%) na hinfheistíochta 2013 chun tacú le taighde (143 lá) agus le cláir oiliúna fochéime/iarchéime (57 lá) ar bord na n-árthaí taighde náisiúnta an *RV Celtic Explorer* agus an *RV Celtic Voyager*. Tugadh faoi thaighde inar díríodh ar na réimsí seo a leanas: iascaigh (suirbhé ar uibheacha ronnach), muirthimpeallacht (suirbhé ar chothaitheigh), aigéaneolaíocht/athrú aeráide, geolaíocht mhuirí, teicneolaíocht mhara agus bithéagsúlacht/bithfhionnachtain mhara. Cuireadh cláir oiliúna ar fáil do mhic léinn ó sé Institiúid Ardoideachais, trí mhodúil shonracha struchtúrtha agus chreidiúnaithe nó trí chúrsaí cineálacha iildisciplíneacha a ndearna Scoil Mhara SMART comhordú orthu in Institiúid Teicneolaíochta na Gaillimhe-Maigh Eo.

In 2013, foilsíodh ceithre thuarascáil deiridh maidir le tionscadail agus cuireadh ar fáil iad ar Stór Rochtana Oscailte Fhoras na Mara. Soláthraíonn na tuarascálacha sin torthaí taighde tábhachtacha ar bhonn fianaise a chuideoidh le cinnteoireacht beartais a dhéanfar sa todhchaí maidir le dobharshaothrú iasc eite (maidir le paiteolaíocht gheolbhaigh agus galair éisc), dobharshaothrú feamainne (speicis feamainne a bhfuil cumas tráchtála iontu), comhtháthú sonraí (de shonraí geo-eolaíochta) agus cosaint na muirthimpeallachta (trí scaipeadh mamach mara a chainníochtú in uiscí na hÉireann).

Infheistíodh €5m breise, trí chlár iomaíochta náisiúnta eile (e.g. DAFM, HEA, SFI, EPA, IRC), i dtaighde dírithe ar aghaidh a thabhairt ar spriocanna *Chasadh na Taoide*. Mar chuid de sin bhí glao suntasach inar bronnadh €4m faoi Bheart Taighde Institiúide Bia (FIRM) DAFM le haghaidh taighde ar bhia mara.

Bhí ag éirí go maith i gcónaí le taighdeoirí mara na hÉireann i gcláir maoiniúcháin iomaíocha an AE (FP7 agus INTERREG), agus bronnadh deontais dar luach €12.8m in 2013. Fágann sé seo gurb ionann agus €67.5m iomlán na ndeontas a bronnadh ar thaighdeoirí mara Éireannacha i dtimthriall maoinithe reatha an AE (2007–2013). Tá thart ar €204m san iomlán infheistithe anois i dtaighde mara/taighde atá bainteach le cúrsaí mara in Éirinn thar ré *Chasadh na Taoide* (2007–2013) agus is ionann 33% de sin agus deontas an AE le haghaidh taighde. Tá iomlán na ndeontas AE a baineadh amach thar an tréimhse sin trí huaire níos mó ná an sprioc a leagadh síos in 2007.

Thug an Oifig Taighde tacaíocht freisin do chomhghleacaithe i bhForas na Mara i ngach réimse seirbhíse le linn 2013 a bhain le bainistiú/riar tionscadal taighde arna maoiniú ag an AE. Tá tacaíocht á cur ar fáil do 26 tionscadal faoi láthair, dar luach os cionn €3.3m don Fhoras ó thaobh deontais de. Sa chuid deiridh den bhliain dírfódh an fócas ar dhul i dtaithí agus ullmhú don chéad sraith maoinithe eile de chuid an AE sna seacht mbliana seo romhainn; is é sin Horizon 2020.

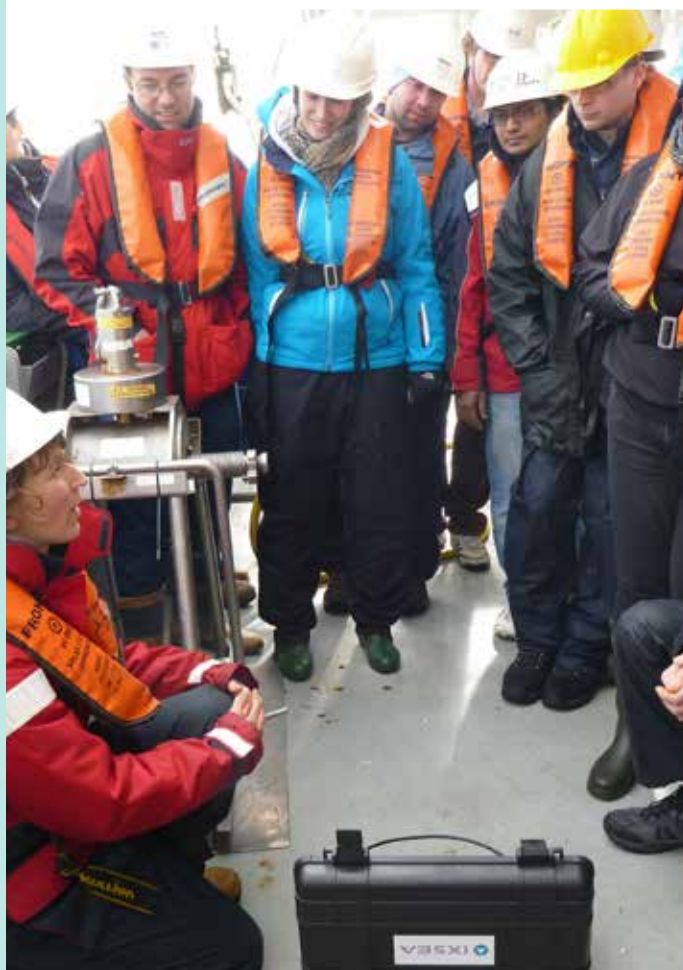
Inrochtaineacht

Chloígh an Foras go hiomlán le forálacha an Achta um Míchumas le linn 2013.



Athsheoladh Clár Oideachais Mara na dTaiscéalaithe agus tá 45 scoil is páirteach sa chlár mara i nGaillimh anois.

“Cuireadh an tábhacht atá le taighde mara ildisciplíneach chun cinn ag an ócáid The Longest River – A Marine Science, Literacy and Music event a bhí ar siúl sa Bhruiséil agus an bealach a bhfuil obair thar theorainneacha idirnáisiúnta riachtanach chun éiceachórais mhuirí fholláine a bhaint amach”



Léiríonn Sheena Fennel as OÉ Gaillimh eisiúint fhuaimniúil le linn an chúrsa phraiticiúil farraige ar ardteicneolaíochtaí mara a mhair dhá lá agus a seachadadh ar an ártach taighde náisiúnta an RV Celtic Voyager do mhic léinn iarchéime ón gclár Céimí Idirnáisiúnta SmartOcean: Tionscnamh Fiontraíochta (ISGEI). Rinneadh an oiliúint faoin straitéis Casadh na Taoide le tacaíocht ó Fhoras na Mara agus ó Fhoclár Taighde Mara an Phlean Forbartha Náisiúnta 2007–2013.

Oifig Forbartha Muirí na hÉireann



Ráiteas an Stiúrthóra

Tá an earnáil iompair mhuirí ag teacht slán ó thréimhse cúlaithé agus comhdhlúthaithe a thosaigh in 2007. Cé gur iomaí dúshlán atá le sárú fós, ba bhliain thábhachtach é 2013 ó thaobh athruithe. Bhí fás le brath arís sa mhéid trádála iomlán a bhí ag gluaiseacht trí chalafoirt na hÉireann, de réir mar a tháinig méadú ar an éileamh ar amhábhair i dtionscail cosúil le talmhaíocht agus tógáil.

Ar feadh na tréimhse ar fad, de réir mar a bhí an geilleagar ag teacht chuige féin, bhí clár oibre Oifig Forbartha Muirí na hÉireann (IMDO) dírithe go daingean i gcónaí ar bheartais agus ar chleachtais a fhorbairt ina dtacaítear le fás, le hinbhuanaitheacht agus le cruthú post laistigh den earnáil iompair mhuirí. Is iarracht chomhoibritheach é beartais agus cleachtais den chineál sin a fhorbairt a bhí ag brath go mór ar chomhoibriú páirtithe leasmhara sa tionscal. Is léir iad torthaí na comhiarrachta sin san obair ar éirigh leis an IMDO a dhéanamh in 2013 agus sna blianta roimhe sin. Mar shampla:

- Tairgeann an IMDO sonraí iontaofa agus údarásacha a choinníonn súil ar fhás agus ar fhorbairt na hearnála. Eisítear tráchtearraí ráithiúla maidir leis an margadh, mar aon le *The Irish Maritime Transport Economist* (IMTE), foilseachán bliantúil a úsáideann cleachtóirí, comhlachtaí ionadaíocha agus lucht déanta beartas mar dhoiciméad tagartha anois. Ní bheadh na foilseacháin sin againn in aon chor murach comhoibriú agus tacaíocht na gcomhlachtaí loingseoireachta, na gcalafoirt agus gníomhaireachtaí eile san earnáil. Eisíodh an 10ú heagrán den IMTE in 2013, sprioc thábhachtach ina fhorbairt. Mar thoradh ar an stór sonraí atá taobh istigh den IMDO anois tá deis ann cur go heolasach le forbairt Beartas Náisiúnta maidir le Calafóirt, a d'fhoilsigh an tAire Iompair, Turasóireachta agus Spóirt in 2013.
- Nuair a tugadh isteach é in 2002, chuir córas Cháin Tonnáiste na hÉireann deireadh leis an meath ar úinéireacht loinge dúchasaigh. D'éirigh leis freisin úinéirí loinge idirnáisiúnta a thabhairt isteach sa scéim agus infheistíocht choigríche isteach a thabhairt chomh fada le hearnáil mhuirí na hÉireann. Tá cuideachtaí loingseoireachta idirnáisiúnta, a thug an IMDO go hÉirinn, le feiceáil go follasach anois i measc na gcuideachtaí is fearr in Éirinn, mar a tuairiscíodh i Liosta an Irish Times den 1000 cuideachta is fearr i mí na Bealtaine 2013. Ba thionscnamh réamhghníomhach a bhí i dtabhairt isteach chóras na cánach tonnáiste ag an Rialtas agus tá sé fós ag saothrú díbhinne don earnáil mhuirí agus don gheilleagar níos leithne. Faoi dheireadh 2013, bhí 45 cuideachta cláraithe faoin scéim, ag cuimsiú beagnach 300 ártach.
- Trí thacú le hoideachas agus le hoiliúint daltaí, tríd an Scéim Cúnaimh Oideachais do Mharaithe na hÉireann (ISEAS), leanann an IMDO ag aithint agus ag léiriú scoth na gcéimithe atá ag teacht amach as Coláiste Náisiúnta Muirí na hÉireann. Tríd an scéim, faigheann daltaí socrúcháin le cuideachtaí loingseoireachta idirnáisiúnta clúiteacha agus is féidir leo dul ar aghaidh agus gairmeacha beatha bisiúla agus rathúla a bheith acu san earnáil mhuirí. In 2013, d'aimsigh an clár ISEAS socrúcháin do 123 dalta leis na 14 chuideachta a bhí rannpháirteach sa scéim.
- Bíonn tionchar ag feidhmíocht agus ag éifeachtúlacht na hearnála iompair mhuirí ar thrádáil idirnáisiúnta, ar iomaíochas ár ngeilleagair náisiúnta agus ar chruthú post. Dá bhrí sin, tá sé de chúram ar an

IMDO oibriú go dlúth le gach calafóirt tráchtála ar an oileán, lena n-áirítear iad sin i dTuaisceart Éireann, chun forbairt na hearnála a stiúradh chun cinn. D'aithin an tAire Post, Fiontar agus Nuálaíochta an gá atá le héifeachtúlacht agus le hiomaíochas san earnáil, agus d'iarr sé ar an Údarás Iomaíochta athbhreithniú a dhéanamh ar iomaíochas chalafoirt na hÉireann. Chuir an IMDO leis an bpróiseas comhairliúcháin trí anailís theicniúil agus staitistiúil a sholáthar, a bhí mar bhonn eolais ag an tuarascáil a d'eisigh an tÚdarás Iomaíochta i mí na Samhna 2013. Ina theannta sin, rinne an IMDO a athbhreithniú bliantúil ar fheidhmíocht airgeadais chalafoirt na hÉireann, agus cuireadh faoi bhráid an Aire Iompair, Turasóireachta agus Spóirt é i rith na bliana. Tugadh athbhreithniú comparáideach san anailís ar fheidhmíocht airgeadais na gcalafoirt agus d'úsáid comhghleacaithe sa Roinn na torthaí chun treoir a thabhairt maidir le cinntí beartais níos leithne maidir le calafóirt.

Trí bheith rannpháirteach i dtionscnaimh cosúil leo sin atá thuasluaite, spreagann an IMDO athrú dearfach agus comhlíonann sé a shainordú chun tacú le forbairt earnáil iompair mhuirí na hÉireann. Le linn 2013 ar fad, chuir an IMDO béim ar na tionscnaimh agus na beartais sin a thugann deis an geilleagar a athnuachan agus poist a chruthú.

An tUasal Glenn Murphy

Stiúrthóir: Oifig Forbartha Muirí na hÉireann

Leárgas Náisiúnta

Ag iompú ar fheidhmíocht na hearnála iompair mhuirí in Éirinn in 2013, is léir gur thug roinnt táscairí údar misnigh dúinn le hais mar a bhí againn le roinnt blianta anois.

Tá an méid trádála a bhogann trí chalafoirt na hÉireann ina tháscaire iontaofa d'fheidhmíocht agus de ghníomhaíocht gheilleagair náisiúnta. Cé go bhfuil an méid tráchtála atá ag dul trí chalafoirt na hÉireann fós i bhfad faoi bhuai stairiúil na ndéic mbliana roimhe seo, is fuá a rá gur tháinig méadú 3% ar an Innéacs iShip, an tomhas comhbhailiúcháin de mhéideanna trádála, go dtí 862 pointí in 2013. Tháinig méadú 6% ar thrácht builc thirim, inar cuimsíodh tráchtearraí cosúil le gual, mian agus táirgí talmhaíochta. Tháinig méadú 18% ar an innéacs maidir le bulc le briseadh, ina ndéantar rianú ar ábhar a bhaineann le tógáil, cosúil le cruach agus adhmaid, rud a thabharfadh le fios go bhfuil borradh arís ar earnáil na tógála. Ar an iomlán, mar thomhas d'fheidhmíocht gheilleagair, tacaíonn innéacs iShip le haghaidh 2013 leis an tuairim go bhfuil dul chun cinn cobhsaí a dhéanamh i dtreo téarnamh gheilleagair.

Chuir roinnt cuideachtaí calafóirt, a bhfuil sé de chúram orthu an bonneagar a sholáthar chun freastal ar éilimh gheilleagar na hÉireann amach anseo faoin mBeartas Náisiúnta maidir le Calafóirt, tograí uaillmhianacha isteach chun leathnú agus forbairt a dhéanamh. Cé nach bhfuil aon imní faoi láthair faoi chumas iomlán na gcalafoirt, toisc go bhfuil an méid tráchtála reatha faoi bhuai ceanna a bhí ann roimh an gcúlú eacnamaíoch, aithnítear sna tograí atá á mbreithniú go bhfuil gá le cumas breise ag calafóirt de réir mar a fheabhsaíonn an geilleagar agus de réir na féidearthachta a bhaineann le cuid shonrach den mhargadh, cosúil le gnó cúrsála, a leathnú go suntasach amach anseo.

In 2013, tháinig pleananna chun cinn chun seirbhísí nua a chur ar fáil go dtí an Fhrainc agus an Spáinn agus cuireadh acmhainn bhreise le roinnt bealaí atá ann cheana. Léirítear i bhfógraí den sórt sin go bhfuiltear muiníneach arís go bhfeabhsóidh geilleagar na hÉireann agus go gcreidtear gur féidir trácht paisinéirí agus lastais a mhéadú ar roinnt bealaí. Cuirtear fáilte roimh na tionscnaimh sin agus is athrú suntasach meoin é maidir le cumas fáis na hearnála.

Fágann na tascáir agus na treochtaí seo i dteannta a chéile, atá á bhfaire go grinn ag an IMDO, nár mhiste a bheith soirbh de bheagán ar aon nós go bhfuil an earnáil iompair mhuirí ag teacht chuici féin diaidh ar ndiaidh ó thréimhse inar cuireadh tús le gearradh siar mór in 2007.

Leárgas Idirnáisiúnta

Is tionscal domhanda í an loingseoireacht nach féidir a dheighilt go néata i réigiúin thíreolaíocha scoite. Tá sócmhainní an tionscail soghluaiste agus dá bhall sin, bíonn tionchar mór go réigiúnach ag treochtaí domhanda. Déanann an IMDO monatóireacht ar mhargáil loingseoireachta ar fud an domhain agus tugann sé tuairisc ar na tosca a mbíonn tionchar acu ar sholáthar, ar éileamh agus ar phraghsáil taobh istigh den tionscal. Tá an méid seo a leanas san anailís: éileamh domhanda; rátaí cairte; rátaí malartáin; rátaí úis; praghsanna breosla; agus raon saincheisteanna sóisialta, polaitiúla agus geilleagracha a mbíonn tionchar acu ar mhargáil loingseoireachta go hidirnáisiúnta agus dá réir sin, ar earnáil iompair mhuirí na hÉireann.

Tháinig méadú 5% ar thrádáil dhomhanda coimeádán in 2013, beagán níos ísle ná mar a bhíodhas ag súil leis, agus sin mar gheall go príomha ar thearcfheidhmíocht i Limistéar an Euro. Ag féachaint chun cinn, táthar ag súil go méadóidh an méid trádála idir 6% agus 7% in 2014, de réir mar a leantar don téarnamh geilleagrach i dtíortha limistéar an Euro.

Tuairiscíodh méaduithe measartha maith ar mhargadh cairte longa coimeádán domhanda in 2013, de réir mar a mhéadaigh rátaí 2.9% ar an meán, i gcomparáid leis an mbliain roimhe sin. Is fiú a thabhairt faoi deara, gur tháinig méadú 20% sa tréimhse ar rátaí cairte le haghaidh aicmí áirtheaí a bhfuil ceannas acu ar mhargadh na hÉireann (300 go dtí 1000 TEU). Mar sin féin má fhéachaimid ar an scéal ar bhonn stairiúil, bhí na rátaí fós níos ísle ná riamh i gcás bhunáite na n-aicmí áirtheaí, agus i gcuid mhaith cásanna faoin leibhéal a ghineann toradh geilleagrach d'úinéirí.

Maolaíodh an méadú ar rátaí cairte a raibh tionchar acu ar mhargadh na hÉireann mar gheall ar phraghsanna buncair a bhí níos ísle ná an meán – síos 7% ó 2012, bunaithe ar IFO 380. Mar sin féin b'fhéidir gur faoiseamh sealadach é sin. Ón 1 Eanáir 2015, beidh feidhm le Treoir Sulfair an AE. Méadóidh sé sin go substaintiúil costas breosla buncair, agus tiocfaidh méadú ar fhormhuirir breosla dá réir. Iarrfar ar gach long a bheidh ag dul thar Limistéar Rialaithe Astaíochtaí Sulfair (SECA) breosla a úsáid ina bhfuil an méid sulfair ann níos lú ná 0.1%.

Bhí rátaí úis níos ísle ná riamh go hidirnáisiúnta. Táthar ag smaoineamh ar rátaí úis a ghearradh tuilleadh agus fiú rátaí úis cineál díúltach a ghearradh ar thaisc d'fhonn gníomhaíocht ghilleagrach a spreagadh agus an brú díbhóilscitheach laistigh de Limistéar an Euro a mhaolú.

Mar gheall ar neart an Euro in aghaidh mór-airgeadraí eile, go háirithe airgeadra chomhpháirtithe móra trádála na hÉireann, cuireadh tuilleadh leis na dúshláin a bhí os comhair easpórtálaithe na hÉireann in 2013. Táthar ag ceapadh go n-éireoidh an Euro níos laige de réir a chéile in 2014, agus meán-réamhaisnéisí ag maíomh go dtiocfaidh dímhéas 6.0% agus 5.2% air i gcoinne an Steirling agus dhollar SAM faoi seach.

Gach seans go gcabhróidh sé sin le cúrsaí trádála easpórtálaithe na hÉireann sa dá mhargadh thábhachtacha sin an bhliain seo amach romhainn.

Ar feadh 2013 ar fad, rinne an IMDO monatóireacht ar threochtaí idirnáisiúnta a bhfuil tionchar acu ar fheidhmíocht earnáil iompair mhuirí na hÉireann agus bhí tionchar ina dhiaidh sin ag na treochtaí sin ar an gcomhairle beartais a thug sé don rialtas.

Leárgas ar fud an Tionscail

Cuimsítear raon leathan grúpaí leasa i dtionscal iompair mhuirí na hÉireann. Bíonn tionchar suntasach ag feidhmíocht na hearnála ar an ngeilleagar náisiúnta, go háirithe cúrsaí trádála agus turasóireachta. Tá sé tábhachtach dá bhrí sin, mar ghníomhaireacht forbartha, go bhfaigheadh an IMDO tuairimí raon páirtithe leasmhara a dhéanann ionadaíocht ar an tionscal trí chéile. Tá sé tábhachtach freisin go mbeadh aon seasamh a ghlacann an IMDO maidir le beartais á dtreorú ag saincheisteanna náisiúnta, ag saincheisteanna atá ag teacht chun cinn laistigh den AE, agus ag forbairtí domhanda ábhartha. Chuige sin, cothaíonn an IMDO caidrimh láidre le líonra eagraíochtaí agus gníomhaireachtaí a bhfuil cuspóir coiteann acu an earnáil iompair mhuirí a fhorbairt in Éirinn.

Ar leibhéal náisiúnta, is gnách leis an IMDO oibriú go dlúth le grúpaí ionadaíocha cosúil le Cumann Onnmhaiseoirí na hÉireann, IBEC agus Cumann Calafort na hÉireann. Ina thacaíocht d'fhorbairt an tionscail, d'fhorbair an IMDO ceangal láidir le gníomhaireachtaí mar an IDA, Fiontraíocht Éireann agus institiúidí tríú leibhéal a bhfuil baint acu le cláir oideachais san earnáil mhuirí.

Ar leibhéal Eorpach, tá baint ag an IMDO le cláir AE a leagan amach agus a chur i bhfeidhm agus scaipeann sé faisnéis ábhartha maidir leis na cláir sin do pháirtithe leasmhara sa tionscal. Faoi láthair, tá an IMDO rannpháirteach go gníomhach i gcláir cosúil leis an Tionscadal Uisce-Iompartha, faoi Chlár Horizon 2020 agus sainaitníonn sé deiseanna maoinithe don tionscal agus d'institiúidí tríú leibhéal a bhfuil spéis acu taighde a dhéanamh san earnáil mhuirí. Trína ghréasán Eorpach de theagmhálaithe sa tionscal, lena n-áirítear ionadaithe buana i ngníomhaireachtaí Éireannacha sa Bhruiséil, coinnítear an IMDO ar an eolas maidir le forbairtí suntasacha ar leibhéal an AE.

Ar leibhéal domhanda, cruinníonn an IMDO faisnéis ó mhargáil loingseoireachta ar fud an domhain trí eagraíochtaí ionadaíocha, nó nuair is iomchuí, ó ghníomhairí a bhíonn ceaptha go díreach. Bhí an IMDO gníomhach i margaí in áiteanna chomh fada óna chéile le SAM agus an Cianoirthear d'fhonn spéis a mhúscaill in earnáil mhuirí na hÉireann.

Tá dlúthbhaint ag an IMDO le tionscadal Ionad Seirbhísí Loingseoireachta na hÉireann (ISSC), ina bhféachtar le cáil a fhorbairt d'Éirinn mar mhol loingseoireachta idirnáisiúnta. D'aithin lucht poiblíochta an tionscadail an deis atá ann níos mó ná 3,000 post nua a chruthú in Éirinn trí chuideachtaí a bhfuil baint dhíreach acu leis an earnáil mhuirí a mhealladh isteach, mar aon le sraith leathan seirbhísí coimhdeacha, lena n-áirítear maoiniú áirtheaí, árachas agus seirbhísí comhairleacha agus comhairliúcháin.

In 2013, thug an IMDO cluas éisteachta do pháirtithe leasmhara sa tionscal agus labhair sé ar a son le cur in iúl don rialtas cad iad na cleachtais agus na beartais a chuirfidh ar chumas earnáil iompair mhuirí na hÉireann an acmhainn atá aici a bheith mar éascaitheoir ar thrádáil idirnáisiúnta agus mar fhoinsé post nua i ngeilleagar na hÉireann a fhorú.

Seirbhísí Muirthimpeallachta agus Sábháilteacht Bhia



Ráiteas an Stiúrthóra

Díríonn obair na Seirbhísí Muirthimpeallachta agus Sábháilteacht Bhia (MEFS) ar chosaint a thabhairt don mhuirthimpeallacht, seirbhísí a sholáthar ag tacú le tionscal dobharshaothraithe inbhuanaithe, agus sábháilteacht tomhaltóirí a chinntiú trí sheirbhísí sábháilteachta bia mara a sholáthar. Leanann an obair sin ag tacú le rochtain an

mhargaidh d'onnmhairithe bia mara na hÉireann. Déantar an obair sin a sheachadadh trí thrí phríomhfheidhm lena n-áirítear: Monatóireacht; Comhairle agus Tacaíocht Theicniúil; agus Taighde.

I measc na gclár monatóireachta ar leanadh dóibh in 2013 bhí siad seo a leanas:

- > Clár Náisiúnta Monatóireachta Bitocsainí
- > Clár Náisiúnta maidir le Rialú Iarmhair (gné bia mara)
- > Iniúchtaí agus monatóireacht ar ghluaiseachtaí stoc éisc agus sliogéisc, mar a cheanglaítear faoi Threoir an AE maidir le Sláinte Éisc
- > Clár Náisiúnta Monatóireachta na Míolta Éisc
- > An Chreat-Treoir Uisce (gnéithe maidir le hUisce Idirthréimhseacha agus Cósta).

Mar thacaíocht do na cláir seo, is é Foras na Mara an tSaotharlann Náisiúnta Tagartha le haghaidh monatóireachta ar ghalair i sliogéisc, in éisc eite agus i gcrústaigh; bitocsainí; éilleáin mhicribhitheolaíochta i sliogéisc agus substaintí áirithe ceimiceacha i ndobharshaothrú.

Rinneadh leathnú breise in 2013 ar ár gcóras cáilíochta creidiúnaithe (ISO 17025) ó Bhord Náisiúnta na hÉireann um Chreidiúnú (INAB), atá mar thaca le seachadadh na gclár sin, agus tá idir 36 agus 40 modh tástála creidiúnaithe ann anois.

Thacaigh na seirbhísí comhairleacha agus teicniúla a sholáthair MEFS in 2013 leo seo a leanas:

- > Measúnuithe lomchuí ar ghníomhaíocht lascaigh agus Dobharshaothraithe i láithreáin Natura 2000, i Limistéir Chaomhantais Speisialta agus i Limistéir faoi Chosaint Speisialta (SACanna agus SPAnna)
- > Ceadúnú dobharshaothraithe
- > Bainistiú Bánna Singile Dobharshaothraithe (SBM)
- > Seachadadh spriocanna tábhachtacha de Chreat-Treoir na Straitéise Mara (MSFD) ag an Roinn Comhshaoil, Pobail agus Rialtais Áitiúil (DECLG) – measúnú tosaigh ar mhuirthimpeallacht na hÉireann agus seoladh Atlas Mara na hÉireann (<http://atlas.marine.ie>).
- > Cinntí maidir le léasú/ceadúnú urthrú ag DECLG
- > Comhairle don Ghníomhaireacht um Chaomhnú Comhshaoil (EPA) maidir le dumpáil ar farraige
- > Obair an Tascfhórsa Cumasóra maidir le Pleanáil Spásúlachta Muirí de chuid an Ghrúpa Comhordaithe Mhuirí.

Bhí ról lárnach ag rannpháirtíocht i gcláir/dtionscadail taighde – agus scaipeadh torthaí taighde, lena n-áirítear foilseacháin piarmheasúnaithe – ina dtacaítear lenár bpríomhról mhonatóireachta agus chomhairleacha maidir leis an gcomhshaoil agus sábháilteacht an bhia mara inár gclár oibre le haghaidh 2013. Is fiú a lua gur cuireadh an tionscadal clúiteach ASIMUTH i gcrích, in éineacht le Seirbhísí Aigéaneolaíochta agus Faisnéise, inar forbraíodh táirgí réamhaisnéisithe ag baint úsáide as samhlacha fisiceacha, satailíte agus sonraí in situ le réamhrabhadh ar bhlás a chur ar fáil, rud a thabharfadh deis d'fheirmeoirí éisc agus sliogéisc a gcultúr agus a gcleachtadh bainte a oiriúnú in am, chun caillteanais fhéideartha a laghdú.

Déantar ár gcuid oibre go léir i gcomhar le ranna agus le gníomhaireachtaí Rialtais lena n-áirítear an Roinn Talmhaíochta, Bia agus Mara (DAFM), Údarás Sábháilteachta Bia na hÉireann (FSAI), an Roinn Comhshaoil, Pobail agus Rialtais Áitiúil (DECLG); an Roinn Ealaíon, Oidhreacht agus Gaeltachta, an tÚdarás um Chosaint Iascaigh Mhara (SFPA) agus an Ghníomhaireacht um Chaomhnú Comhshaoil (EPA). Tá ról gníomhach freisin ag MEFS i bhfóiraim idirnáisiúnta e.g. an Chomhairle Idirnáisiúnta um Thaiscéalaíocht na Mara (ICES) agus Coinbhinsiún Oslo agus Pháras 1992 (OSPAR).

An tUasal Aengus Parsons

Stiúrthóir: Seirbhísí Muirthimpeallachta agus Sábháilteacht Bhia

Monatóireacht

Sábháilteacht Sliogéisc

Rinneadh anailís ar díreach os cionn 3,300 sampla sa chlár monatóireachta ar bhitocsainí i sliogéisc, a rinne MEFS thar ceann SFPA agus FSAI in 2013. Mar thoradh ar an gceanglas atá ann anailís a dhéanamh ar líon méadaithe muiríní a bhaintear ó limistéir chladaigh aicmithe tá méadú mór anois ar an líon samplacha le hais blianta roimhe seo. Mar gheall ar leibhéil ardaithe bhitocsainí i gcuid mhaith limistéir táirgthe sliogéisc coinníodh ionaid sliogéisc dúnta go fadtréimhseach ar feadh an tsamhraidh agus i limistéir áirithe suas go dtí deireadh na bliana. Cé gur imeachtaí nádúrtha iad sin agus gur tugadh faoi deara go raibh áiteanna dúnta ar feadh píosa fada roimhe seo, bhí an tionchar a bhí aige ar an tionscal suntasach. Tugadh tacaíocht leanúnach trí mhonatóireacht leanúnach a sholáthar chun na leibhéil tocsaineachta i ngach sampla a cuireadh isteach a thomhas agus eisíodh comhairle, mar aon leis an SFPA, ar athoscailt limistéir chomh luath is a bhí sé sábháilte é sin a dhéanamh.

Rinneadh monatóireacht mhíosúil ar leibhéil E. coli i sliogéisc i ngach limistéir táirgeachta agus rinneadh an t-athbhreithniú bliantúil ar na sonraí leis an SFPA chun aicmiú cuí a shannadh ar gach limistéir. Cuireadh dhá thionscadal PhD i gcrích in MEFS in 2013 a chuir go mór leis an eolas atá againn ar scaipeadh Noraivíris ó ghléasraí cóireála dramhuise agus an baol a bhaineann leo sin i sliogéisc.

Thángthas ar bhlás leathan den speiceas fiteaplanctóin *Phaeocystis* i mí

an Mheithimh 2013 agus breathnaíodh orthu ag úsáid íomhánna sataillíte. Bhí an-spéis ag an bpobal ann. Tá an speiceas seo, a fheictear go minic in uiscí na hÉireann, ina chuid de choilíneach ceall ar snámh atá leabaithe i mairtís glóthaí polaisiúicríde agus dá thoradh sin bhí dath glas ar an uisce i roinnt áiteanna feadh chósta an oirthir. Ní fios go gcuireann sé sláinte daoine i mbaol.

Monatóireacht ar larmharaigh agus ar Thruailleáin

Rinne an fhoireann ceimiceach an chomhchuid do bharshaothraithe den Chlár Náisiúnta Monatóireachta ar larmharaigh 2013 lena chinntiú go raibh siad ag comhlíonadh reachtaíocht an Choimisiúin Eorpaigh agus lena chinntiú go bhfuil an t-iasc feirme feiliúnach le hithe. Tabharfar tuairisc in 2014 ar na torthaí ó anailís ar 658 sampla as raon leathan substaintí. Taispeántar i dtorthaí 2012, a foilsíodh in 2013, gur comhlíonadh go hiomlán caighdeáin na hEorpa. Rinneadh monatóireacht agus tugadh comhairle don FSAI agus don SFPA maidir leis na leibhéil truailleáin chomhshaoil a bhí i mbia mara.

Monatóireacht ar Iasc Eite Feirme

Thug Clár Náisiúnta Monatóireachta na Míolta Éisc faoi 238 scrúdú ar mhíolta éisc ar 24 láithreán tógála salmainide (brádán agus breac) a bhí gníomhach le linn 2013, ar aon dul le prótacal náisiúnta monatóireachta na míolta éisc. Scaipeadh tuairiscí míosúla ar na torthaí monatóireachta chuig páirtithe leasmhara agus foilsíodh sonraí 2013 ar fad i dtuarascáil bhliantúil (O'Donohoe et al., 2014).

Rinneadh athbhreithniú iomlán ar thuarascálacha beantacha ar iasc eite feirme 2012 a cuireadh isteach chuig an DAFM i gcomhlíonadh a gcuid prótacail monatóireachta beantach.

Sláinte Éisc

In 2013, rinneadh tástáil pataigine ar os cionn 3,000 iasc eite – brádán an Atlantaigh go príomha, ach bhí breac dea-dhathach, liús, péirse agus cineál eile éisc gharbh ina measc freisin faoi chlár monatóireachta sláinte; tar éis samplaí diagnóiseacha a chur isteach chuig an tsaotharlann, nó de thoradh trialacha scagtha ar tugadh fúthu ar son thionscal an do bharshaothraithe. Tá Éire fós saor ó ghalair liostaithe na n-iasc eite. Rinneadh tástáil i gcomhair pataigine ar dhá mhíle sampla sliogéisc. Díríodh go láidir arís in 2013 ar fhaireachán an víris heirpéis (OshV-1 μvar) in oisrí an Aigéin Chiúin. Aimsíodh an víreas i dtrí bhá eile, rud a fhágann go bhfuair 32 bá san iomlán toradh tástála dearfach ina leith. Meastar go bhfuil an tír ar fad, cé is moite d'ocht gcuan, saor ó *Bonamia ostreae*, agus tá an tír ar fad fós saor ó *Marteilia refringens*.

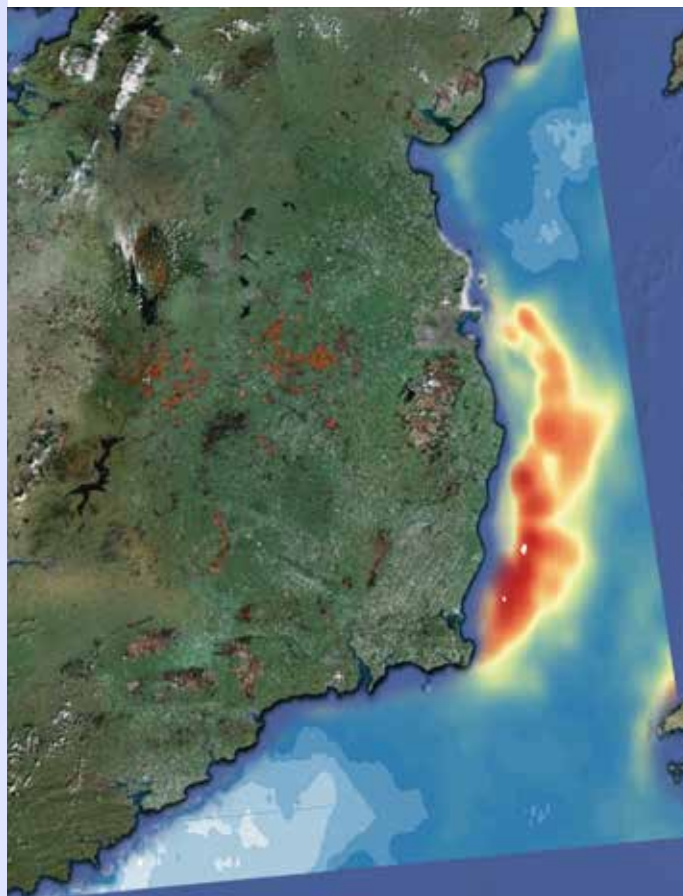
Monatóireacht Chomhshaoil

Cuireadh clár forleathan monatóireachta comhshaoil i bhfeidhm thar ceann an EPA agus DECLG in uiscí inbhir agus cósta maidir le paraiméadair fhisiceiceimiceacha, substaintí tosaíochta, fíteaplanctón agus fána beantach chun ceanglais Threoir na nUiscí Sliogéisc a chomhlíonadh. Thug foireann MEFS faoi shuirbhé comhshaoil geimhridh i mí Feabhra 2013, ar bord an *RV Celtic Voyager*, ag tógáil samplaí ag 280 stáisiún as Muir Éireann, agus ar chóstaí an deiscirt agus an iarthair le cothaithe agus paraiméadar cháilíocht an uisce a thástáil. Bailíodh 95 sampla freisin chun anailís a dhéanamh ar an bhfána beantach.



Fuair comhshaoil mara agus sábháilteacht bhia na hÉireann tacaíocht ó mmonatóireacht leanúnach, agus seirbhísí comhairleacha agus teicniúla agus taighde.

“Thug foireann MEFS cúnamh mór eolaíochta agus teicniúil, chun Measúnú Tosaigh na hÉireann (measúnú grinn ar ár muirthimpeallacht), a chur i gcrích agus a chur isteach chuig an gCoimisiún Eorpach, agus le comhairliúchán poiblí ina dhiaidh sin, faoi Chreat-Treoir na Straitéise Mara.



Blás fíteaplanctóin amach ó chósta an Oirthir i mí an Mheithimh 2013.

Comhairle agus Tacaíocht Theicniúil

Thug MEFS comhairle leanúnach do DAFM mar thaca le ceadúnú do bharshaothraithe. I rith 2013 áiríodh leis sin:

- Trí Mheasúnú Iomchuí (AA) a chur i gcrích le haghaidh Limistéir Chaomhantais Speisialta mhara (Cuan Dhún na nGall, Loch Súilí agus Loch Trasna), a thug deis dul chun cinn a dhéanamh maidir le breis is 150 cinneadh ceadúnaithe. Rinneadh dul chun cinn mór ar ceithre Mheasúnú Iomchuí eile in 2013 agus cuirfear i gcrích iad go luath sa bhliain 2014.
- Scagadh um Mheasúnú Tionchair Timpeallachta (EIA) agus scagadh AA le haghaidh iarratas ar cheadúnais i láithreáin nach bhfuil láithreáin Natura iad.
- Comhairle maidir le 56 ceadúnas do bharshaothraithe i láithreáin nach bhfuil láithreáin Natura iad.

Cuireadh an próiseas maidir le Bainistiú Bánna Singile (SBM) i gcrích go rathúil i ngach cuan feirmeoireachta iasc eite atá gníomhach in 2013. Tugadh doiciméid SBM, pleananna gníomhacha branair san áireamh, cothrom le dáta i ndáil leis an 11 oibreoir do bharshaothraithe éisc eite go léir feadh an chósta. Dearadh an próiseas SBM chun fearachas éisc a chomhordú ionas go gclótear leis an dea-chleachtas agus go mbíonn córais stocála, bhranair agus chóireála ar fheirmeacha aonair comhoiriúnach leis na socraithe ar fheirmeacha comharsanachta. Is rud éifeachtach é chun éifeachtúlacht rialaithe míolta farraige a fheabhsú agus an méid galar a bhíonn ar na stoic a laghdú. Tá pleananna SBM faoi réir athbhreithniú i ngach timthriall táirgeachta.

Thug an fhoireann um Shábháilteacht Sliogéisc comhairle don SFPA agus don FSAI maidir le sábháilteacht bhia i dtaobh sliogéisc, chun rialuithe leanúnacha oifigiúla a chur i bhfeidhm de réir na gclár monatóireachta maidir le bitocsainí sliogéisc agus rangú micribhitheolaíochta. Le linn 2013, chabhraigh MEFS leis an údarás inniúil le linn iniúchadh a rinne Oifig Bia agus Tréidliachta an Choimisiúin Eorpaigh ar na cláir sin.

Lean Foras na Mara dá chabhair do Bhord Iascaigh Mhara sa mhachnamh a bhí ar bun acu maidir le láithreáin fhéideartha do bharshaothraithe amach ón gcósta.

Thug foireann MEFS cúnamh mór eolaíochta agus teicniúil, chun Measúnú Tosaigh na hÉireann (measúnú grinn ar ár muirthimpeallacht), a chur i gcrích agus a chur isteach chuig an gCoimisiún Eorpach, i lár 2013, agus le comhairliúchán poiblí ina dhiaidh sin, faoi Chreat-Treoir na Straitéise Mara (MSFD). Tá an obair sin, atá á bhainistiú ag Foras na Mara thar ceann DECLG, á dhéanamh ag conraitheoirí seachtracha. Cuireadh Atlas Mara na hÉireann i gcrích freisin in 2013 agus seoladh é ar shuíomh gréasáin Foras na Mara. Tá faisnéis spásúlachta maidir le saintréithe éiceachóras, gníomhaíochtaí an duine, láithreáin faoi chosaint agus teorainneacha riaracháin le fáil san Atlas Mara ar líne (<http://atlas.marine.ie/>). Díreofar an obair anois ar chlár monatóireachta a fhorbairt atá riachtanach faoin Treoir.

Áirítear iad seo a leanas leis na réimsí eile inar thug foireann MEFS comhairle le linn 2013:

- Diúscairt cartadh dreideála ar muir – trí pháirt a ghlacadh i gCoiste Comhairleach an EPA maidir le Dumpáil ar Muir
- Iarratais ar Léasanna/Cheadúnais Urthrá – trí pháirt a ghlacadh i gCoiste Seiceála na gCeadúnas Mara (MLVC) de chuid DECLG

- Gnéithe comhshaoil áirithe de thaiscéalaocht agus táirgeacht hidreacarbóin amach ón gcósta – comhairle don Roinn Cumarsáide, Fuinnimh agus Acmhainní Nádirtha (DCENR) agus don EPA
- Pleanáil Spásúlachta Muirí lena n-áirítear comhairle a thabhairt do Thascfhórsa Cumasóra an Ghrúpa Comhordaithe Mhuirí agus do Roinn an Taoisigh maidir leis an Treoir Eorpach atá beartaithe.

An tÚdarás Inniúil maidir le Sláinte Éisc

Sa bhreis ar na seirbhísí saotharlainne um shláinte éisc, tá an tAonad um Shláinte Éisc de chuid an MEFS ina Údarás Inniúil maidir leis an Treoir um Shláinte Éisc (Treoir ón gComhairle 2006/88/CE) a chur i bhfeidhm. Is í rannóg an Údaráis Inniúil a stiúirann obair na gCigirí Tréidliachta ón DAFM a oibríonn i réimse an do bharshaothraithe. In 2013, cuireadh 301 cigireacht i gcrích de réir na reachtaíochta; údaraíodh 1,421 gluaiseacht (allmhairí, onnmhairí agus gluaiseachtaí inmheánacha) i leith ainmhithe uisceacha beo; agus eisíodh Údarú Sláinte Éisc i gcás 48 cuideachta, rud a fhágann go bhfuil 465 Gnólaacht Táirgthe Do bharshaothraithe údairithe sa tír faoi láthair.

Taighde

Lean foireann MEFS dá rannpháirtíocht i gcláir taighde arna maoiniú ag an Eoraip agus go náisiúnta, agus rinne siad taighde feidhmeach mar thaca le seachadadh ár gcláir monatóireachta agus ár seirbhísí comhairleacha. Toisc gur tháinig deireadh in 2013 le timthriallta maoinithe náisiúnta agus na hEorpa tháinig deireadh le roinnt tionscadal in 2013, lena n-áirítear:

- Fuarthas tuilleadh eolais i dtionscadal ASTOX II maidir leis an tocsaineolaíocht atá sa nimh sliogéisc seo, aistriú na tocsaine trí shliogéisc agus dáileadh an speicis chúisigh *Azadinium spinosum* in uisce an chósta.
- D'fhoilsigh tionscadal an AE arna mhaoiniú ag FP7 *Prevent Escape* torthaí a thugann staidéar cáilíochtúil agus cainníochtúil ar na cúiseanna éalaithe agus an méid éalaithe a tharlaíonn ó oibríochtaí do bharshaothraithe amach ón gcladach ar fud na hEorpa. Táthar ag súil le tuilleadh foilseachán piarmheasúnaithe sna míonna amach romhainn.
- D'fhorbair an tionscadal clúiteach ASIMUTH (arna mhaoiniú ag FP7) táirgí réamhaisnéisithe ag baint úsáide as samhlacha fisiceacha, satailíte agus sonraí in situ le réamhrabhadh ar bhlás algach díobhálach (HAB) a chur ar fáil, rud a thabharfadh deis d'fheirmeoirí éisc agus sliogéisc a gcultúr agus a gcleachtadh bainte a oiriúnú in am, chun caillteanais fhéideartha a laghdú. Thug Stáisiún Taighde Mara Dháithí Uí Mhurchú (DOMMRS), ceannairí tionscadail agus Foras na Mara, mar aon leis na comhpháirtithe eile, faoi dhúshlán réamhaisnéisithe in iarracht blás a d'fhéadfadh cur isteach go tromchúiseach ar phleananna táirgeachta feirmeacha éisc a thuar. Bíonn costais bhreise de bharr an bhláis sin, agus ní hamháin go bhfaigheann iasc bás dá bharr, ach bíonn costas breise ann de bharr go ndúntar cuanta, agus go ndéantar diúscairt ar iasc ina dhiaidh sin, agus eascraíonn asbhaintí árachais mhéadaithe as sin. I gcomhar lenár seirbhís monatóireachta, foilsíodh rabhadh réigiúnach seachtainiúil agus léirmhíniú saineolaithe agus réamhaisnéis ar HABanna trí fheasachán gréasáin. Dearadh an tseirbhís chun an fhaisnéis go léir atá ar fáil ó fhoinsí na Cruinne (stáisiún

mhonatóireachta in situ), sa spás (sonraí satailíte) agus il-silico (samhlacha bitheolaíocha agus fisiceacha aigéin) le haghaidh an Atlantaigh thoir thuaidh. Leanann ASIMUTH tar éis an tionscadail ag tabhairt léargais don tionscal dobharshaothraithe ar limistéir atá i mbaol go dtarlódh HAB iontu.

- > *Bivalife* (arna mhaoiniú ag FP7) – tá sé de chuspóir ag an tionscadal eolas a chur ar fáil maidir le patagainí a ionfhabhtaíonn oisrí agus diúilicíní agus cur chuige praiticiúil a fhorbairt leis na galair ionfhabhtaíocha a chuireann isteach ar na hainmhithe seo a rialú.
- > Tionscadal arna mhaoiniú ag an EPA maidir le tionchar an Noraiviris in eisilteach dramhuisce ar shliogiascaigh in Éirinn.

I measc na dtionscadal a bhí ag dul ar aghaidh in 2013 bhí siad seo a leanas:

- > Éifeachtaí Bitheolaíochta, ina gcomhcheanglaítear éifeachtaí bitheolaíochta agus anailís cheimiceach chun measúnú níos éifeachtaí a dhéanamh ar thruaillí in uiscí na hÉireann.
- > An ról atá ag sampláil éighníomhach ar scagadh agus monatóireacht ceimiceáin nua agus atá ag teacht chun cinn sa mhuirthimpeallacht (arna maoiniú ag an EPA) – tionscadal faoi stiúir Ollscoil Chathair Bhaile Átha Cliath ina ndéantar measúnú ar an gcumas atá ag sampláil éighníomhach ó thaobh monatóireachta ar thruaillí thosaíochta in Éirinn.
- > Tá raon tionscadal eile ann, ag leibhéal MSc agus PhD, i micribhitheolaíocht sliogéisc, i gceimic mhara agus i sláinte éisc.

Leanann Foras na Mara le tacaíocht a thabhairt do Chlár Náisiúnta na hÉireann um Biteicneolaíocht Mhuirí, go háirithe trí shaoráidí saotharlainne a sholáthar do thionscadail taighde atá ar bun in Ollscoil na hÉireann, Gaillimh faoi dhámhachtain Beaufort do Bhithfhionnachtain Mhara faoi stiúir an Ollaimh Deniz Tasdemir.



Roinn Pat Costello ó fhoireann fiteaplanctóin Foras na Mara a chuid eolais agus rinne sé poiblíocht ar eolaíocht mhuirí neamhchoitianta na hÉireann ag Féile Eolaíochta agus Teicneolaíochta na Gaillimhe.

“D’fhorbair an tionscadal clúiteach ASIMUTH (arna mhaoiniú ag FP7) táirgí réamhaisnéisithe ag baint úsáide as samhlacha fisiceacha, satailíte agus sonraí in situ le réamhrabhadh ar bhlás algach díobhálach (HAB) a chur ar fáil.”



Jenny Ronan ag tástáil an uisce ar lomaí, atá ar cheann de na suíomhanna samplála le haghaidh an tionscadail Éifeachtaí Bitheolaíochta agus Toisí Ceimiceacha in Uiscí Mara na hÉireann. Bhí an tionscadal á chómhaoiniú ag an nGníomhaireacht um Chaomhnú Comhshaoil agus ag Foras na Mara agus rinneadh é faoin straitéis Casadh na Taoide agus Fochlár Taighde Mara an Phlean Forbartha Náisiúnta 2007–2013.



Seirbhísí Comhairleacha um Éiceachórais lascaigh



Ráiteas an Stiúrthóra

Bhí obair na Seirbhísí Comhairleacha um Éiceachórais lascaigh (FEAS) in 2013 dírithe ar thacaíocht eolaíochta a thabhairt chun an Comhbheartas lascaireachta a chur i bhfeidhm agus chun seirbhísí a sholáthar dár mórchliant, an Roinn Talmhaíochta, Bia agus Mara (DAFM). D'éirigh linn Plean Corparáideach Foras na Mara a chur i bhfeidhm trí Phlean Straitéiseach FEAS (2000 go 2013) ar bhain an fhoireann FEAS go léir

leas as chun cuspóirí fostaíochta a leagan síos le haghaidh 2013 mar chuid de Córas Bainistíochta agus Forbartha Feidhmíochta an Fhorais. Bhain foireann seirbhíse thiomanta agus ardoilte ár dtorthaí amach do 2013.

Buaicphointí don bhliain 2013:

- Ba phríomhghné dár gcuid oibre le linn 2013 tacaíocht a thabhairt do ranna éagsúla Rialtais le linn Uachtaránacht na hÉireann ar an AE, go háirithe maidir le DAFM, a bhí i gceannas ar na cainteanna maidir le hathchóiriú an Chomhbheartais lascaireachta. Bhí ról lárnach ag eolaithe FEAS ó thaobh ionchur eolaíochta a chur ar fáil maidir leis na hoibleagáidí nua maidir le gabhálacha (cosc ar aschur) agus an fócas nua réigiúnach bainistíochta.
- Thacaigh FEAS leis an Roinn Ealaíon, Oidhreacht agus Gaeltachta (DAHG) chun cúig speiceas leochaileacha siorcanna a liostú ar an gCoinbhinsiún maidir le Trádáil Idirnáisiúnta ar Speicis i mBaol (CITES). Fuair FEAS €3.9 milliún de mhaoiniú ón AE faoi Chreat um Bailiú Sonraí an AE. Bhí siad rannpháirteach freisin i roinnt cruinnithe tábhachtacha inar ullmhaíodh an réamhobair le haghaidh an Chreata um Bailiú Sonraí (2014-2020).
- Bhí an Leabhar Stoc bliantúil ar an bpríomh-ábhar seachadta, a bhí mar bhunús ag measúnú inbhuanaitheachta na nAíre a bhí le cur chuig an gCoiste Oireachtais maidir le Talmhaíocht agus lascaigh agus ba uirlis chriticiúil thagartha é le linn chaibidlíocht Chomhairle lascaigh an AE ar dheiseanna iascaireachta 2014. Lean FEAS ag forbairt pleananna bainistíochta iascaigh áitiúla le haghaidh Limistéir Chaomhantais Speisialta (SAC) éagsúla mar chuid de chlár NATURA na hÉireann agus d'oibrigh sé go dlúth le foireann Sheirbhísí Muirthimpeallachta agus Sábháilteacht Bhia an Fhorais agus leis an tSeirbhís Páirceanna Náisiúnta agus Fiadhúlra (NPWS).
- Maidir le cur i bhfeidhm Chreat-Treoir na Straitéise Mara (MSFD), d'oibrigh an fhoireann i ndlúthchomhar lenár gcomhghleacaithe sna Seirbhísí Muirthimpeallachta agus Sábháilteacht Bhia agus bhí ról lárnach acu ó thaobh táscairí a fhorbairt le haghaidh stádas stoc éisc (D3), agus an bhiathéagsúlacht (D1). Tá sonraí agus eolas riachtanach chun comhairle eolaíochta a leagan amach agus d'oibríomar i ndlúthchomhar leis na Seirbhísí Aigéaneolaíochta agus Faisnéise ar shaincheisteanna a bhain le bainistíocht sonraí agus le huasghrádú bunachair sonraí.
- Is cuid thábhachtach d'obair FEAS é an taighde agus fuarthas maoiniú náisiúnta agus AE le haghaidh raon tionscadal taighde a bhí dírithe ar ár seachadadh seirbhíse a neartú agus ar luach a chur lenár sócmhainní sonraí. Ina measc sin bhí forbairt pleananna bainistíochta d'iascaigh mheasctha sa Mhuir Cheilteach, ag forbairt fhorfheidhmiú chur chuige an éiceachórais i dtaca le bainistíocht, agus suirbhéanna athraitheacha ar áiríochtaí taighde d'fhonn sonraí breise a bhailiú chun tacú leis an MSFD.

- D'oibrigh ár bhfoireann go dlúth freisin leis an Údarás um Chosaint Iascaigh Mhara (SPPA) agus d'fhónaimh siad ar Choiste Comhairleach SPPA le linn 2013. Bhí dlúthchomhar freisin leis an earnáil tríú leibhéal trí thionscadail taighde éagsúla agus tríd an gcomhahoirseacht a rinneadh ar mhic léinn PhD agus MSC.
- Chaitheamar mar fhoireann go leor ama ar farraige, ag sampláil i gcalafoirt agus ag cruinnithe náisiúnta agus idirnáisiúnta araon. Is cuid chriticiúil de chlár na ngrúpaí seirbhíse mar sin é cumarsáid inmheánach agus chinntigh cruinnithe rialta leis an bhfoireann agus leis an lucht bainistíochta i rith 2013 go ndearnadh seachadadh éifeachtúil agus

éifeachtach ar sheirbhísí.

An Dr Paul Connolly

Stiúrthóir: Seirbhísí Eolaíochta Iascaigh

An Creat um Bailiú Sonraí

Tacaítear leis an eolaíocht is gá chun an Comhbheartas lascaireachta a chur i gcrích nuair a chuirtear oibleagáidí na hÉireann faoin gCreat um Bailiú Sonraí (DCF) (Rialachán an AE ón gComhairle 199/2008) i bhfeidhm, agus is cuid lárnach é de chlár oibre na foirne. Chuir an DAFM de chúram ar Fhoras na Mara an bailiú sonraí éagsúil, an bhainistíocht sonraí agus an chomhairle eolaíochta a thabhairt atá riachtanach chun freastal ar ár n-oibleagáidí DCF. Chuir FEAS an Clár Náisiúnta nua DCF d'Éirinn (2014-2020) isteach, Tuarascáil Bhliantúil DCF le haghaidh 2012 agus Ráiteas Costais mionsonraithe le haghaidh 2012 chuig an gCoimisiún. Chuimsigh clár oibre DCF 2013 clár cuimsitheach suirbhé áiríochtaí taighde, sampláil calafort ar ghabhálacha, sampláil mara ar cholfairtí, próifíl aoise ar na príomhstoic, anailís ar shonraí logleabhair an AE agus ar mhapaí gníomhaíochtaí áiríochtaí iascaireachta ó Chórais Monatóireachta Áiríochtaí.

Tugadh faoi 164 turas breathnóireachta um shampláil mhara ar bord áiríochtaí iascaireachta Éireannacha san iomlán, agus bhí 561 lá eolaithe ar muir de thoradh sin. Tugann na turais seo teagmháil dhíreach ar an láthair leis an tionscal iascaireachta, atá ríthábhachtach agus thar a bheith luachmhar do FEAS. Tomhaiseadh os cionn 483,583 iasc agus ríomhadh aois 54,160 iasc d'fhonn sonraí a sholáthar do na samhlacha measúnaithe do stoic idirnáisiúnta ag ICES.

Rinneadh athdhearadh agus atógáil i rith 2013 ar an mbunachar sonraí STOCKMAN a úsáideann FEAS agus cuireann sé fiosruithe agus torthaí sonraí níos éifeachtúla agus níos éifeachtaí ar fáil anois. Rinneadh uasghrádú freisin ar an mbunachar sonraí maidir le haschur éisc agus tá rochtain níos fearr anois ar logleabhair an AE. D'oibrigh Foras na Mara go dlúth le Bord Iascaigh Mhara a bhfuil sé de chúram orthu na codanna eacnamaíocha den DCF a sheachadadh.

Suirbhéanna Áiríochtaí Taighde

Is cuid ríthábhachtach de chlár oibre FEAS iad na suirbhéanna ar áiríochtaí taighde. Rinneadh 13 suirbhé san iomlán ar an *RV Celtic Explorer*, ar an *RV Celtic Voyager* agus ar áiríochtaí tráchtála cairtíostaithe sna huisc timpeall ar Éirinn. Caitheadh 213 lá mara agus 1,242 lá eolaithe ar na suirbhéanna sin agus is tiomantas ollmhór ó thaobh acmhainní foirne é sin.

Dhírigh na cláir suirbhéanna fuaimiúla ar mheasúnú a dhéanamh ar acmhainní an fhaoitín ghoirm, an torcéisc agus an scadáin. Is acmhainn riachtanach iad Nephrops do thionscal na hiascaireachta in Éirinn agus bhí na suirbhéanna le teilifís faoi uisce criticiúil don mheasúnú stoc ar friú os cionn €80 milliún iad do thionscal na hÉireann. Rinneadh an suirbhé ar iasc grinnill na hÉireann thar thréimhse 42 lá i Ráithe 4 agus rinneadh suirbhé ar stoic éisc sa Mhuir Cheilteach agus amach ó chósta iarthar agus iarthuaisceart na hÉireann. Déantar an suirbhé idirnáisiúnta ar uibheacha ronnach gach trí bliana agus déantar suirbhé ar an scaipeadh a bhíonn ar uibheacha ronnach ó Eanáir go hlúil thar limistéar ón bPortaingéil go dtí oirdheisceart na hÍoslainne agus deisceart na hIorua.

Rinneadh comhordú ar na suirbhéanna sin go léir trí an gComhairle Idirnáisiúnta um Thaiscéaladh na bhFarraigí a chinntíonn freisin go ndéantar caighdeánú ar na prótacail agus ar na modheolaíochta a úsáidtear i ngach suirbhé. Baineadh úsáid as na sonraí as na suirbhéanna go léir i measúnuithe stoic idirnáisiúnta a bhí ina mbonn eolais faoi chomhairle eolaíochta ar dheiseanna iascaireachta le haghaidh 2014 agus 2015.

Idirghníomhaíocht Páirtithe Leasmhara

Bhí cruinnithe rialta ar siúl le tionscal na hiascaireachta tríd an bhfóram atá ag Comhpháirtíocht Taighde Eolaíochta Iascaigh na hÉireann agus ag na Comhairlí Comhairleacha Réigiúnacha (RAC), go háirithe RAC Uiscí an Iarthuaiscirt agus an RAC Peiligeach. I measc na bpríomh-shaincheisteanna ar tugadh aghaidh orthu ag an gComhpháirtíocht Taighde Eolaíochta Iascaigh ráithiúil bhí meicníochtaí maoinithe le haghaidh suirbhéanna, Creat-Treoir na Straitéise Mara, NATURA, an doingeann mara, sampláil diúscairtha, riocht na stoc, modhanna measúnaithe, uastoradh inbhuanaithe mar sprioc, cás-staidéir eacnamaíochta ar chalafoirt na hÉireann, torthaí trialach trealamh Bhord Iascaigh Mhara, uastoradh inbhuanaithe na Limistéar faoi Chosaint Mhara, comhairle na Comhairle Idirnáisiúnta um Thaiscéaladh na Mara (ICES) agus pleananna bainistíochta. Thug eolaithe FEAS ionchur tábhachtach freisin do Choiste Bainistíochta Scadán na bhFarraigí Ceilteacha. Forbraíodh plean atógála an scadáin don iarthuaisceart le hionchur ó Chónaidhm Iascairí na hÉireann agus RACanna Peiligeacha. Bhí cruinnithe ráithe ar siúl freisin leis na heagraíochtaí neamhrialtasacha comhshaoil agus i measc na gceisteanna a ardaíodh bhí uastoradh inbhuanaithe, athchóiriú an Chomhbheartais Iascaireachta, riocht na stoc, comhairle eolaíochta le haghaidh 2014. Bunaíodh fóram ráithiúil a cuireadh ar bhonn go foirmiúil leis na heagraíochtaí neamhrialtasacha (Fóram Éiceachórais Iascaigh) agus cuirfeadh tús le cruinnithe in 2014.

Comhairle Eolaíochta

Ghlac eolaithe FEAS páirt i mbreis agus 117 cruinniú de chuid sainghrúpaí idirnáisiúnta eolaíochta an AE, ICES agus an Choiste Eolaíochta, Theicniúil agus Eacnamaíochta um Iascaigh (STECF). Fuair cuid mhaith de na cruinnithe sin maoiniú faoin DCF. Pléadh an príomhghnó a bhaineann le measúnú agus comhairle maidir le stoc ag na cruinnithe sin, ach pléadh saincheisteanna eolaíochta eile agus na dúshláin a bhain le cur i bhfeidhm an CFP, NATURA 2000 agus Chreat-Treoir na Straitéise Mara freisin ag na cruinnithe sin. Pléadh topaicí mar chalabráir ionstraimí fuaimiúla in eolaíocht iascaigh ag na cruinnithe sin; táscairí le haghaidh Chreat-Treoir na Straitéise Mara; pointí tagartha an uastoraidh inbhuanaithe i dtaca le stoic éisc; riocht ronnach cósta; pleananna bainistíochta don bholmán; measúnú stoic agus dréachtú comhairle; cur i bhfeidhm an Rialacháin um Bailiú Sonraí; agus plean diúscairtha an AE agus na héifeachtaí a bhíonn ag an iascaireacht ar éiceachórais. Thug an fhoireann comhairle eolaíochta freisin maidir le stádas stoc cladaigh agus ar Leabhar Stoc sliogéisc. Forbraíodh creat measúnaithe riosca chun measúnú a dhéanamh ar iascaigh i láithreáin NATURA agus cuireadh measúnuithe riosca i gcrích maidir leis na cóstaí go léir. Forbraíodh comhairle maidir le bradáin agus eascanna i gcomhar le Iascach Intíre Éireann agus na Buanochoistí Eolaíochta do Bhradáin (SSCS) agus d'Eascanna (SSCE). Nuashonraíodh an tsamhail réamhaisnéise bradáin a úsáidtear chun comhairle gabhála a thabhairt in 2011 agus 2012 agus cuireadh i bhfeidhm é den chéad uair in 2013. Rannchuidigh ár bhfoireann leis an gcéad mheasúnú ar uiscí mara na hÉireann de Chreat-Treoir na Straitéise Mara a chur isteach agus díriodh an obair ar bhithéagsúlacht agus ar tháscairí stádais iascaigh.

Saoráid Bhaile Uí Fhiacháin

Lean na cláir oibre áirimh ar an mbradán, ar an mbreac geal agus ar an eascann ó na gaistí éisc ar éiceachórais Bhuiríos Umhaill. Sna sonraí áirimh gaistí le haghaidh 2013, taifeadadh 6,357 de ghealóga bradáin fiáin ag bogadh amach as éiceachórais dhoibharcheantar Bhuiríos Umhaill.

Lean grúpa FEAS i mBaile Uí Fhiacháin lena gcuid oibre le tacair shonraí fhadtéarmacha fhisiceacha, cheimiceacha agus bhitheolaíochta a choinneáil agus a fhorbairt ina sonraítear gné fhóruisce an éiceachórais. Bhí na sonraí sin ar fáil ar dheais nua Bhuiríos Umhaill a chuaigh ar líne in 2013. Lean an t-aonad tógála éisc lena chuid oibre, agus coinníodh 71,862 ubhán súileach le haghaidh an chláir rainseoireachta. Scaoileadh 34,028 gealóg bradáin rainse i mí na Bealtaine 2013 mar chuid den chlár measúnaithe ar an stoc bradáin.

Leanadh den obair PhD ar na tosca a imríonn tionchar ar bhradáin ar muir i gcomhar leis an Iorua agus le Gníomhaireacht na Lochanna i dTuaisceart Éireann. Leanadh don obair ar an gclár clibeála fuaimiúla ar Loch Fíoch inar scrúdaíodh roghanna iompair agus comhshaoil na mbradáin fásta fiáin agus rainse. Leanadh leis an obair atá ar bun i mBaile Uí Fhiacháin ag tionscadal Géineolaíochta Beaufort de chuid Choláiste na hOllscoile, Corcaigh agus d'fhoilsigh siad go leor foilseacháin phiarmheasúnaithe in irisí eolaíochta idirnáisiúnta. Cuireadh tús le PhD nua maidir leis an doingeann mara in 2013. Leis sin cuirfeadh teicneolaíochtaí nua i bhfeidhm i gclibeáil satailíte agus i rianú fuaimiúil chun chur lenár dtuiscint ar phatrúin imirce na an doingeann mhara sa Mhuir Cheilteach agus i Muir Éireann.

Taighde Feidhmeach

Is gné tábhachtach de straitéis FEAS é comhairle eolaíochta athraitheach a thabhairt trí na torthaí ó thionscadail taighde a chur i bhfeidhm. Chuaigh an tionscadal maidir le hÉiceachórais Beaufort, arna mhaoiniú faoi *Chasadh na Taoide*, i ngleic le réimsí cosúil le creachadóireacht rón agus ceisteanna seachghabhála, idirghníomhaíochtaí an ghréasáin bia, samhaltú éiceolaíoch bunaithe ar mhéid agus limistéir dhúnta a aithint d'fhonn ealáimhbraintiaigh a chosaint agus foilsíodh na torthaí i litríocht idirnáisiúnta.

In 2013, d'éirigh lenár bhfoireann maoiniú a fháil agus bhí siad rannpháirteach i raon leathan tionscadal a fuair maoiniú ón AE lena n-áirítear Líonra Acmhainní an Phortaínt Atlantaigh (ACRU-NET); forbairt ar phlean bainistíochta d'iascaigh mheasctha don Mhuir Cheilteach (GEPETO agus DAMARA); Líonra iascaigh, doibharshaothraithe agus próiseála bia mara (COFASP); staidéir maidir le tionchar iascaigh ar éiceachórais beantach (BENTHIS); clibeáil satailíte siorcanna; Uastoradh Inbhuanaithe (MYFISH); Anailís ar phríomhghréasáin bia (EUROBASIN); Forbairt samhlacha chun líon na mbradáin fillte a mheas (ECOKNOWS). Ina measc sin bhí suirbhéanna athraitheacha chun tuilleadh sonraí a bhailiú a d'fhéadfaidh tacú le Creat-Treoir na Straitéise Mara. D'éirigh leis na tionscadail maoiniú AE €683,000 a fháil thar thréimhse na dtionscadail agus beidh comhoibriú dlúth ar bun le hearnáil tríú leibhéal na hÉireann lena n-áirítear Ollscoil na hÉireann, Gaillimh, Coláiste na hOllscoile Corcaigh, Institiúid Teicneolaíochta na Gaillimhe-Maigh Eo agus Ollscoil Uladh, Béal Feirste.

Leantar den obair thaighde leis an tionscadal ÉICEACHÓRAIS Beaufort. Is é cuspóir an tionscadail, ina n-áirítear Foras na Mara, Coláiste na hOllscoile, Corcaigh, agus Ollscoil na Banríona, Béal Feirste, cur chuige na n-éiceachórais a chur i bhfeidhm i dtaca le bainistiú iascaigh. I rith 2013, rinneadh dul chun cinn mór ar thionscadail ina raibh idirghníomhaíocht ag éin mhara, róna agus céiticigh le hiascaigh.

Cuireadh raon tionscadal PhD i gcrích in 2013, a bhí á maoirsiú ag ár bhfoireann agus iad maoinithe faoi chlár *Casadh na Taoide* Foras na Mara. Ina measc seo bhí staidéir stair saoil ar an scabaird dhubh domhainfharraige; samhlacha braite comhartha le sonraí teoranta; athruithe tíreolaíochta de bharr athrú aeráide ar an trosc agus ar an ronnach; dinimic fhadtéarmach i ndaonraí scadán; treochtaí spásúlachta ama in aischur éisc, Coláiste na Tríonóide, Baile Átha Cliath; agus iascaigh inbhuanaithe agus éagsúlacht na bpobal mara.

Seirbhísí Aigéaneolaíochta agus Faisnéise



Ráiteas an Stiúrthóra

Bhí bhliain an-ghnóthach ag na Seirbhísí Aigéaneolaíochta agus Faisnéise (OSIS) in 2013 agus tugadh faoi obair shuntasach i ngach ceann de na réimsí seirbhísí in aigéaneolaíocht, i léarscáilíú ghrinneall na farraige, in oibríochtaí árthaí taighde, i seirbhísí faisnéise, i bhfuinneamh na mara agus in ardteicneolaíocht mhara. Tacaíonn an ghnómhachocht sin le roinnt mhaith taighde náisiúnta agus

idirnáisiúnta, le forbairt teicneolaíochta agus nuálaíochta, agus déanann sé monatóireacht ar ghnómhachochtaí ón bhfáil sonraí allamuigh trí sheirbhísí agus táirgí sonraí a ghiniúint.

Ghlac OSIS páirt i réimse cláir náisiúnta, Eorpacha agus idirnáisiúnta agus é gnómhach go háirithe thar raon clár atá maoinithe ag an AE a chuireann feabhas ar ár gcumas seirbhísí tacaíochta a chur ar fáil atá saincheaptha do na riachtanais a bhaineann le cláir chomhtháite eolaíochta atá ina mbonn eolais faoi chomhairle beartais trasearnála.

Agus aitheantas á thabhairt don riachtanas atá ag méadú le haghaidh cur chuige comhtháite i leith Fhorbairt, Theicneolaíocht, Taighde agus Nuálaíocht na mara, soláthraíonn OSIS réitithe iomlána ó thús deireadh do chliaint. Chuir OSIS le smaointeoireacht straitéiseach freisin ar leibhéal náisiúnta agus idirnáisiúnta trí pháirt a ghlacadh i raon tionscnamh lena n-áirítear *Feidhm a Bhaint as Saibhreas ár nAigéin – Plean Comhtháite Muirí d'Éirinn*, Ráiteas na Gaillimhe ar Chomhar an Aigéin Atlantaigh agus straitéis Atlantach an AE.

Michael Gillooly

An tUasal Michael Gillooly

Stiúrthóir: Seirbhísí Aigéaneolaíochta agus Faisnéise

Oibríochtaí Árthaí Taighde

Is é misean na rannóige um Oibríochtaí Árthaí Taighde (RVOpanna) comhordú agus bainistiú a dhéanamh ar oibríochtaí an dá ártach taighde de chuid Fhoras na Mara, an *RV Celtic Voyager*, an *RV Celtic Explorer* agus an fheithicil chianoibrithe domhainmhara, an *ROV Holland I*. Cuireann siad seirbhísí tacaíochta ar fáil d'úsáideoirí na n-árthaí, lena n-áirítear ionstraimí agus seirbhísí tacaíochta innealtóireachta agus oibríochtaí fórsolúbtha.

Buaicphointí don bhliain 2013:

- > Cuireadh dianchláir shuirbhé i gcrích ar an dá ártach taighde. Chuir an *RV Celtic Explorer* 15 shuirbhé i gcrích arbh ionann iad agus 292 lá eolaíochta (agus os cionn 20 lá cothabhála agus os cionn 20 lá slógtha/díslógtha). Chuir an *RV Celtic Voyager* 31 shuirbhé i gcrích arbh ionann iad agus 261 lá eolaíochta.
- > Reáchtáladh “cruinniú d'úsáideoirí árthaí” i mí na Bealtaine 2013 in Órán Mór agus d'fhreastail os cionn 50 úsáideoirí árthaigh agus pearsanra muirghabhála air. Bhí an cruinniú an-áisiúil chun tuairimí a mhalartú ar oibríochtaí árthaí agus ar fhorbairt sa todhchaí.
- > Chuir an fheithicil chian-oibrithe domhainnuisce *ROV Holland I* shuirbhé rathúil de chuid Ollscoil na hÉireann, Gaillimh (OÉ Gaillimh) i gcrích

faoi threoir “Feidhm Bithfhionnachtana agus Éiceachórais Cainneon” a mhair 23 lá ar an *RV Celtic Explorer*.

- > Úsáideadh an *ROV Holland I* ina cumraíocht domhainnuisce ar an *ILV Granuaile* agus i ndiaidh triail rathúil den chóras cuireadh an t-ártach agus an ROV ar conradh chun suirbhé rathúil aimsithe fabhtanna a chur i gcrích ar idirnascaire leictreachais fomhuirí ardvoltais na hÉireann - na RA.
- > Chuir Kinsale Energy PLC RVOpanna ar chonradh chun suirbhé imscrúdaithe a dhéanamh ar a líonra iomlán de phíblíne gáis fhomhuirí agus ar na hardáin táirgeachta Alpha agus Bravo ag úsáid an *ROV Holland I*. Rinneadh an suirbhé seo a chur i gcrích ag úsáid an *ILV Granuaile* arís (a bhí faoi chairt ag an bhForas) agus cuireadh foireann rialta na bpíolótaí ROV ar conradh agus pearsanra suirbhé ar conradh i gcrích in am agus taobh istigh de bhuiséad agus cruthaíodh ioncam seachtarach luachmhar don Fhoras dá bharr sin a thacaíonn le príomhsheirbhísí.
- > Chomh maith le suirbhéanna ar an bhfaoitín gorm bliantúil, scadán an iarthuaiscirt, agus suirbhéanna fuaimiúla ar an ronnach le haghaidh Sheirbhísí Comhairleacha Éiceachórais lascaigh an Fhorais agus an suirbhé ar thrál grinnill na hÉireann (IBTS) a mhair 47 lá, suirbhé iasc grinnill, chuir an *RV Celtic Explorer* dhá shuirbhé ar uibheacha ronnach i gcrích a mhair 21 lá a tharlaíonn gach trí bliana mar chuid de chlár a dhéantar a chomhordú go hidirnáisiúnta

Cuireadh trí chairt sheachtaracha i gcrích ar bord an *RV Celtic Explorer* in uiscí na Gearmáine agus Idirnáisiúnta lena n-áirítear suirbhéanna le haghaidh BS-Germany agus an Lárionad Aigéaneolaíochta Náisiúnta (NOC) na Ríochta Aontaithe a thug rannchuidiú luachmhar seachtarach don bhuiséad oibriúcháin.

- > Chairtfhostaigh an Lárionad Taighde lascaigh agus Éiceachórais de chuid Fhoras na Mara i dTalamh an Éisc, Ceanada an *RV Celtic Explorer* ar feadh 36 lá i mí Aibreáin agus mí na Bealtaine 2013 arís le suirbhé iascaigh a chur i gcrích inar áiríodh obair ar an gCaidhp Phléimeannach agus ar na Grand Banks theas. Sula ndearnadh an suirbhé thuasluaite tugadh faoi shuirbhé trasdula ar an Atlantach Thuaidh ar feadh naoi lá ina raibh eolaithe Éireannacha agus Ceanadacha ar bord agus bailíodh sonraí luachmhara maidir le céiticigh agus le haigéaneolaíocht.
- > Tugadh an *RV Celtic Explorer* don tSeirbhís Páirceanna Náisiúnta agus Fiadhúlra den Roinn Ealaíon, Oidhreacht agus Gaeltachta i mí Feabhra chun suirbhé ceamara anuas trí lá a chur i gcrích de chairn charbónáite uathghineacha meatán-dhíorthaithe i Muir Éireann chun cuidiú le Limistéar Chaomhantais Speisialta Mhara féideartha a bhunú don todhchaí.
- > Cuireadh 30 lá de shuirbhéanna Teilifíse Faoin Uisce i gcrích ar an *RV Celtic Voyager* i gcomhair measúnú stoic *Nephrops* lenar áiríodh suirbhé rathúil ar na meána cloicheán ar Bhanc an Torcáin ag doimhneacht síos go 540m.
- > Cuireadh an suirbhé monatóireachta geimhridh bliantúil i gcrích thar ceann MEFS a rinne suirbhé ó theas ó Bhaile Átha Cliath go Gaillimh i mí Eanáir 2013.
- > Cuireadh seacht gcinn de shuirbhéanna taighde maoinithe am loinge de chuid an Phlean Forbartha Náisiúnta (NDP) i gcrích ar an *RV Celtic Voyager* a mhair 47 lá agus bhí eolaithe as OÉ Gaillimh, Ollscoil Uladh, Institiúid Teicneolaíochta na Gaillimhe-Maigh Eo agus Suirbhéireacht Gheolaíochta na hÉireann ina mbun.

- > Cuireadh clár gníomhaíochta thar a bheith rathúil i gcrích faoin gclár Léarscáiliú Comhtháite d'Fhorbairt Inbhuanaithe Acmhainn Mhara na hÉireann (INFOMAR) i rith na bliana lenar bhain 73 lá suirbhé ar an *RV Celtic Voyager*, lena n-áirítear suirbhéanna fairsinge bataiméadracha amach ó chósta an deiscirt.
- > Chuir an *RV Celtic Voyager* trí shuirbhé hidreagrafacha i gcrích freisin agus rinneadh glanadh láithreáin ar láithreán tástála Chuan na Gaillimhe a mhair ar feadh 30 lá mar thacaíocht le forbairt fhuinneamh na mara de chuid Údarás Fuinnimh Inmharthana na hÉireann.
- > I measc gníomhaíochtaí eile suntasacha ar tugadh fúthu ar bord an *RV Celtic Voyager* bhí clár oiliúna chómhodúil á stiúradh ag foireann an Chomhaontais Straitéisigh Mara um Thaighde agus Oiliúint (SMART) agus clár oiliúna eile faoi stiúir ollscoileanna
- > D'fhoth éascú a dhéanamh ar leathnú chumhdach an tsuirbhé isteach sa Limistéar atá Leochaileach ó thaobh na Bitheolaíochta, agus le bheith mar bhonn eolais ag ceanglais taighde na hÉireann, AE agus Thras-Atlantaigh amach anseo, lorgaíodh maoiniú caipitil agus ceadaíodh é le haghaidh uasghráduithe ar chóras an tsuirbhé ar an *RV Celtic Voyager* agus ar an *RV Celtic Explorer*, a bheidh ar bun in 2014.

Scéim na mBreathnóirí ar Árthaí Eachtracha 2013

In 2013, chuir Foras na Mara 12 bhreathnóir Éireannacha ar bord árthaí eachtrannacha a bhí i mbun taighde inár n-uiscí. Chaith na breathnóirí 176 lá ar muir san iomlán agus mhair na suirbhéanna ar feadh tréimhsí éagsúla, idir 25 lá agus 4 lá. Bhí breathnóirí páirteach ar bord suirbhéanna de chuid na Breataine, na Beilge, na hÍsiltíre agus na hIorua.

Ardseirbhís Léarscáilithe

I gcomhar le GSI, thug PricewaterHouse Coopers (PWC) faoi athbhreithniú neamhspleách clár, mar thaca le haighneacht rathúil rialtais le haghaidh maoiniú cúig bliana do thiomantas leanúnachais le haghaidh Léarscáiliú Comhtháite d'Fhorbairt Inbhuanaithe Acmhainn Mhara na hÉireann (INFOMAR), ag €3m in aghaidh na bliana go dtí 2018. Ag teacht le moltaí a rinne an PWC ar na hacmhainní a leithroinntear ar fhorbairt ghnéithe breisluacha INFOMAR a mhéadú, eisíodh tairiscint forbartha gnó agus bronnadh conradh amháin ar Ionad Nuálaíochta Gnó Bhaile Átha Cliath.

Le linn 2013 leanadh do léarscáiliú INFOMAR amach ó chóstaí an Deiscirt agus an Iarthair ar bord an *RV Celtic Voyager*, lena cuireadh i gcrích príomhcheangaltas árthaigh le haghaidh Chéim 1 de INFOMAR.

Tugadh faoi éadail mhór sonraí eile mar chuid den Chlár Saothraithe Breisluacha agus fuarthas cumhdach forleathan amach ó chósta Iarthar an Chláir ar an *RV Celtic Voyager* le haghaidh Údarás Fuinnimh Inmharthana na hÉireann (SEAI), chun taca a chur faoi fhorbairt na hearnála fuinnimh in-athnuaite amach ó chósta na hÉireann.

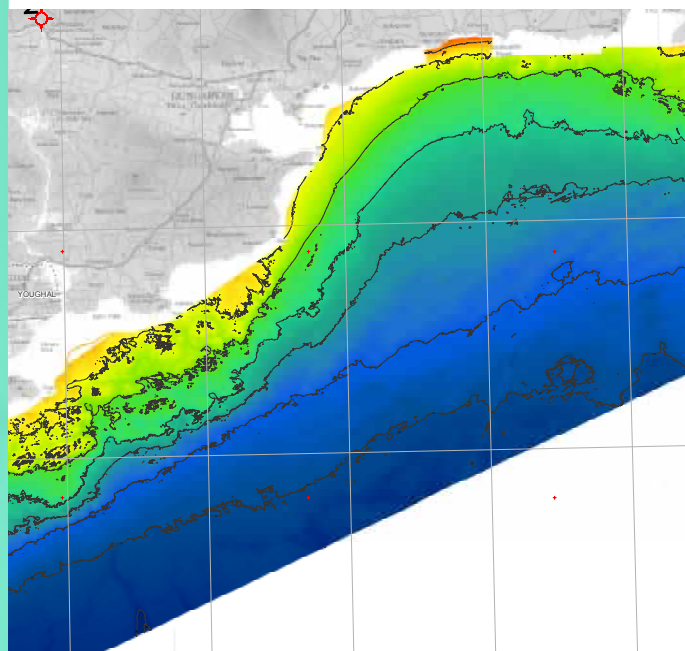
Rinne Ardseirbhís Léarscáilíochta (AMS) comhordú ar Sheimineár Bliantúil INFOMAR 2013 in Ollscoil Luimnigh agus d'éirigh thar barr leis an imeacht, áit a raibh cainteoirí áitiúla agus idirnáisiúnta ón saol acadúil, ón tionscal agus ó earnálacha poiblí. Anuas ar an ngnáth-leagan amach le cur i láthair, bhí seisiún ceardlaine idirghníomhaí mar chuid de, le taispeántais teicneolaíochta ó eitleirí UAV go píolótú ROV cianda. Ba léir ón méid daoine a d'fhreastail air, agus é roinnte go cothrom idir an tionscal, an rialtas agus an saol acadúil, thar iomad earnálacha mara, go ndeachaigh gníomhaíochtaí an chláir i gcion go mór ar dhaoine.

Tar éis for-rochtain a dhíriú ar Éirinn agus ar an RA le blianta beaga anuas, mhéadaigh AMS an leibhéal for-rochtana go hidirnáisiúnta in 2013, agus iad rannpháirteach in imeachtaí suntasacha suirbhé



Ag cur an Fheithicil Chianoibrithe Domhainuisce, an ROV Holland I ag obair ón ártach náisiúnta taighde an *RV Celtic Explorer*

“Agus aitheantas á thabhairt don riachtanas atá ag méadú le haghaidh cur chuige comhtháite i leith Fhorbairt, Theicneolaíocht, Thaighde agus Nuálaíocht na mara, soláthraíonn OSIS réitithe iomlána ó thús deireadh do chliant.”



Taispeántar sa chairt bataiméadracha a chuir INFOMAR le chéile comhrian chuan Eochaille i gCorcaigh. Is féidir na cairteacha a íoslódáil ó www.infomar.ie

Seirbhísí Aigéaneolaíochta agus Faisnéise



sa Phortaingéil, sna Stáit Aontaithe, sa RA agus i gCeanada. Toisc na rannpháirtíochta sna himeachtaí sin bhí sé níos éasca líonrú a dhéanamh rud a thacaigh leis an gcrúinniú ar Chomhar Trasatlantach i bhForas na Mara, agus ardaíodh an fhéidearthacht go dtabharfar faoi thionscnaimh taighde chomhoibritheacha sa todhchaí.

Ina theannta sin, tacaíodh le roinnt imeachtaí áitiúla lena n-áirítear Féile Eolaíochta & Teicneolaíochta, Gaillimh, agus Atlantach Éireann agus SmartOcean agus neart eile.

Le linn 2013 chuir Ardseirbhísí Léarscáilíochta na tionscadail seo a leanas i gcrích: Gnáthóga Eorpacha Ghrienneall na Farraige a Léarscáiliú (MESH) INTEREG IVB agus INIS Hydro INTERREG IVA.

Seirbhísí Aigéaneolaíochta

Dhéileáil an Fhoireann Aigéaneolaíochta le breis agus 130 iarratas ar shonraí agus ar tháirgí aigéaneolaíochta i rith 2013. Lean siad ag soláthar sonraí agus anailís allamuigh agus samhla chun tacú le seirbhísí comhairleacha arna soláthar ag an bhfoireann seirbhísí Muirthimpeallachta agus Sábháilteacht Bhia i bhForas na Mara.

Sholáthair foireann na Seirbhísí Aigéaneolaíochta gach gné den chlár oibre suntasach a bhain le comhaontú seirbhíse SEAL um Fhuinneamh na Mara go tráthúil agus laistigh den bhuiséad a bhí socraithe dó. Áiríodh leis seo gné na seirbhísí mara de chomhthionscadal lena raibh baint ag SEAL, Foras na Mara, IBM agus leis an ngnóthas FBM atá bunaithe i nGaillimh Biospheric Engineering Ltd.

I ndiaidh iarratas rathúil a chur chuig Fondúireacht Eolaíochta Éireann faoi ghairm 2012 ar bhonneagar taighde, chuir an fhoireann tús le clár soláthair d'fhonn cábla snáthoptaice agus nód ghrienneall na farraige agus trealamh gaolmhar a sholáthar agus a chur i mbun oibre. Cuirfidh sé sin taca faoi ghníomhaíochtaí tástála agus taispeána ag láithreán tástála fhuinneamh na mara agus SmartBay i gCuan na Gaillimhe a bhfuil dálaí na ceathrún scála luaite leo.

Tacaíodh agus coinníodh líonra náisiúnta na mbaoithe aimsire ar son na Roinne Iompair, Turasóireachta agus Spóirt (DTTAS). Rinne an DTTAS athbheithniú freisin ar fheidhmíocht an líonra in 2013. D'éirigh go rathúil leis sin in ainneoin acmhainní srianta. Ag tógáil ar na samhlacha nua aigéin a forbraíodh le déanaí le haghaidh doirteadh ola agus feidhmeanna bithghéiceimeiceacha, forbraíodh samhail ardtairgí (mionscála logánta) scairbhe. Seoladh uirlis tuartha taoide beo ar an idirlíon a sholáthraíonn réamhaisnéis taoide ar feadh suas le dhá bhliain ar aghaidh d'úsáideoirí mara. Is a bhuíochas leis an gcothabháil leanúnach a dhéantar ar Líonra Náisiúnta Tomhsaire Taoide na hÉireann go rabhtas in ann an feidhmchlár seo a fhorbairt. Sholáthraigh Seirbhísí Aigéaneolaíochta anailís agus ionchur aigéaneolaíochta roimhe seo i gcomhair mheasúnú tosaigh Chreat-Treoir na Straitéise Mara. Tá siad ag cuidiú anois le cleachtadh anailíse bearnaí anois agus ag sainiú an chlár monatóireachta atá de dhíth faoin Treoir.

Seachadadh príomhghnéithe tionscadail ASIMUTH, JERICO agus MyOcean2 (arna maoiniú ag an AE) go rathúil agus mar chuid de tá feachas HAB réamhrabhaigh fíor-ama don tionscal dobharshaothraithe, i gcomhar le MEFS.

Tá Seirbhísí Aigéaneolaíochta fós gníomhach ar an gComhairle Idirnáisiúnta um Thaiscéalaithe na Mara (ICES), ar WGOH agus ar an gCóras Eorpach um Breathnóireacht Aigéin Dhomhanda (EuroGOOS) agus ar an Sainghrúpa um Bhreathnóireacht Mara agus Sonraí de chuid DG Mare. Lean an fhoireann ag tabhairt ionchuir chun an obair dlí agus phleanála a chur i bhfeidhm chun Cuibhreas Eorpach um Bonneagar Taighde (ERIC) a fhorbairt le haghaidh comhpháirtíocht fhadtéarmach ar thionscadal Faireachlann Ildisciplíneach Eorpach Ghrienneall na Farraige (EMSO) agus bunaíodh oifig eatramhach sa Róimh. Ghlac OSIS páirt sna tionscadail CoOPEUS (ag nascadh mórtionscadal taighde comhshaoil na hEorpa na Stát Aontaithe)

agus SIDERI (comhpháirtithe Eorpacha i ngníomhaíochtaí snámháin ARGO) agus Fix03 (ag nascadh gníomhaíochtaí AE ar fhaireachlanna mara pointe fosaithe) freisin agus i raon leathan tionscadal bonneagair AE agus idirnáisiúnta.

Seirbhísí Faisnéise agus Forbartha

Lean an fhoireann um Sheirbhísí Faisnéise agus Forbartha (IS&D) orthu ag tabhairt tacaíocht theicniúil ó lá go lá don Fhoras go léir. Dhéileáil IS&D le breis agus 3,059 éileamh ar thacaíocht, a chuimsigh ceisteanna teicniúla, fiosruithe maidir le hiarratais agus bainistíocht sonraí, agus ag déileáil le breis agus 250 iarratas sonraí ó pháirtithe seachtacha.

Bhí baint ag IS&D le 76 tionscadal agus gníomhaíocht maidir le tacaíocht straitéiseach ghnó agus theicniúil, le cúrsaí oibríocháin agus tionscadail tacaíochta ghrúpaí seirbhíse Fhoras na Mara le linn 2013.

I measc na bpríomhghníomhaíochtaí a bhí ar siúl ag IS&D in 2013 suiteáladh freastalaí nua inmheánach TF níos éifeachtúla, baineadh úsáid den chéad uair as néalóstáil sonraí (HEAnet) agus bunaíodh naisc líonra ardluais as Baile Uí Fhiacháin agus Sráid Fhearchair go hÓrán Mór a bhí mar chuspóirí i Straitéis Teicneolaíochtaí Faisnéise agus Cumarsáide Fhoras na Mara (2013-2015). Rinne an fhoireann Oibríochtaí TF maoirsiú freisin ar athsholáthar an bhonneagair aistrithe don líonra sonraí inmheánach in Órán Mór a raibh a ré caite, agus cuireadh tús le huasghrádú an-suntasach ar bhonneagar freastalaí an *RV Celtic Explorer*.

Chuaigh an Tairseach Íoslódála Sonraí Ar Líne beo chun rochtain níos fearr ar shonraí Fhoras na Mara a éascú, agus forbraíodh Atlas Mara na hÉireann mar chuid de chlár Chreat-Treoir na Straitéise Mara. Cothóidh foireann Bainistíochta Sonraí IS&D na sonraí atá mar thaca ag an Atlas, agus in 2014 déanfar uasghrádú ar an Atlas ionas go mbeidh sé oiriúnach le húsáid ar ghléasanna móibíleacha. Thacaigh an fhoireann Bainistíochta Sonraí freisin le clár an Chreata um Bailiú Sonraí, INFOMAR agus Chreat-Treoir na Straitéise Mara, agus an fhoireann um Cheadúnú Urthrá Dobharshaothraithe.

In 2013 rinne an fhoireann um Fhorbairt Feidhmchlár IS&D athfhorbairt theicniúil shuntasach ar shuíomh gréasáin an Fhorais. Cuirfear inneachar ar an suíomh gréasáin in 2014 sula seolfar é.

Chuir an fhoireann tús freisin le hathfhorbairt ollmhór ar an gcóras sonraí HAB i dtreo dheireadh 2013 agus déanfaidh sé sin nuachóiriú iontach ar an gcóras, agus feabhsófar iontráil sonraí, tuairisciú agus coimeádáin poiblí ar líne. Leanfar don obair sin ar feadh 2014 ar fad.

I measc gníomhaíochtaí eile a bhaineann le cúrsaí sonraí: cuireadh i gcrích an tionscadal arna mhaoiniú ag FP7 AE, 'ENVIRO-FI Future-Internet' agus a chomhpháirtí InTune Networks inar tugadh sárthaispeántas ar sheirbhís sonraí an Fhorais; rannpháirtíocht na tionscadal Eorpach um Bonneagar sonraí 'SeaDataNet II'; agus leanadh den fhorbairt leanúnach ar chórais sonraí le haghaidh sonraí toinne agus iascaigh.

Bhí baint ag IS&D freisin le sainiú an choincheapa maidir le hAigéan Digiteach Éireannach, a bhfuil sé mar aidhm leis rochtain éasca a thabhairt ar shonraí mara ó fhoinsí éagsúla d'fhonn taighde mara a éascú agus forbairt táirgí faisnéise a chumasú. Déanfar forbairt bhreise ar an gcoincheap sin i gcomhar le Straitéis Sonraí inmheánach an Fhorais in 2014.

An Clár Ardteicneolaíochta

Le roinnt blianta anuas, féachadh sa Chlár Ardteicneolaíochta Mara (AMTP) le cuspóirí a bhaint amach maidir grúpáil mara ildisciplíneach le mais chriticiúil atá dírithe ar thionscal a chruthú i réimse ardchórais braite, cumarsáide agus faisnéisíochta. Thacaigh an clár le roinnt tionscnaimh náisiúnta i gcomhair forbairt cumais sa spás sin.

Thug OSIS páirtithe leasmhara náisiúnta le chéile chun cuibhreannas a bhunú mar fhreagairt ar an nGairm do Lárionaid Taighde ó Fhondúireacht Eolaíochta Éireann faoin réimse téama Breathnóireacht na Cruinne agus an Aigéin. Bhí an réamhthogra dar teideal Lárionad an Atlantaigh um Breathnóireachtaí na Cruinne (ACEObs) faoi stiúir OÉ Gaillimh agus d'éirigh leis dul chomh fada leis an gcéim togra iomlán atá le cur isteach i mí Aibreáin 2014.

Bhí an Clár ag obair freisin ar dheiseanna a fhorbairt i réimse Bhreathnóireacht na Cruinne. Bhí roinnt cainteanna ar siúl le Gníomhaireacht Spáis na hEorpa agus le pointí teagmhála náisiúnta sa réimse seo. Cuireadh ionchur ar fáil freisin ón gclár maidir le tionscnaimh chun inniúlachtaí náisiúnta a fhorbairt i mbreathnóireacht na cruinne ó thaobh na mara.

Ag deireadh 2013, lean an Clár ag úsáid an phobail teicneolaíocht mara náisiúnta trí chomhpháirtíochtaí a phlé, trí fhaisnéis a scaipeadh agus trí chaibidlíocht le gach pointe teagmhála náisiúnta ábhartha i gcás ina bhfuil deiseanna le haghaidh tionscadal a bhaineann le cúrsaí mara faoi *Horizon 2020*. Ag deireadh 2013, fuarthas fógra gur éirigh le togra le haghaidh thionscadal Interreg IVF do Limistéar an Atlantaigh ar a nglaoitear Taispeántas Teicneolaíochta atá Infheidhme d'Fhiontair Bheaga agus Mheánmhéide i Limistéar an Atlantaigh (STAMAR).

Tá AMTP ag féachaint freisin ar fhorbairt straitéiseach don todhchaí. Seoladh go háirithe comhairliúcháin maidir le Straitéis taighde agus nuálaíochta SmartOcean ar líne i mí Mheán Fómhair 2013. Tháinig 35 freagra ar ais mar gheall air sin agus tháinig a bhformhór díobh ón tionscal. Ina dhiaidh tharla ceardlann comhairliúcháin leis an tionscal ag Fóram SmartOcean 2013. Beidh a dtorthaí sin mar bhonn eolais ag pleanáil straitéiseach le haghaidh 2014 agus ina dhiaidh sin.

Lean an fhoireann AMTP ag tacú le forbairt an bhonneagair náisiúnta tástála agus taispeántais atá ann cheana. Mar chuid de sin chuathas i mbun oibre leis an bpobal taighde agus forbartha (R&D) maidir le deiseanna chun an t-ardán tástála agus taispeántais SmartBay a úsáid tríd an gClár Náisiúnta um Rochtain ar Bhonneagar, cuairteanna ar shaoráidí eile cosúil le Coláiste Náisiúnta Muirí na hÉireann d'fhonn iniúchadh a dhéanamh ar conas is féidir bonneagair a chur chun cinn ar bhonn náisiúnta. Thosaigh siad freisin ag iniúchadh conas a úsáidtear bonneagar breise trí oibriú le gníomhaireachtaí eile stáit cosúil le hAerchór na hÉireann agus eagraíochtaí sa tionscal maidir le bonneagar digiteach a úsáid.

In 2013, thosaigh AMTP ag féachaint ar éabhlóid na hArdteicneolaíochta Mara agus ar SmartOcean amach anseo. Thosaigh OSIS ag cur bonn foirmiúil faoin gcoincheap maidir leis an Aigéan Digiteach Éireannach agus ag tabhairt ionchuir maidir le moltaí faoi thosaíochtaí taighde le haghaidh réimse suaitheantais na dTeicneolaíochtaí Cumarsáide TF agus na Mara le haghaidh straitéis nua náisiúnta R&D mara 2014-2020.

I mí na Samhna 2013, d'éirigh le AMTP Fóram SmartOcean 2013 a eagrú. Ba é sin an Fóram ba mhó go dtí seo ar an fhreastail thart ar 180 rannpháirtí cláraithe. B'imeacht suntasach é toisc gurbh é sin an chéad uair go raibh an Fóram ar bun i dTuaisceart Éireann, le hurraíocht ó InvestNI. B'imeacht dhá lá a bhí ann a bhí ar siúl ag Titanic Bhéal Feirste agus rinneadh ionadaíocht ar bhreis is 90 eagraíocht agus roinnt cainteoirí, taispeántas, póstaer agus ceardlann comhairliúcháin a bhain leis an tionscal.

Tugadh poiblíocht freisin do SmartOcean trí bheith rannpháirteach i roinnt imeachtaí breise ar feadh na bliana lena n-áirítear an Siompóisiam ar an bPláinéad Beo de chuid Ghníomhaireacht Spáis na hEorpa (ESA), ceardlann olltíomsaithe sonraí an ESA, comhdháil Oceans 13 Virginia Beach, Lá Nuálaíochta Microsoft i mBaile Átha Cliath, agus Meitheal Oibre Taighde Microsoft in Cambridge.

Rinneadh obair freisin chun an suíomh gréasáin SmartOcean a bhogadh chuig mol faisnéise dinimiciúil agus leanúint de phróifíl ar líne SmartOcean a fhorbairt.



An tAire Talmhaíochta, Mara agus Bia an tUasal Simon Coveney, TD le toscairí na comhdhála ag an gcomhdháil Nuálaíocht Spáis – Fás Gorm a Chumhachtú a bhí ar siúl i gCorcaigh, áit ar thug Gníomhaireacht Spáis na hEorpa ardmholadh do Nuálaíochtaí Mara na hÉireann.

“an coincheap maidir le hAigéan Digiteach Éireannach, a bhfuil sé mar aidhm leis rochtain éasca a thabhairt ar shonraí mara ó fhoinsí éagsúla d'fhonn taighde mara a éascú agus forbairt táirgí faisnéise a chumasú.”



Bhí sé mar aidhm ag Fóram SmartOcean, a bhí ar siúl in Ionad an Titanic, i mBéal Feirste, Tuaisceart Éireann agus Éire a leagan síos mar cheannairí i bhforbairt táirgí agus seirbhísí TFC le haghaidh earnálacha mara ar fud an domhain mhóir. Sa phictiúr (Ó Chlé go Deas) Arlene Foster, an tAire Fiontar, Trádála agus Infheistíochta, Tuaisceart Éireann agus an Dr Peter Heffernan, Príomhoifigeach Feidhmiúcháin Fhoras na Mara.

Riarachán Ginearálta

Idirchaidreamh

Cuimsíonn clár Foras na Mara réimse leathan gníomhaíochtaí lena dteastaíonn idirchaidreamh agus comhoibriú dlúth le go leor daoine agus eagraíochtaí. Áirítear leo siúd an Roinn Talmhaíochta, Bia agus Mara, an Roinn Airgeadais, an Roinn Comhshaoil, Pobail agus Rialtais Áitiúil, an Roinn Iompair, Turasóireachta agus Spóirt agus ranna rialtais agus gníomhaireachtaí stáit eile, fiontar príobháideach agus earnáil an ardoideachais. Tugann an Foras aitheantas do thacaíocht agus do chomhoibriú leanúnach gach dreama lena mbaineann.

Sláinte agus Sábháilteacht

De réir an Achta um Shábháilteacht, Sláinte agus Leas ag an Obair (1989), thug Foras na Mara gach Ráiteas Sláinte agus Sábháilteachta cothrom le dáta. Leanann an Foras de na bearta cuí a chur i bhfeidhm le sábháilteacht agus sláinte gach fostaí agus cuairteora ar a n-áitreabh a chosaint.

An tAcht um Eitic in Oifigí Poiblí

Soláthraíonn gach duine ag a bhfuil post ainmnithe i bhForas na Mara ráiteas leasa don Choimisiún um Chaighdeán in Oifigí Poiblí de réir ailt 18 agus 20 den Acht um Eitic in Oifigí Poiblí, 1995.

Comhionannas Fostaíochta

Tá Foras na Mara tiomanta do bheartas comhionannais deiseanna, agus glacann sé cur chuige réamhghníomhach i leith an chomhionannais. Tá scéimeanna i bhfeidhm ag an bhForas a thugann deiseanna don fhoireann freastal ar a riachtanais ghairme agus phearsanta, ar nós comhroinnt post, saoire staidéir agus cláir oideachais.

Cód Cleachtais (Tuairisciú)

Cloíonn Foras na Mara leis na Cóid reachtúla Chleachtais um Rialachas na gComhlachtaí Stáit de réir mar atá leagtha síos ag an Roinn Airgeadais. Dearbhaíonn an Foras gur ghlac na Stiúrthóirí agus na fostaí leo seo a leanas agus go gcuirtear oiliúint orthu ina leith fosta:

- > Cód foirmiúil iompair um choinbhleacht leasa agus cairt chustaiméirí
- > Coistí Iniúcháireachta cuibhunnaithe
- > Nósanna imeachta um sholáthar
- > Saincheisteanna fogaire

Tuairisciú ar Éifeachtacht Fuinnimh ag Comhlachtaí san Earnáil Phoiblí (I.R. 542 de 2009)

Forbhreathnú ar Úsáid Fuinnimh in 2013

Is iad na príomhúsáideoirí fuinnimh i bhForas na Mara oifig na ceanncheathrún agus an tsaoráid saotharlainne agus na háiríochtaí taighde, an *RV Celtic Explorer* agus an *RV Celtic Voyager*. Taobh istigh de na saotharlanna in Órán Mór, ídíonn seirbhísí meicniúla agus leictreachais na saotharlann thart ar 20% den ídiú foriomlán fuinnimh leictirigh sa tsaoráid. Baineann formhór an ídithe leictirigh eile le soilse, trealamh ginearálta oifige agus trealamh saotharlainne.

In 2013 d'ídiigh Foras na Mara:

2,794,914 kWh leictreachais

13,509 lítear Ceirisín

345,575 lítear de bhulgás própáin i gcomhair teasa

9,271 lítear díosail

1,376,550 lítear d'ola gáis mhara le haghaidh suirbhéanna taighde maoinithe ag Foras na Mara

Gníomhartha ar Tugadh Fúthu in 2013

Shuiteáil Foras na Mara rialuithe soilse trí Chóras Bainistíochta an Fhoirgnimh in Órán Mór trí bhraiteoir leibhéil solais lasmuigh. Tá soilse curtha ag obair anois i gcomhlímistéir agus tagann siad air chomh luath is a thiteann an leibhéil solais taobh amuigh faoi leibhéil luca réamhshocraithe áirithe. Ba cheart go mbeifí in ann thart ar 30% éifeachtúlacht fuinnimh sna soilse a fheiceáil ó 2014 ar aghaidh nuair a bheidh an córas ag obair. Cuireadh athbhreithniú ar bun in 2013 ar na Córais Láimhseála Air sna saotharlanna go léir.

Gníomhaíochtaí atá Beartaithe le haghaidh 2014

Tugadh faoi athbhreithniú tosaigh ar úsáid fuinnimh agus ar oibríochtaí saoráide in Órán Mór agus tugadh gealltanais go laghdófaí ídiú agus go gcruithófaí éifeachtúlacht fuinnimh le linn 2014.

Meastar go dtabharfar isteach laghdú ar thréimhsí reatha in 2014 chun laghdú breise a dhéanamh ar an ídiú fuinnimh laistigh de na saotharlanna.

Scéim Gaeilge 2013 An scéal is déanaí

Bunaíodh an Grúpa Gaeilge chun Scéim Gaeilge/Scéim Foras na Mara a ullmhú faoi Alt 11 d'Acht na dTeangacha Oifigiúla 2003. Chuaigh an chéad tréimhse den scéim Gaeilge in éag in 2012 agus rinne an Grúpa Gaeilge maoirsiú ar ullmhú agus ar fhorbairt chéim a dó den scéim in 2012 agus 2013. Cuireadh é sin faoi bhráid oifig an Choimisinéara Teanga i mí na Samhna 2013. Tógann an dara tréimhse den scéim ar na hiarrachtaí móra a rinneadh chun na ceanglais faoin Acht a chur i bhfeidhm agus a tugadh isteach faoin gcéad tréimhse tar éis réimsí a aithint inar theastaigh feabhas ar na seirbhísí Gaeilge a bhí á soláthar ag an bhForas. Coinneofar an tiomantas sa dara tréimhse chun measúnú a dhéanamh, ar bhonn leanúnach, ar an méid éilimh atá ar sheirbhísí trí Ghaeilge agus a chinntiú go leanann Foras na Mara ag comhlíonadh an éilimh sin ar bhealach pleanáilte, comhsheasmhach agus inrochtana. Leanann Foras na Mara ag tomhas an méid éilimh ar a sheirbhísí i nGaeilge trí iniúchtaí rialta a dhéanamh trí chóras comhairimh/tomhais do líon na bhfiosruithe/n-iarratas ar sheirbhísí trí Ghaeilge i dtréimhse faoi leith. Mar sin féin, d'fhonn iarratais ar sheirbhísí a chruthú, tugann Foras na Mara tuairisc agus déanann sé poiblíocht ar fheasacht i measc na foirne agus na gcliant maidir leis na seirbhísí a sholáthraíonn an Foras trí Ghaeilge.



Rinne Suirbhé na Feidhme Bithfhionnachtana agus Éiceachórais Cainneon imscrúdú ar éagsúlacht leathan gnáthóg agus pobal fo-uisce i gcóras Chainneon Whittard ar imeall an Atlantaigh. Ag úsáid an ROV *Holland I*, ar an *RV Celtic Explorer*, tógadh íomhánna de speicis neamhchoitianta ar cheamara lena n-áirítear an feadánach mór seo. Rinneadh an suirbhé taighde faoin straitéis Casadh na Taoide le tacaíocht ó Fhoras na Mara agus Fochlár Taighde Mara an Phlean Forbartha Náisiúnta 2007–2013. Tugann an Clár Am Loinge rochtain ar na hÁrthaí Taighde Náisiúnta (*RV Celtic Explorer*/*RV Celtic Voyager*) d'eagraíochtaí taighde atá bunaithe in Éirinn.

Aguisíní

AGUISÍN 1: CLÁR TAIGHDE MARA AN NDP 2007–2013

CLÁR TAIGHDE MARA AN NDP 2007–2013 – CLÁR AM LOINGE 2013

<i>Beart Taighde</i> Chasadh na Taoide	<i>Clár Taighde</i> Chasadh na Taoide	Cineál Tionscadail	Tagairt an Tionscadail	Teideal an Tionscadail	Deontáí/Ceann	Cúnamh Deontais Iomlán
Tacaíocht Bonneagair	Am Loinge Árthach Taighde	Clár Oiliúna Tiomanta	CV13002	Oiliúint Fochéimithe Chuan na Gaillimhe	Ollscoil na hÉireann, Gaillimh	€88,000
Tacaíocht Bonneagair	Am Loinge Árthach Taighde	Clár Oiliúna Tiomanta	CV13003	SMART Eolaíocht ar Muir: Oiliúint Ildisciplíneach Longbhunaithe do Mhic Léinn Eolaíochtaí a bhaineann leis an bhFarraige	Institiúid Teicneolaíochta na Gaillimhe- Mhaigh Eo	€48,000
Tacaíocht Bonneagair	Am Loinge Árthach Taighde	Clár Oiliúna Tiomanta	CV13005	SMART: Ollscoil Chathair Bhaile Átha Cliath Brath agus Bithshálú	Institiúid Teicneolaíochta na Gaillimhe- Mhaigh Eo	€16,000
Tacaíocht Bonneagair	Am Loinge Árthach Taighde	Clár Oiliúna Tiomanta	CV13006/ CV13011/ CV13021	SMART: Cómhodúl Foghlama Creidiúnaithe	Institiúid Teicneolaíochta na Gaillimhe- Maigh Eo	€160,000
Tacaíocht Bonneagair	Am Loinge Árthach Taighde	Clár Oiliúna Tiomanta	CV13009	SMART: Clár Breathnóireachta	Institiúid Teicneolaíochta na Gaillimhe- Maigh Eo	€48,000
Tacaíocht Bonneagair	Am Loinge Árthach Taighde	Clár Oiliúna Tiomanta	CV13018	Oiliúint Loinge Fochéime i Modhanna Taighde Aigéaneolaíochta, Beantach, Meigeafhána agus Iascaigh	Institiúid Teicneolaíochta na Gaillimhe- Maigh Eo	€48,000
Tacaíocht Bonneagair	Am Loinge Árthach Taighde	Clár Oiliúna Tiomanta	CV13010	SMART: Taiscéaladh Geolaíoch Amach ón gCósta	Institiúid Teicneolaíochta na Gaillimhe- Maigh Eo	€32,000
Tacaíocht Bonneagair	Am Loinge Árthach Taighde	Clár Oiliúna Clár	CV13013	MSc sa Bhitheolaíocht Mhuirí – Cuan Chorcaí	Coláiste na hOllscoile Corcaigh	€16,000
Bonneagar Bonneagair	Árthach Taighde Árthach Taighde	Clár Oiliúna Tiomanta	CV13020	SMART: Fuinneamh na Mara	Institiúid Teicneolaíochta na Gaillimhe- Maigh Eo	€16,000
Tacaíocht Bonneagair	Am Loinge Árthach Taighde	Suirbhé Comhtháite Taighde	CE13001	Rannóga Aigéaneolaíochta, Bithghéiceimice agus Geolaíochta i ndáil le hAthrú Aeráide	Foras na Mara	€170,000
Tacaíocht Bonneagair	Am Loinge Árthach Taighde	Suirbhé Comhtháite Taighde	CE13002	Céiticigh ar an Teorainn 4	Institiúid Teicneolaíochta na Gaillimhe- Maigh Eo	€255,000

CLÁR TAIGHDE MARA AN NDP 2007–2013 – CLÁR AM LOINGE 2013

<i>Beart Taighde</i> Chasadh na Taoide	<i>Clár Taighde</i> Chasadh na Taoide	Cineál Tionscadail	Tagairt an Tionscadail	Teideal an Tionscadail	Deontai/Ceann	Cúnamh Deontais Iomlán
Tacaíocht Bonneagair	Am Loinge Árthach Taighde	Suirbhé Comhtháite Taighde	CE13003/ CE14001	Ag forbairt Geoiteicne- stratagrafaíochta	Coláiste na hOllscoile Corcaigh	€221,000
Tacaíocht Bonneagair	Am Loinge Árthach Taighde	Suirbhé Comhtháite Taighde	CE13004/ CE13010	Suirbhé ar Uibheacha Ronnach	Foras na Mara	€357,000
Tacaíocht Bonneagair	Am Loinge Árthach Taighde	Suirbhé Comhtháite Taighde	CE13007	SEDEX – Ról atá ag Sraitheanna Néifealóideacha i nDríodar Imill Tras-Scairbhe a lompar	Ollscoil na hÉireann, Gaillimh	€17,000
Tacaíocht Bonneagair	Am Loinge Árthach Taighde	Suirbhé Comhtháite Taighde	CE13008	Feidhm Bithfhionnachtana agus Éiceachórais Cainneon	Ollscoil na hÉireann, Gaillimh	€544,000
Tacaíocht Bonneagair	Am Loinge Árthach Taighde	Suirbhé Comhtháite Taighde	CV13001	Clár Shuirbhé Comhshaoil Geimhridh 2013	Foras na Mara	€104,000
Tacaíocht Bonneagair	Am Loinge Árthach Taighde	Suirbhé Comhtháite Taighde	CV13004	Tearmainn De Facto d'Ealásmabrainciaigh sa Mhuir Cheilteach	Institiúid Teicneolaíochta na Gaillimhe- Maigh Eo	€80,000
Tacaíocht Bonneagair	Am Loinge Árthach Taighde	Suirbhé Comhtháite Taighde	CV13019	Suirbhé ar speiceas den fíteaplanctón dineaifís 2013 (DINO13)	Ollscoil na hÉireann, Gaillimh	€48,000
Tacaíocht Bonneagair	Am Loinge Árthach Taighde	Suirbhé Comhtháite Taighde	CV13012	Suirbhé ar sceireacha agus ar phurláin Chiarraí	Ollscoil na hÉireann, Gaillimh	€64,000
Tacaíocht Bonneagair	Am Loinge Árthach Taighde	Suirbhé Comhtháite Taighde	CV13028	Suirbhé ar Bhlás Algach Díobhálach san Iarthar (HABWEST2013)	Ollscoil na hÉireann, Gaillimh	€40,000
Tacaíocht Bonneagair	Am Loinge Árthach Taighde	Suirbhé Comhtháite Taighde	CV13029	Mapáil Bithéagsúlachta ar Sceireacha Coiréil Fuaruisce	Coláiste na Tríonóide, Baile Átha Cliath	€56,000
Tacaíocht Bonneagair	Am Loinge Árthach Taighde	Suirbhé Comhtháite Taighde	CV13030	Measúnú ar lompar Dríodair Cósta Thuaidh na hÉireann	Ollscoil Uladh	€40,000
Tacaíocht Bonneagair	Am Loinge Árthach Taighde	Suirbhé Comhtháite Taighde	CV13031	Pailéitimpeallachtaí agus Scaipeadh Dríodair Siar ó Éirinn	Ollscoil Uladh	€48,000
IOMLÁN						€2,500,000

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CLÁR TAIGHDE MARA AN NDP 2007–2013 – TIONSCADAIL TAIGHDE A MAOINIÓDH IN 2013

Beart Taighde Chasadh na Taoide	Clár Taighde Chasadh na Taoide	Cineál Tionscadail	Tagairt an Tionscadail	Teideal an Tionscadail	Deontái/Ceann	Cúnamh Deontais Iomlán
Tacaíocht Beartais	Taighde Beartais, Soch-Eacnamaíoch agus Dlíthiúil	Conradh Seirbhísí	SERV-13- OCEO-014	Comhairle a thabhairt don Tascfhórsa Cumasóra d'fhoth Creat Pleanála Spásúlachta Mara a Fhorbairt d'Éirinn	John Martin	€17,250
Tacaíocht Beartais	Taighde Beartais, Soch-Eacnamaíoch agus agus Dlíthiúil	Conradh Seirbhísí	MGE0381	Taighde Dlíthiúil ar Reachtaíocht Náisiúnta/AE a bhfuil feidhm leo sa Timpeallacht Mhuirí	RPS Group Ltd.	€16,974
Tacaíocht Beartais	Taighde Beartais, Soch-Eacnamaíoch agus agus Dlíthiúil	Conradh Seirbhísí	SERV-13- CS-005	Athbhreithniú deisce ar Dhea- Chleachtas i bPleanáil Spásúlachta Muirí	Ollscoil na Banríona, Béal Feirste	€13,831
Tacaíocht Beartais	Taighde Beartais, Soch-Eacnamaíoch agus agus Dlíthiúil	Staidéar Deisce	DK/ME/13/001	Ionstraimí Dlí Náisiúnta, Idirnáisiúnta agus AE atá Ábhartha d'Fhorbairt Creat Pleanála Spásúlachta Muirí in Éirinn	MacCabe Durney Barnes	€37,219
Tionscal	Dobharshaothrú Sliogéisc	Tairiscint	N/B	Teitrealplóidigh óga <i>Crassostrea gigas</i> a tháirgeadh le húsáid mar stoc goir ag gorlanna Éireannacha chun trioplóidigh ghéinitigh a tháirgeadh	Cartron Point Shellfish	*€100,000
Fionnachtain	Teicneolaíocht Mara	Líonrú	N/B	Oceanology International 2014	Reed Exhibitions Ltd.	€28,538
Tionscal	Dobharshaothrú lasc eite	Tacaíocht do Bhonneagar Tairisceana	N/B	Aithint Stioc agus Imirce na An Doinean mara in Uiscí Cósta na hÉireann	Foras na Mara/ Coláiste na hOllscoile, Corcaigh	€63,559
Tacaíocht Nuálaíochta	Nuálaíocht	Deontais Taistil Líonraithe	NT/13/01 go NT/13/53	Tinreamh ag Comhdhálacha Mara, Ceardlanna agus Ócáidí, nó iad a Óstáil	Éagsúil	€30,071
Tacaíocht Beartais	Timpeallacht Mhuirí	Comhaltacht Iardhochtúireachta	PDOC/ME/ 13/01	Timthriall bithgheoiceimiceach carbóin agus cothaithigh in uiscí mara agus inbhir na hÉireann	Ollscoil na hÉireann, Gaillimh	##€44,987
Tacaíocht Beartais	Timpeallacht Mhuirí	Tógáil Cumais	N/B	Comhaltacht Fulbright Fhoras na Mara	N/B	€22,000
IOMLÁN						€374,429

* Is ionann é sin agus rannchuidiú Fhoras na Mara don tionscadal, atá á chómhaoiniú ag Bord Iascaigh Mhara.

Á chómhaoiniú ag an nGníomhaireacht um Chaomhnú Comhshaoil.

AGUISÍN 2: RANNPHÁIRTÍOCHT NA HÉIREANN I DTIONSCADAIL RTD AN AONTAIS EORPAIGH.

Ó foilsíodh athbhreithniú 2007–2010 ar rannpháirtíocht na hÉireann i dtionscadail taighde mara arna maoiniú ag an AE agus i dtionscnaimh eile bainteach le taighde mara (tag: *New Connections: Exploring Ireland's International Marine Research Relationships: 2007–2010*), tá 51 tionscadal curtha leis sin (Cúnamh Deontais >€11.7 milliún) in 2011–2012.

In 2013 cuireadh 16 thionscadal nua FP7 (cúnamh deontais: €11 mhilliún) agus 12 thionscadal nua INTERREG-IV (Deontas: €1.7 milliún) le hiomlán na dtionscadal in Éirinn. Fágann sé sin go raibh 190 tionscadal comhoibríoch san iomlán ann a raibh luach deontais os cionn €67.5 milliún ag baint leo ag dul chuig pobal thaighde mara na hÉireann (lena n-áirítear frontair bheaga agus mheánmhéide atá taighde-bhunaithe) le linn 2007–2013.

Is léir go bhfuil cláir maoinithe taighde an AE atá comhoibríoch agus iomaíoch ag cur go mór le fuinneamh agus le nuálaíocht phobal thaighde mara na hÉireann agus go gcuireann siad breis le maoiniú taighde a fhaightear trí chlár náisiúnta um thaighde, fhorbairt agus nuálaíocht amhail iad siúd a fhaigheann tacaíocht faoin bPlean Forbartha Náisiúnta (2007–2013).

Bhí Foras na Mara rannpháirteach i gceithre cinn den 28 tionscadal nua in 2013 (FP7: Fix03, EUROFLEETS 2, INTERREG: ARCPOLPLATFORM, STAMAR) a fuair cúnamh deontais de bhreis is €767K.

Tá sonraí i leith deiseanna um Maoiniú Taighde an AE mínithe ar shuíomh gréasáin Foras na Mara agus is féidir teacht ar bhunachar sonraí tionscadal le maoiniú AE ag an EuroOCEAN Knowledge Gate (www.kg.eurocean.org/).

Is féidir liosta iomlán de thionscadail FP7 (2007–2013) a fháil sa leabhrán *Blue Growth & Horizon 2020*, a foilsíodh i mí na Nollag 2013 (<http://oar.marine.ie/handle/10793/921>).

Tionscadail FP7 an AE (2013):

BRAAVOO: Bithbhraiteoirí, Tuairisceoirí agus Árthaí Uathrialaitheacha Algacha le haghaidh Breathnóireachta Aigéin. *IDS Monitoring Ltd.*

SENSE OCEAN: Na forbairtí braiteora muirí is fearr ar dhomhan a thabhairt le chéile chun córas braiteora bithghéiceimiceach muirí in situ a bheadh comhtháite agus ilfheidhme agus éifeachtúil ó thaobh costais de a chruthú. *T.E. Laboratories.*

COMMON SENSE: Braiteoirí costéifeachtacha, is féidir a oibriú le Córais Bhreathnóireachta Aigéin Idirnáisiúnta atá ann cheana, chun freastal ar Bheartais AE. *Coláiste na hOllscoile, Corcaigh / an Coláiste Ollscoile, Baile Átha Cliath / AquaTT / T.E. Laboratories.*

LEANWIND: Éifeachtúlachtaí Lóistíochta agus ailtireacht chabhlaigh le haghaidh suiteálacha gaoithe le forbairtí nua. *Coláiste na hOllscoile, Corcaigh / Gavin & Doherty Geosolutions Ltd / Rappel Enterprises Ltd / Institiúid Teicneolaíochta Chorcaí.*

MARIABOX: Measúnú in situ agus bosca uirlisí chun monatóireacht a dhéanamh ar an muirthimpeallacht. *Ollscoil Chathair Bhaile Átha Cliath/SmartBay.*

ASTARTE: Measúnú, straitéis agus laghdú riosca súnáimithe san Eoraip. *An Coláiste Ollscoile, Baile Átha Cliath.*

HERPISH: An víreas heirpéis in oisrí na hÉireann agus stoic frithsheasmhacha a aithint. *Coláiste na hOllscoile, Corcaigh.*

BACCHUS: An tionchar atá ag astaíochtaí bithghineacha ar scamail agus ar an aeráid i gcomparáid le hastaíochtaí antrapaigineacha. *Ollscoil na*

hÉireann, Gaillimh.

MAREFRAME: Réitigh Bainistíochta lascaigh bunaithe ar Éiceachóras a chomhchruthú. *Comhairle Chomhairleach Réigiúnach Uisce an Iarthuaiscirt.*

SAFI: Tacaíocht don Tionscal Dobharshaothraithe agus lascaigh. *Coláiste na hOllscoile, Corcaigh / Ionad Taighde Mara Dháithí Uí Mhurchú.*

DANCERS: Macrairéigiún DANube: Tógáil cumais agus Barrfheabhais i gCórais Aibhneacha (abhantrach, deilt agus farraige). *Coláiste na hOllscoile, Corcaigh.*

TIDES: Taispeántas Taoide i gcomhair Scéim Fuinnimh. *Coláiste na hOllscoile, Corcaigh/DPEnergy.*

DTOcean: Uirlisí Deartha Optamacha le haghaidh Eagair Fhuinneamh na Mara. *Coláiste na hOllscoile, Corcaigh.*

SEABIOPLAS: Feamainn ó Dhobharshaothráir Inbhuanaithe mar amhábhair ó Bhithphlaistigh In-bhithmhillte. *Ionad Taighde Mara Dháithí Uí Mhurchú/Cartron Point Shellfish Ltd.*

Fix03: Faireachlann Aigéin Oscailte Pointe Fosaithe. Foras na Mara.

EUROFLEETS 2: Céimeanna oibríochta nua i dtreo comhaontais ar loingsí taighde na hEorpa. *Foras na Mara.*

INTERREG-IV (2013)

ISLES II: Naisc Éireannacha-Albanacha ar Staidéar Fuinnimh. *An Roinn Cumarsáide, Fuinnimh agus Acmhainní Náidúrtha.*

STAMAR: Taispeántas Teicneolaíochta atá Infheidhme d'Fhiontair Bheaga agus Mheánmhéide i Limistéar an Atlantaigh. *Foras na Mara/Údaráis Réigiúnach an Oirdheiscirt.*

ATLANTICBLUETECH: Ag samhlú earnáil na mbith-acmhainní mara le haghaidh 2014–2020. *WESTBIC/Ollscoil na hÉireann, Gaillimh.*

ARCPOLPLATFORM: Ardán chun ullmhacht agus freagairt ar thruailliú cósta muirí i Limistéar an Atlantaigh a fheabhsú. *Foras na Mara / Coláiste Náisiúnta Muirí na hÉireann.*

TURNKEY: Acmhainn Náidúrtha In-athnuaite Tearcúsáidte a Bhunathrú agus Príomhthorthaí Fuinnimh a dhéanamh de. *Ollscoil na hÉireann.*

MAREN 2: Samhaltú hidrea-chomhshaoil agus gilleagrách ar ardán ilchuspóireach fuinnimh in-athnuaite mara *Ollscoil na hÉireann, Gaillimh.*

REPUTE: Fiontar Iompair Phoiblí In-athnuaite. *Institiúid Teicneolaíochta Luimnigh.*

CEAMAS: Feidhmiúcháin Innealtóireachta Sibhialta ar Dhríodair Mhuirí. *Coláiste na hOllscoile, Corcaigh / Institiúid Teicneolaíochta Chorcaí.*

Salmainidí: Tionscadal Shalmainidí an Iarthair. *Iascaigh Intíre/Ollscoil na hÉireann, Gaillimh.*

MaRET: Sraith straitéisí Pobail agus Gnó le haghaidh Fhorbairt Fuinneamh In-Athnuaite Mara. *Gníomhaireacht Fuinnimh Luimnigh an Chláir/Ollscoil na hÉireann, Gaillimh.*

SMACS: Freagairt Éigeandála le haghaidh Báid Bheaga agus Oilíuint Marthanais in aimsir an-fhuar. *Institiúid Teicneolaíochta Chorcaí, Éire.*

APLIC: Inbhuanaitheacht gilleagrách agus chomhshaoil na feirmeoireachta éisc i dtuaisceart na hEorpa. *Ollscoil na hÉireann, Gaillimh.*

Aguisíní

AGUISÍN 3: FOILSEACHÁIN FHORAS NA MARA Tuarascálacha Speisialta

Foras na Mara (2013). Leabhar na Stoc 2013: *Annual Review of Fish Stocks in 2013 with Management Advice for 2014*. **Foras na Mara**. <http://hdl.handle.net/10793/918>

SEAS-ERA (2013): Towards a Strategic Research Agenda / Marine Research Plan for the European Atlantic Sea Basin. *Special Report of the FP7 SEAS-ERA Project (Samhain 2013)*, tiomsaithe ag Geoffrey O'Sullivan (Foras na Mara) agus Nan-Chin Chu (Bord Mara na hEorpa), 44pp.tt

Lassoued, Y. (2013). *GeoDI-Geoscientific Data Integration*. Foras na Mara. <http://hdl.handle.net/10793/851>

O'Reilly, E. & O'Sullivan, G. (2013). *Blue Growth and Horizon 2020, competitive marine/maritime research funding opportunities in the Horizon 2020 programme (2014–2020)*. Foras na Mara. <http://oar.marine.ie/handle/10793/921>

Ruane, N., Rodger, H., Mitchell, S., Doyle, T., Baxter, E., & Fringuelli, E. (2013). *GILPAT: An Investigation into Gill Pathologies in Marine Reared Finfish*. Fochlár Taighde Mara (NDP 2007–2013), PBA/AF/08/002 (01). Foras na Mara. <http://oar.marine.ie/handle/10793/866>

Doré, B., Flannery, J., Keaveney, S. & Rajko-Nenow, P. (2013). *STRIVE 109–Norovirus in Wastewater and Shellfish; assessing the Impact of Wastewater Treatment Plant Effluent on Norovirus Contamination in Shellfisheries, (2008–EH–MS–7–S3), Clár STRIVE an EPA 2007–2013*. An Ghníomhaireacht um Chaomhnú Comhshaoil, Bosca OP 3000, Caisleán Bhaile Sheáin, Co. Loch Garman, Éire.

Feasachán lascaigh na hÉireann ISSN: 1649–5055

Jackson, D., O'Donohoe, P., McDermott, T., Kane, F., Kelly, S. & Drumm, A. (2013). *Report on Sea Lice Epidemiology and Management in Ireland with Particular Reference to Potential Interactions with Wild Salmon (Salmo salar) and Freshwater Pearl Mussel (Margaritifera margaritifera) Populations*. Feasachán lascaigh na hÉireann Uimh. 43: Foras na Mara. <http://hdl.handle.net/10793/893>

O'Sullivan, D., O'Keefe, E., Berry, A., Tully, O., & Clarke, M. (2013). *An Inventory of Irish Herring Spawning Grounds*. Feasachán lascaigh na hÉireann Uimh. 42: Foras na Mara. <http://hdl.handle.net/10793/874>

O'Donohoe P, Kane F, Kelly S, Mc Dermott T, Drumm A & D Jackson (2013). *National Survey of Sea Lice (Lepeophtheirus salmonis Krøyer and Caligus elongatus Nordmann) on Fish Farms in Ireland – 2012*. Feasachán lascaigh na hÉireann Uimh. 41. <http://oar.marine.ie/handle/10793/861>

Marine Environment and Health Series ISSN: 1649 0053

Glynn, D., McGovern, E., Slattery, T., Ó Conchubhair, D., Toomey, M., Kelly, C., Reid, A. & Moffat, R. (2013). *Chemical Residue in Irish Farmed Finfish, 2011*. Marine Environment & Health Series, Uimh. 39. Foras na Mara. <http://oar.marine.ie/handle/10793/876>

Tuarascálacha Suirbhéanna

Doyle, J., Lordan, C., Fitzgerald, R., Strong, J. & Service, M. (2013). *Western Irish Sea Nephrops Grounds (FU15) 2012 UWTV Survey Report*. Foras na Mara agus an Institiúid Agraibhia agus Eolaíochtaí Bitheacha. <http://hdl.handle.net/10793/891>

Doyle J., Lordan C., Ligeas A., Brown V., Leocadio A., McCausland I., McCorriston P., Service M., Stewart P., & Schön P.-J. (2013). *Western*

Irish Sea Nephrops Grounds (FU15) 2013 UWTV Survey Report and catch options for 2014. Foras na Mara agus an Institiúid Agraibhia agus Eolaíochtaí Bitheacha. <http://hdl.handle.net/10793/913>

Doyle, J., Lordan, C., Hehir, I., Fitzgerald, R., O'Connor, S., O'Donovan, S. & Salaun, M. (2013). *The "Smalls" Nephrops Grounds (FU22) 2013 UWTV Survey Report and catch options for 2014*. Foras na Mara. <http://hdl.handle.net/10793/919>

Lordan, C., Doyle, J., O'Connor, S., Hehir, I., Fitzgerald, R., Blaszkowski, M., O'Sullivan, D., O'Donovan, S., Salaun, M., Stewart, P. (2013). *Porcupine Bank Nephrops Grounds (FU16) 2013 UWTV Survey Report and catch options for 2014*. Foras na Mara. <http://hdl.handle.net/10793/912>

Lordan, C., Doyle, J., Hehir, I., Allsop, C., Butler, R. & Burke, C. (2013). *Aran, Galway Bay and Slyne Head Nephrops Grounds (FU17) 2013 UWTV Survey Report and catch options for 2014*. Foras na Mara. <http://hdl.handle.net/10793/910>

Lordan, C., Doyle, J., Hehir, I., O'Sullivan, D., Allsop, C., O'Connor, S., Blaszkowski, M., Butler, R., Burke, C., agus Stewart, P. (2013). *FU19 Nephrops Grounds 2013 UWTV Survey and catch options for 2014*. Foras na Mara. <http://hdl.handle.net/10793/911>

Nolan, C., O'Donnell C., Campbell, A., Sullivan, M., Mullins, E. & Keogh, H. (2013). *Tuarascáil ar Shuirbhé Fuaimiúil Scadáin an Iarthuaiscirt 22 Meitheamh–12th Iúil, 2013*. Sraith Shuirbhéanna FEAS: 2013/04. Foras na Mara. <http://hdl.handle.net/10793/889>

O'Donnell, C., Farrell, E., Nolan, C. & Campbell, A. (2013). *Boarfish Acoustic Survey Cruise Report 10 July–31 July, 2013*. Foras na Mara. <http://hdl.handle.net/10793/916>

O'Donnell, C., Mullins, E., Johnston, G. & Keogh, N. (2013). *Blue Whiting Acoustic Survey Cruise Report March 26–April 15, 2013*. Foras na Mara. <http://hdl.handle.net/10793/917>

O'Donnell, C., Nolan C., Mullins, E., Lyons, K., Volkenandt, M., Keogh, N., McAvoy, S. & Willians, D. (2013). *Celtic Sea Herring Acoustic Survey Cruise Report 2013, 07–27 October, 2013*. Foras na Mara. <http://hdl.handle.net/10793/920>

Foras na Mara, Institiúid le haghaidh Léann Acmhainní Mara & Éiceachórais, Institiúid an Taighde Mara, PINRO, Institiúid Taighde Mara Fharó, Saotharlann Mhara Marine Scotland, Johann Heinrich von Thünen-Institut & Institiúid na Danmhairge le haghaidh Taighde lascaigh, an Grúpa Éireannach maidir le Míolta Móra agus Deilfeanna & Institiúid Teicneolaíochta na Gaillimhe-Maigh Eo, (2013). *International Blue Whiting Spawning Stock Survey (IBWSS) Spring 2013*. Foras na Mara. <http://hdl.handle.net/10793/868>

Foilseacháin Chomhoibritheacha

FSAI (2013). *Investigation into Levels of Dioxins, Furans, Polychlorinated Biphenyls and Brominated Flame Retardants in Fishery Products in Ireland Monitoring & Surveillance Series*. Údarás Sábháilteachta Bia na hÉireann, Baile Átha Cliath www.fsai.ie, <http://hdl.handle.net/10793/875> (Údair a chuir leis: **McHugh, B., McGovern, E., O'Hea, L., & Boyle, B.**)

Dwyer, N. (2013). An Ghníomhaireacht um Chaomhnú Comhshaoil, 2012. *The Status of Ireland's Climate, 2012. Research Programme–CCRP, Tuarascáil 26*. <http://hdl.handle.net/10793/867> (Údair a chuir leis:

McGrath, T., McGovern, E., Nolan G., Dwyer, N. 3.9 Cothaitheigh. McGrath, T., McGovern, E., Nolan G., Dwyer, N. 3.3 Ocean Acidification and Carbon Dioxide)

AGUISÍN 4: PÁIPÉIR EOLAÍOCHTA AGUS FOILSEACHÁIN

Brown, S. L., **Reid, D.** & Rogan, E. (2013). A risk-based approach to rapidly screen vulnerability of cetaceans to impacts from fisheries bycatch. *Biological Conservation*, 168, 78–87. doi:10.1016/j.biocon.2013.09.019

Burrell, S., Gunnarsson, T., Gunnarsson, K., **Clarke, D.** & Turner, A. D. (2013). First detection of paralytic shellfish poisoning (PSP) toxins in Icelandic mussels (*Mytilus edulis*): Links to causative phytoplankton species. *Food Control*, 31(2), 295–301. doi:10.1016/j.foodcont.2012.10.002

Cassina, F., Dalton, C., **de Eyto, E.** & Sparber, K. (2013) The Palaeolimnology of Lough Murree, A Brackish Lake in the Burren, Ireland. *Biology & Environment: Proceedings of the Royal Irish Academy* 113, 1–17. Doi:10.3318/BIOE.2013.23

Cassina, F., Dalton, C., **Dillane, M.**, **de Eyto, E.**, **Poole, R.** & Sparber, K. (2013). A multi-proxy palaeolimnological study to reconstruct the evolution of a coastal brackish lake (Lough Furnace, Ireland) during the late Holocene. *Palaeogeography, Palaeoclimatology, Palaeoecology*. 383–384, 1–15. <http://dx.doi.org/10.1016/j.palaeo.2013.04.016>

Clegg, T. A., **Morrissey, T.**, **Geoghegan, F.**, Martin, S. W., **Lyons, K.**, Ashe, S. & More, S. J. (2013). Risk factors associated with increased mortality of farmed Pacific oysters in Ireland during 2011. *Preventive Veterinary Medicine*, 113, 257–267. <http://dx.doi.org/10.1016/j.prevetmed.2013.10.023>

Dabrowski, T., **Lyons, K.**, Curé, M., **Berry, A.** & **Nolan, G.** (2013). Numerical modelling of spatio-temporal variability of growth of *Mytilus edulis* (L.) and influence of its cultivation on ecosystem functioning. *Journal of Sea Research*, 76, 5–21. doi:10.1016/j.seares.2012.10.012

Delaney, C., **Gaughan, P.** & **Smyth, D.** (2013). Informatics and Decisions support in Galway Bay (SmartBay) using ERDDAP, OGC Technologies and Third Party Data Sources to Provide Services to the Marine Community. (Imleabhar 15, Ich 11221). Faighte ó <http://adsabs.harvard.edu/abs/2013EGUGA..1511221D>

Dransfeld, L., **Gerritsen, H. D.**, Hareide, N. R. & Lorange, P. (2013). Assessing the risk of vulnerable species exposure to deepwater trawl fisheries: the case of orange roughy *Hoplostethus atlanticus* to the west of Ireland and Britain. *Aquatic Living Resources*, 26(04), 307–318. doi:10.1051/alr/2013066

Duggan, D. E., Farnsworth, K. D. & **Kraak, S. B. M.** (2013). Identifying functional stakeholder clusters to maximise communication for the ecosystem approach to fisheries management. *Marine Policy*, 42, 56–67. doi:10.1016/j.marpol.2013.01.023

Ensing, D., Crozier, W. W., Boylan, P., **O'Maoiléidigh, N.** & **McGinnity, P.** (2013). An analysis of genetic stock identification on a small geographical scale using microsatellite markers, and its application in the management of a mixed-stock fishery for Atlantic salmon *Salmo salar* in Ireland. *Journal of Fish Biology*, 82(6), 2080–2094. doi:10.1111/jfb.12139

Flannery, J., **Keaveney, S.**, **Rajko-Nenow, P.**, O'Flaherty, V. & **Doré, W.** (2013). Norovirus and FRNA bacteriophage determined by RT-qPCR and infectious FRNA bacteriophage in wastewater and oysters. *Water Research*. doi:10.1016/j.watres.2013.06.008

Flannery, J., **Rajko-Nenow, P.**, **Keaveney, S.**, O'Flaherty, V. & **Doré, W.** (2013). Simulated sunlight inactivation of norovirus and FRNA bacteriophage in seawater. *Journal of Applied Microbiology*, 115 (3), 915–922. doi:10.1111/jam.12279

Fung, T., Farnsworth, K. D., Shephard, S., **Reid, D. G.** & Rossberg, A. G. (2013). Why the size structure of marine communities can require decades to recover from fishing. *Marine Ecology Progress Series*, 484, 155–171. doi:10.3354/meps10305

Gerritsen, H. D., Minto, C. & **Lordan, C.** (2013). How much of the seabed is impacted by mobile fishing gear? Absolute estimates from Vessel Monitoring System (VMS) point data. *ICES Journal of Marine Science*, 70(3), 523–531. doi:10.1093/icesjms/fst017

Giltrap, M., **Ronan, J.**, Hardenberg, S., Parkes, G., **McHugh, B.**, **McGovern, E.** & **Wilson, J. G.** (2013). Assessment of biomarkers in *Mytilus edulis* to determine good environmental status for implementation of MSFD in Ireland. *Marine Pollution Bulletin*, 71(1–2), 240–249. doi:10.1016/j.marpolbul.2013.02.021

Giltrap, M., Macken, A., Davoren, M., **McGovern, E.**, Foley, B., Larsen, M., **White, J.** & **McHugh, B.** (2013). Utilising caging techniques to investigate metal assimilation in *Nucella lapillus*, *Mytilus edulis* and *Crassostrea gigas* at three Irish coastal locations. *Estuarine, Coastal and Shelf Science*, 132, 77–86.

Grienke, U., **Silke, J.**, & Tasdemir, D. (2013). Bioactive compounds from marine mussels and their effects on human health. *Food Chemistry*. doi:10.1016/j.foodchem.2013.07.027

Hedger, R. D., **de Eyto, E.**, **Dillane, M.**, Diserud, O. H., Hindar, K., **McGinnity, P.**, **Poole, R.** & **Rogan, G.** (2013). Improving abundance estimates from electrofishing removal sampling. *Fisheries Research*, 137, 104–115.

Houle, J. E., Andersen, K. H., Farnsworth, K. D., & **Reid, D. G.** (2013). Emerging asymmetric interactions between forage and predator fisheries impose management trade-offs. *Journal of Fish Biology*, 83(4), 890–904. doi:10.1111/jfb.12163

Jackson, D., **Cotter, D.**, Newell, J., **McEvoy, S.**, **O'Donohoe, P.**, **Kane, F.**, **McDermott, T.**, **Kelly, S.** & **Drumm, A.** (2013). Impact of *Lepeophtheirus salmonis* infestations on migrating Atlantic salmon, *Salmo salar* L., smolts at eight locations in Ireland with an analysis of lice-induced marine mortality. *Journal of Fish Diseases*, 36(3), 273–281. doi:10.1111/jfd.12054

Jackson D., **Kane F.**, **O'Donohoe P.**, **Mc Dermott T.**, **Kelly S.**, **Drumm A.** & **Newell** (2013). Sea lice levels on wild Atlantic salmon, *Salmo salar* L., returning to the coast of Ireland. *Journal of Fish Diseases*, Eagrán 36(3), lgh 293–298. <http://dx.doi.org/10.1111/jfd.12059>

Jackson, D., **McDermott, T.**, **Kane, F.**, **O'Donohoe, P.** & **Kelly, S.** (2013). Evaluation of the impacts of aquaculture and freshwater habitat on the status of Atlantic salmon stocks in Ireland. *Agricultural Sciences*, 04(06), 62–67. doi:10.4236/as.2013.46A010

Jansen, T., **Campbell, A.**, Brunel, T., & Worsøe Clausen, L. (2013). Spatial Segregation within the Spawning Migration of North Eastern Atlantic Mackerel (*Scomber scombrus*) as Indicated by Juvenile Growth Patterns. *PLoS ONE*, 8(2), e58114. doi:10.1371/journal.pone.0058114

Jauffrais, T., **Kilcoyne, J.**, Herrenknecht, C., Truquet, P., Séchet, V., Miles, C. O., & Hess, P. (2013). Dissolved azaspiracids are absorbed and metabolized by blue mussels (*Mytilus edulis*). *Toxicon*, 65(0), 81–89. doi:10.1016/j.toxicon.2013.01.010

Keenan, K., Bradley, C. R., Magee, J. J., Hynes, R. A., Kennedy, R. J., Crozier, W. W., **Poole, R.** Prodöhl, P. A. (2013). Beaufort trout MicroPlex: a high-throughput multiplex platform comprising 38 informative microsatellite loci for use in resident and anadromous (sea trout) brown trout *Salmo trutta* genetic studies. *Journal of Fish Biology*, 82(6), 1789–1804. doi:10.1111/jfb.12095

Aguisíní

Kochmann, J., **O'Beirn, F.**, Yearsley, J., & Crowe, T. P. (2013). Environmental factors associated with invasion: modelling occurrence data from a coordinated sampling programme for Pacific oysters. *Biological Invasions*, 15 (10), 2265–2279. doi: 10.1007/s10530-013-0452-9

Kraak, S.B.M., Bailey, N., Cardinale, M., Darby, C., De Oliveira, J. A., Eero, M., Graham, N., Vinther, M. (2013). Lessons for fisheries management from the EU cod recovery plan. *Marine Policy*, 37, 200–213.

Lassen, H., **Kelly, C.**, & Sissenwine, M. (2013). ICES Advisory Framework 1977–2012: From MSY to Precautionary Approach and Back. *ICES Journal of Marine Science*. doi:10.1093/icesjms/fst146

Mayer, I., Zhou, Q., Lo, J., Abspoel, L., Keijser, X., Olsen, E., **Nixon, E.** & Kannen, A. (2013). Integrated, ecosystem-based Marine Spatial Planning: Design and results of a game-based, quasi-experiment. *Ocean & Coastal Management*, 82, 7–26. doi:10.1016/j.ocecoaman.2013.04.006

McGrath, T., Kivimäe, C., **McGovern, E.**, **Cave, R. R.**, & **Joyce, E.** (2013). Winter measurements of oceanic biogeochemical parameters in the Rockall Trough (2009–2012). *Earth System Science Data*, 5(2), 375–383. doi:10.5194/essd-5-375-2013

O'Driscoll, C., **de Eyto, E.**, O'Connor, M., Asam, Z.-Z., Rodgers, M., & Xiao, L. (2013). Biotic response to forest harvesting in acidic blanket peat fed streams: A case study from Ireland. *Forest Ecology and Management*, 310(0), 729–739. doi:10.1016/j.foreco.2013.09.018

O'Farrell, B., Benzie, J. A., McGinnity, P., **de Eyto, E.**, Dillane, E., Coughlan, J., & Cross, T. F. (2013). Selection and Phylogenetics of Salmonid MHC Class I: Wild Brown Trout (*Salmo trutta*) Differ from a Non-Native Introduced Strain. *PloS One*, 8(5), e63035. doi:10.1371/journal.pone.0063035

O'Hea, B., **Johnston, G.**, **White, J.**, & **Dransfeld, L.** (2013). Length-weight relations for seven grenadier species (Actinopterygii: Gadiformes: Macrouridae) to the west of Ireland. *Acta Ichthyologica Et Piscatoria*, 43(4), 285–291. doi:10.3750/AIP2013.43.4.04

Otero, J., L'Abée-Lund, J. H., Castro-Santos, T., Leonardsson, K., Storvik, G. O., Jonsson, B., Vøllestad, L. A. (2013). Basin-scale phenology and effects of climate variability on global timing of initial seaward migration of Atlantic salmon (*Salmo salar*). *Global Change Biology*, n/a–n/a. doi:10.1111/gcb.12363

Pazhayamadom, D. G., **Kelly, C. J.**, Rogan, E., & Codling, E. A. (2013). Self-starting CUSUM approach for monitoring data poor fisheries. *Fisheries Research*. doi:10.1016/j.fishres.2013.02.002

Rajko-Nenow, P., Waters, A., **Keaveney, S.**, **Flannery, J.**, Tuite, G., Coughlan, S., **Dore, W.** (2013). Norovirus Genotypes Present in Oysters and in Effluent from a Wastewater Treatment Plant during the Seasonal Peak of Infections in Ireland in 2010. *Applied and Environmental Microbiology*, 79(8), 2578–2587. doi:10.1128/AEM.03557-12

Ribeiro Santos, A., Minto, C., Connolly, P., & Rogan, E. (2013). Oocyte dynamics and reproductive strategy of *Aphanopus carbo* in the NE Atlantic—Implications for fisheries management. *Fisheries Research*, 143, 161–173. doi:10.1016/j.fishres.2013.01.004

Rodger, H. D., McCleary, S. J., & **Ruane, N. M.** (2013). Clinical cardiomyopathy syndrome in Atlantic salmon, *Salmo salar* L. *Journal of Fish Diseases*, n/a–n/a. doi:10.1111/jfd.12186

Ronan, J. M., & **McHugh, B.** (2013). A sensitive liquid chromatography/tandem mass spectrometry method for the determination of natural and synthetic steroid estrogens in seawater and marine biota, with a focus on proposed Water Framework Directive Environmental Quality Standards. *Rapid Communications in Mass Spectrometry*, 27(7), 738–746. doi:10.1002/rcm.6505

Ruane, N. M., Bolton-Warberg, M., Rodger, H. D., Colquhoun, D. J., **Geary, M.**, **McCleary, S. J.**, O'Halloran, K., Maher, K., O'Keeff, D., Mirimin, L., **Henshilwood, K.**, **Geoghegan, F.**, & Fitzgerald, R. D. (2013). An outbreak of francisellosis in wild-caught Celtic Sea Atlantic cod, *Gadus morhua* L., juveniles reared in captivity. *Journal of Fish Diseases*, n/a–n/a. doi:10.1111/jfd.12210

Ruane, N. M., **Collins, E. M.**, **Geary, M.**, **Swords, D.**, **Hickey, C.**, & **Geoghegan, F.** (2013). Isolation of *Streptococcus agalactiae* and an aquatic birnavirus from doctor fish *Garra rufa* L. *Irish veterinary journal*, 66(1), 16. doi:10.1186/2046-0481-66-16

Ryan, C., **McHugh, B.**, Trueman, C. N., Sabin, R., Deaville, R., Harrod, C., ... & O'Connor, I. (2013). Stable isotope analysis of baleen reveals resource partitioning among sympatric rorquals and population structure in fin whales. *Marine Ecology Progress Series*, 479, 251–261. doi: 10.3354/meps10231

Ryan, C., **McHugh, B.**, O'Connor, I., & Berrow, S. (2013). Lipid content of blubber biopsies is not representative of blubber in situ for fin whales (*Balaenoptera physalus*). *Marine Mammal Science*, 29(3), 542–547.

Santos, A. R., Trueman, C., **Connolly, P.**, & Rogan, E. (2013). Trophic ecology of black scabbardfish, *Aphanopus carbo* in the NE Atlantic—Assessment through stomach content and stable isotope analyses. *Deep Sea Research Part I: Oceanographic Research Papers*, 77(0), 1–10. doi:10.1016/j.dsr.2013.02.009

Sharples, J., Ellis, J. R., **Nolan, G.**, & Scott, B. E. (2013). Fishing and the oceanography of a stratified shelf sea. *Progress in Oceanography*, 117, 130–139. doi:10.1016/j.pocean.2013.06.014

Shephard, S., Minto, C., Zolck, M., Jennings, S., Brophy, D., & **Reid, D.** (2013). Scavenging on trawled seabeds can modify trophic size structure of bottom-dwelling fish. *ICES Journal of Marine Science*. doi:10.1093/icesjms/fst134

Solomon, C. T., Bruesewitz, D. A., Richardson, D. C., Rose, K. C., Van de Bogert, M. C., Hanson, P. C., Babin, B. L. (2013). Ecosystem respiration: Drivers of daily variability and background respiration in lakes around the globe. *Limnol. Oceanogr.*, 58(3), 849–866.

Sooknanan, K., **Doyle, J.**, Wilson, J., Harte, N., Kokaram, A., & Corrigan, D. (2013). Mosaics For Burrow Detection in Underwater Surveillance Video. Faighte 6 <http://www.mee.tcd.ie/~sigmedia/pmwiki/uploads/Main.Publications/Oceans13.pdf>

Spencer, P. D., **Kraak, S. B. M.**, & Trippel, E. A. (2013). The Influence of Maternal Effects in Larval Survival on Fishery Harvest Reference Points for Two Life-History Patterns. *Canadian Journal of Fisheries and Aquatic Sciences*, 130921143730000. doi:10.1139/cjfas-2013-0253

Torrissen, O., Jones, S., Asche, F., Guttormsen, A., Skilbrei, O. T., Nilsen, F., **Jackson, D.** (2013). Salmon lice-impact on wild salmonids and salmon aquaculture. *Journal of Fish Diseases*, 36(3), 171–194. doi:10.1111/jfd.12061

Turner, A. D., Lewis, A. M., Hatfield, R. G., Higman, W. A., & **Burrell, S.** (2013). A feasibility study into the production of a freeze-dried oyster reference material for paralytic shellfish poisoning toxins. *Analytical and Bioanalytical Chemistry*, 405(26), 8621–8632. doi:10.1007/s00216-013-7273-7

Van Damme, C. J. G., Thorsen, A., Fonn, M., Alvarez, P., Garabana, D., **O'Hea, B.**, Dickey-Collas, M. (2013). Fecundity regulation in horse mackerel. *ICES Journal of Marine Science*. doi:10.1093/icesjms/fst156

Viana, M., McNally, L., Graham, N., **Reid, D. G.**, & Jackson, A. L. (2013). Ignoring discards biases the assessment of fisheries' ecological fingerprint. *Biology Letters*, 9(6), 20130812–20130812. doi:10.1098/rsbl.2013.0812

Zhang, D., **O'Connor, E.**, Sullivan, T., McGuinness, K., Regan, F., & O'Connor, N. E. (2013). Smart multi-modal marine monitoring via visual analysis and data fusion (lgh 29-34). ACM Press. doi:10.1145/2509896.2509903

Caibidlí Leabhair

Wahle, R. A., Castro, K. M., **Tully, O.**, & Cobb, J. S. (2013). Homarus. In Lobsters: Biology, Management, Aquaculture and Fisheries (lgh 221-258). John Wiley & Sons, Ltd. Retrieved from <http://dx.doi.org/10.1002/9781118517444.ch8>

Johnson, M. P., **Lordan, C.**, Power, A. M. (2013). Habitat and Ecology of Nephrops norvegicus. In Johnson

Nuachtáin Mhóréilimh

O'Sullivan, G. (2013). Building Capacity. Pan-European Networks: Science & Technology. Meán Fómhair 2013, Eagrán 8, lgh: 308-309.

Foilseacháin Pháipéir na Comhairle Idirnáisiúnta um Thaiscéalaíocht na Mara (ICES)

Eochair do ghiorrúcháin ICES:

CM	Doiciméad Comhdhála agus Cruinnithe
ACOM	Coiste Comhairleach
FTC	Coiste Teicneolaíochta Iascaigh
LRC	Coiste Acmhainní Maireachtála
RMC	Coiste Bainistíochta Acmhainní
DFC	Coiste Éisc Dédhromaigh
WKROUND	Ceardlann Tagarmhairc maidir le hlasc Cruinn
SCICOM	Coiste Eolaíochta
SSGEF	Grúpa Stiúrtha um Fheidhm an Éiceachórais
WGNAS	Grúpa Oibre um Bradán an Atlantaigh Thuaidh
WGECO	Grúpa Oibre um Thionchair Gníomhaíochtaí Iascaireachta ar an Éiceachóras
WGMHM	Grúpa Oibre um Léarscáiliú Gnáthóige Mara
SSGSUE	Grúpa Stiúrtha um Úsáid Inbhuanaithe na nÉiceachóras
WGOH	Grúpa Oibre um Hidreagrafaíocht Aigéin
CRR	Tuarascáil ar Chomhthaighde

Hydes, D. J., **McGovern, E.**, agus Walsham, P. (Eag.) 2013. Chemical aspects of ocean acidification monitoring in the ICES marine area. ICES Cooperative Research Report No. 319. 78lch.

ICES (2013). Report of the Working Group on Elasmobranch Fishes (WGEF), 17-21 Meitheamh 2013, Liospóin, an Phortaingéil. ICES CM 2013/ACOM:19. 688lch. (Údar a chuir leis: **Johnston, G.**)

ICES (2013). Report of the Working Group on North Atlantic Salmon (WGNAS), 3-12 Aibreán 2013, Cóbanhávan, An Danmhairg. ICES CM 2013/ACOM:09. 380lch. (Údar a chuir leis: **White, J. & O'Maoiléidigh, N.**)

ICES (2013). Report of the Working Group on Pathology and Diseases of Marine Organisms (WGPDMO), 5-9 Márta 2013, Padova, An Iodáil. ICES CM 2013/SSGHIE:03. 30lch. (Údar a chuir leis: **Ruane, N.**)

ICES. (2013). Report of the Joint EIFAAC/ICES Working Group on Eels (WGEE), 18-22 Márta 2013, Sukarietta, An Spáinn, 4-10 Meán Fómhair 2013, Cóbanhávan, An Danmhairg. ICES CM 2013/ACOM:18. 851lch. (Údar a chuir leis: **de Eyto, E. & Poole, R.**)

ICES. (2013). Report of the third Workshop on Practical Implementation of Statistical Sound Catch Sampling Programmes. 19-22 Samhain 2013, ICES, Cóbanhávan, An Danmhairg. (Údar a chuir leis: **Gerritsen, H.**)

ICES (2013). Report of the Marine Chemistry Working Group (MCWG), 4-8 March 2013, Cóbanhávan, An Danmhairg. ICES CM 2013/SGHIE:07. 65lch. (Údar a chuir leis: **McGovern, E.**)

ICES (2013). Report of the Joint SOPAR/ICES Ocean Acidification Study Group (SGOA), 7-10 Deireadh Fómhair 2013, Cóbanhávan, An Danmhairg. ICES CM 2013/ACOM:31. 80lch. (Údar a chuir leis: **McGovern, E.**)

Is é an suíomh gréasáin i gcomhair dhoiciméid ICES go léir ná: <http://www.ices.dk/publications/Pages/default.as>

Foilseacháin de chuid an Choiste Eolaíochta, Theicniúil agus Eacnamaíochta um Iascaigh (STECF)

STECF (2013). 42nd Plenary Meeting Report of the Scientific, Technical and Economic Committee for Fisheries (PLEN-13-01) Plenary Meeting, 8-12 Aibreán 2013, an Bhruiséil. 85lch. (Údar a chuir leis: **Kraak, S.B.M.; Graham, N.**)

STECF (2013). Different Principles for defining selectivity under the future TM regulation (STECF-13-04), reviewed by the Scientific, Technical and Economic Committee for Fisheries (STECF) during its 42nd plenary meeting held from 8 to 12 April 2013 in Brussels, Belgium. Oifig Foilseachán an Aontais Eorpaigh, Lucsamburg, EUR 25973 EN, JRC 81584, 38lch. (Eagarthóirí: **Graham, N. & Doerner, H.** agus údar a chur leis: **Kraak, S.B.M.**)

STECF (2013). 43rd Plenary Meeting Report of the Scientific, Technical and Economic Committee for Fisheries (PLEN-13-02) Plenary Meeting, 8-12 Iúil 2013, Cóbanhávan. 123lch. (Údar a chuir leis: **Kraak, S.B.M.; Graham, N.**)

STECF (2013). 44th Plenary Meeting Report of the Scientific, Technical and Economic Committee for Fisheries (PLEN-13-03) Plenary Meeting, 4-8 Samhain 2013, An Bhruiséil. 127lch. (Údar a chuir leis: **Kraak, S.B.M.; Graham, N.**)

STECF (2013). Landing obligation in EU fisheries (STECF-13-23), reviewed by the Scientific, Technical and Economic Committee for Fisheries (STECF) during its 44th plenary meeting held from 4-8 November (2013), Brussels. Oifig Foilseachán an Aontais Eorpaigh, Lucsamburg, EUR 26330 EN, JRC 86112, 115lch. (Eagarthóirí: **Graham, N. & Doerner, H.**)

STECF (2013). Different Principles for defining selectivity under the future TM regulation (STECF-13-04). Rinne Coiste STECF athbhreithniú ar an tuarascáil sin le linn an 42ú cruinníú iomlánach a thionóil sé ón 8 go dtí an 12 Aibreán 2013 sa Bhruiséil, an Bheilg.

STECF (2013). Request for an evaluation of the fulfillment of the condition for exclusion under Art 11 of the cod plan (STECF-13-16). Oifig Foilseachán an Aontais Eorpaigh, Lucsamburg. 12lch. (Údar a chuir leis: **Kraak, S.B.M.; Graham, N.**)

STECF (2013). Evaluation of Fishing Effort Regimes in European Waters - Part 1 (STECF-13-06). Oifig Foilseachán an Aontais Eorpaigh, Lucsamburg, EUR 26901EN, JRC 83567, 691lch. (Údar a chuir leis: **Davie, S. L.**)

Aguisíní

STECF (2013). Evaluation of Fishing Effort Regimes in European Waters - Part 2 (STECF-13-21). Oifig Foilseachán an Aontais Eorpaigh, Lucsamburg, EUR 26327 EN, JRC86088, 863lch. (Údar a chuir leis: **Davie, S. L.**)

Comhdhála agus Seimineáir

Barbosa-Solomieu, V., Faury, N., Joyce, **A.**, Cheslett, **D.**, Webb, S. & Renault, T. (2013). Diversity and phylogenetic relationships of OsHV-1 samples from different geographic origins (O-015). 16ú Comhdháil Idirnáisiúnta ar Ghalair Éisc agus Sliogéisc. Tampere, An Fhionlainn, 2-6 Meán Fómhair 2013.

Clegg, T.A., Morrissey, **T.**, Geoghegan, **F.**, Martin, S.W., Lyons, **K.**, Ashe, S. & More, S.J. (2013). Risk factors associated with increased mortality of farmed Pacific oysters in Ireland during 2011 (P-077). 16ú Comhdháil Idirnáisiúnta ar Ghalair Éisc agus Sliogéisc. Tampere, An Fhionlainn, 2-6 Meán Fómhair 2013.

Donohoe, **O.**, Henshilwood, **K.**, Walls D. & Way, K. (2013). Identification of cyprinid herpesvirus 3 (CYHV-3) encoded microRNAs (miRNAs) and analysis of their expression profile (P-272). 16ú Comhdháil Idirnáisiúnta ar Ghalair Éisc agus Sliogéisc. Tampere, An Fhionlainn, 2-6 Meán Fómhair 2013.

Farrell, E.D., Minto, C., Stokes, D., Pinnegar, J. K., Velasco, F., Burns, F., Salaun, M., Chaves, C. and **Clarke, M.** 2013. Rise of the boarfish: recent boom, range expansion or influx from the deep. ICES CM 2013 N.

Hurst, D. (2013). Concluding remarks: main highlights and key messages of the Conference. Biteicneolaíocht Mhara i Limistéar Taighde na hEorpa: Dúshlán agus Deiseanna don Eoraip. An Bhruiséil, An Bheilg, 11-12 Márta 2013.

Hurst, D. (2013). Marine biotechnology an ocean of opportunity. Comhdháil Páirtithe Leasmhara 2013-Laethanta Bithghilleagair: "Bioeconomy in the EU: achievements and directions for the future". Baile Átha Cliath, Éire, 14-15 Feabhra 2013.

Kilcoyne, J., Twiner, M. J., McCarron, P., Crain, S., Wilkins, A. L., Nulty, C., Quilliam, M. A., Hess, P., Miles, C. O., 2013. Ó bhéal: AZA analogues - isolation, *in vitro* toxicity and relevance to human health. Ceardlann ar shábháilteacht sliogéisc, Foras na Mara, Co. na Gaillimhe, Éire. 18 Aibreán 2013.

Kilcoyne, J., Twiner, M. J., McCarron, P., Crain, S., Wilkins, A. L., Nulty, C., Quilliam, M. A., Hess, P., Miles, C. O., 2013. Ó bhéal: AZA analogues - isolation, *in vitro* toxicity and relevance to human health. AOAC, marine and freshwater toxins analysis. An dara siompóisiam comhpháirteach agus cruinniú tascfhórsa AOAC, Baiona, An Spáinn, 7 Bealtaine 2013.

Kilcoyne, J., Twiner, M. J., McCarron, P., Crain, S., Wilkins, A. L., Nulty, C., Quilliam, M. A., Hess, P., Miles, C. O., 2013. Ó bhéal: AZA analogues - isolation, *in vitro* toxicity and relevance to human health. Siompóisiam bliantúil ceimice na hÉireann, Coláiste na Tríonóide, Baile Átha Cliath, Éire, 27 Meitheamh 2013.

Kilcoyne, J., Twiner, M. J., McCarron, P., Crain, S., Wilkins, A. L., Nulty, C., Quilliam, M. A., Hess, P., Miles, C. O., 2013. Ó bhéal: Isolation of minor and novel azaspiracids - structure elucidation and toxicology. Cruinniú bliantúil Chumann Tocsaineolaíochta na hÉireann, Baile Átha Cliath, Éire, 6 Nollaig 2013.

Kilcoyne, J., Twiner, M. J., McCarron, P., Crain, S., Wilkins, A. L., Nulty, C., Quilliam, M. A., Hess, P., Miles, C. O., 2013. Ó bhéal: Isolation of minor

and novel azaspiracids - structure elucidation and toxicology. 21ú Cruinniú de Chumann Tocsaineolaíochta na Fraince, Páras, An Fhrainc, 10 Nollaig 2013.

McCleary, S., Giltrap, M., Gaedi, **T.**, Henshilwood, **K.** & Ruane, **N.** (2013). Detection of salmon alphavirus RNA in Celtic and Irish Sea groundfish (P-137). 16ú Comhdháil Idirnáisiúnta ar Ghalair Éisc agus Sliogéisc. Tampere, An Fhionlainn, 2-6 Meán Fómhair 2013.

Rodger, H.D., Fringuelli, E., Baxter, E.J., Mitchell, S.O., **Ruane, N.**, Gordon, A. & Graham, D. (2013). Gill pathologies of Atlantic salmon (*Salmo salar*): longitudinal studies in marine farms in Ireland (O-044). 16ú Comhdháil Idirnáisiúnta ar Ghalair Éisc agus Sliogéisc. Tampere, An Fhionlainn, 2-6 Meán Fómhair 2013.

Rodger, H.D., **McCleary, S.** & **Ruane, N.** (2013). Clinical cardiomyopathy syndrome (CMS) in Atlantic salmon, *Salmo salar*, in Ireland. 16ú Comhdháil Idirnáisiúnta ar Ghalair Éisc agus Sliogéisc. Tampere, An Fhionlainn, 2-6 Meán Fómhair 2013.

Ronan, J., Giltrap, M., Hardenberg, S., **McHugh, B.**, **McGovern, E.**, Wilson, J.G. (2013). Multi-parameter assessment of endocrine disruption in Irish marine waters using biological effects measurements, chemical analysis and passive sampling. 6ú Comhdháil Dhomhanda an Chumainn Tocsaineolaíochta agus Ceimice Comhshaoil, Beirlín, 20-22 Bealtaine 2013.

Renault, T. Novoa, B., Figueras, A., Culloty, S., Engelsma, M., **Geoghegan, F.**, Furones, D., Pruzzo, C. Venier, P., Peeler, E., Paillard, C., Roch, P., Lichi, T. & Guillaumie, B. (2013). Bivalife, an EU funded project focusing on management of infectious diseases in oysters and mussels in Europe (P-081). 16ú Comhdháil Idirnáisiúnta ar Ghalair Éisc agus Sliogéisc. Tampere, An Fhionlainn, 2-6 Meán Fómhair 2013.

Sooknanan, K., **Doyle, J.**, Kokaram, A., Corrigan, D., **Wilson, J.** and Harte, N. (2013). Mosaics for Burrow Detection in Underwater Surveillance Video. Comhdháil Idirnáisiúnta IEEE ar Aigéin (OCEANS 2013) in San Diego, Meán Fómhair 2013, lgh 9-12. IEEE

Tráchtas

Brennan, L. (2013). A stock assessment of Atlantic salmon in large riverine catchments. Tráchtas PhD a cuireadh faoi bhráid Ollscoil na hÉireann, Gaillimh. (Maoinithe agus trealamh ceannaithe faoin bPlean Forbartha Náisiúnta agus **Foras na Mara**)

Davie, S.L. (2013). The drivers and dynamics of fisher behaviour in Irish Fisheries. Tráchtas PhD a cuireadh faoi bhráid Institiúid Teicneolaíochta na Gaillimhe-Maigh Eo. (Stiúrthóir: **Lordan, C.**)

Donohoe, O. (2013). An Investigation into the existence of Cyprinid Herpesvirus 3 encoded microRNAs. Tráchtas PhD a cuireadh faoi bhráid Ollscoil Chathair Bhaile Átha Cliath. (Stiúrthóir: **Henshilwood, K.**)

Ronan, J.M. (2013). An integrated assessment of estrogenic endocrine disruption in the Irish marine environment, with particular focus on chemical measurements. Tráchtas a cuireadh faoi bhráid Choláiste na Tríonóide, Baile Átha Cliath. (Stiúrthóir: **Mc Hugh, B.**, Comhstíúrthóir: **Giltrap, M.**)

AGUISÍN 5: SONRAÍ ÁIRIMH MAIDIR LE CÓRAS BUIRÍOS UMHAILL 2013

Sonraí áirimh in aghaidh an tsrutha do chóras Bhuiríos Umhaill, 2013

Speiceas	Léim Bradáin In aghaidh an tsrutha 2013	Tarae In aghaidh an tsrutha 2013	lomláin In aghaidh an tsrutha 2013	lomláin In aghaidh an tsrutha 2012	lomláin Suas an sruth 2011	lomláin Suas an sruth 2010
Bláthán Fiáin	607	103	710	671	520	682
Bradán Fiáin Earraigh	16	7	23	18	51	16
Bláthán Tógtha	1163	138	1301	2288	866	861
Breac Geal Fiáin	19	2	21	35	18	35
Fionnóg Fhiáin	30	17	47	108	50	37
Breac Rua Fiáin	46	41	87	57	87	104

Sonraí áirimh le sruth do chóras Bhuiríos Umhaill, 2013

Speiceas	Léim Bradáin Le sruth 2013	Tarae Le sruth 2013	lomláin Le sruth 2013	lomláin Le sruth 2012	lomláin Le sruth 2011	lomláin Le sruth 2010
Gealóg Bhradáin Fhiáin	4963	1394	6357	7717	6627	7123
Gealóg Bhríc Ghil Fhiáin	404	64	468	632	620	213
Eascann Gheal	2720	921	3641	3335	1969	2137

AGUISÍN 6: CLÁR ÁRTHAÍ TAIGHDE 2013

Laethanta ar muir idir 01/01/2013 agus 31/12/2013	Laethanta	Suirbhéanna	Laethanta Eolaithe	Laethanta Mic Léinn
RV Celtic Voyager	261	31	1221	628
RV Celtic Explorer	292	15	2330	455
IOMLÁN	553	46	3551	1083

RV Celtic Voyager Gníomhaíocht 2013

Cód an tSuirbhé	Ainm an tSuirbhé	Laethanta a caitheadh leis an tSuirbhé	Líon na nEolaithe	Laethanta Eolaithe	Líon na Mac Léinn	Laethanta Mic Léinn	Laethanta Mic Léinn agus Eolaithe
CV13001	Monatóireacht Chomhshaoil sa Gheimhreadh Suirbhé (cothaithigh & beantach)	13	6	78	0	0	78
CV13002	Oiliúint Fochéimithe Chuan na Gaillimhe 2013	11	5	55	90	90	145
CV13017	Triail INFOMAR	4	4	16	0	0	16
CV13003	SMART Science@Sea 2013	6	5	30	36	72	102
CV13022	Suirbhé SEAI uimh. 1	9	4	36	0	0	36
CV13005	SMART DCU Brath & Bithshalú 2013	2	5	10	12	24	34
CV13006	Cómhódú SMART Earrach 2013	4	5	20	22	44	64
CV13004	Tearmainn De Facto d'ealásmabrainciaigh i Muir Éireann agus sa Mhuir Cheilteach	10	6	60	0	0	30

Aguisíní

RV Celtic Voyager Gníomhaíocht 2013

Cód an tSuirbhé	Ainm an tSuirbhé	Laethanta a caitheadh leis an Suirbhé	Líon na nEolaithe	Laethanta Eolaithe	Líon na Mac Léinn	Laethanta Mic Léinn	Laethanta Mic Léinn agus Eolaithe
CV13023	SUIRBHÉ SEAI CÉIM 2	10	4	40	0	0	40
CV13024	SUIRBHÉ SEAI CÉIM 3	9	4	36	0	0	36
CV13007	INFOMAR 1	40	5	200	0	0	200
CV13025	Seirbhís Baoi Aimsire	4	3	12	0	0	12
CV13016	UWTV ar Árainn & an Torcáin	10	6	60	0	0	60
CV13026	Bataiméadracht ar Oileáin Árann	1	2	2	0	0	2
CV13015	Suirbhé UWTV sa Mhuir Cheilteach	10	6	60	0	0	60
CV13019	Dino13	6	3	18	3	18	36
CV13027	INFOMAR	29	4	116	0	0	116
CV13028	HABWEST2013	5	2	10	4	20	30
CV13029	Mapáil bithéagsúlachta ar sceireacha coiréil fuaraisce	7	5	35	0	0	28
CV13012	Suirbhé ar choiréil agus ar phurláin Chiarraí	8	4	32	0	0	32
CV13014	Muir Éireann agus an Mhuir Cheilteach	10	6	60	0	0	60
CV13032	Aisghabháil baoi aimsire M4	2	0	0	0	0	0
CV13033	SEAI UIMH. 4	6	4	24	0	0	24
CV13031	Pailéithimpeallacht agus scaipeadh dríodair siar ó Éirinn	6	6	36	0	0	18
CV13030	Measúnú ar Iompar Dríodair, Cósta Thuaidh na hÉireann	5	5	25	0	0	15
CV13009	Clár Breathnóireachta SMART 2013	4	4	16	20	40	56
CV13018	Oiliúint fochéimithe loinge maidir le taighde aigéaneolaíochta, beantach, meigeafhána agus iascaigh	6	4	24	60	60	84
CV13010	SMART: Taiscéaladh Geolaíoch Amach ón gCósta	4	5	20	24	48	68
CV13013	MSC sa Bhitheolaíocht Mhuirí, Coláiste na hOllscoile, Corcaigh (Iarratas Bliantúil)	2	3	6	12	24	32
CV13011	Cómhódúl SMART Geimhreadh 2013	10	4	40	60	120	160
CV13021	Cómhódúl Geimhridh 2	6	7	42	34	68	110
CV13034	Glanadh Láithreán Tonnfhuinimh	2	1	2	0	0	2
IOMLÁN		261	137	1221	377	628	1786

RV Celtic Explorer Gníomhaíocht 2013

Cód an tSuirbhé	Ainm an tSuirbhé	Laethanta a caitheadh leis an Suirbhé	Líon na nEolaithe	Laethanta Eolaithe	Líon na Mac Léinn	Laethanta Mic Léinn
CE13001	Rannóga ar Aeráid Aigéin agus Geolaíocht: Limistéar an Torcáin, Rocail.	16	17	272	3	48
CE13002	Céiticigh ar an Teorainn 4	15	13	195	7	105
CE13016	Suirbhé MDACS	4	12	48		
CE13003	Ag forbairt Geoiteicneó-stratagrafaíochta (DGS)	5	10	50	2	10

Cód an tSuirbhé	Ainm an tSuirbhé	Laethanta a caitheadh leis an Suirbhé	Líon na nEolaithe	Laethanta Eolaithe	Líon na Mac Léinn	Laethanta Mic Léinn
CE13004	Suirbhé ar Uibheacha Ronnach Márta 2013	21	6	126	2	42
CE13005	Cairt BSH 2	9				
CE13006	Suirbhé Fuaimiúil an Fhaoitín Ghoirm	21	8	168		
CE13007	CE2013 Suirbhé Fuaimiúil ar Iascaigh i dTalamh an Éisc (Cairt)	29				
CE13008	Feidhm Bithfhionnachtana agus Éiceachórais Cainneon	23	9	207	6	138
CE13009	Suirbhé Fuaimiúil Scadáin an Iarthuaiscirt	21	10	210	1	21
CE13010	Suirbhé ar Uibheacha Ronnach Iúil 2013	21	6	126	1	21
CE13012	BSH 3: Cairt Shuirbhé na Mara Thuaidh	39				
CE13013	Suirbhé Éisc Thalún na hÉireann 2013	12	12	144		
CE13015	Suirbhé Fuaimiúil Scadáin na Mara Ceilte	21	19	399		
CE13014	Suirbhé Éisc Thalún na hÉireann 2013	35	11	385	2	70
		292		2330		455

RV Celtic Voyager Sonraí ar Thuras Mara 2013

Cód an tSuirbhé	Ainm an tSuirbhé	Príomheolaí	Eagraíocht	Dáta Tosaigh	Dáta Deiridh	Suirbhé Laethanta
CV13001	Suirbhé Monatóireachta Comhshaoil sa Gheimhreadh (cothaitheigh & beantach)	An Dr Evin McGovern	Foras na Mara	28/01/2013	09/02/2013	13
CV13002	Oiliúint Fochéimithe Chuan na Gaillimhe 2013	An Dr Robin Raine	Ollscoil na hÉireann, Gaillimh	11/02/2013	21/02/2013	11
CV13017	Triail INFOMAR	An tUas. Kevin Sheehan	Foras na Mara	22/02/2013	25/02/2013	4
CV13003	SMART Science@Sea 2013	An Dr Pauhla McGrane	Institiúid Teicneolaíochta na Gaillimhe-Maigh Eo	01/03/2013	06/03/2013	6
CV13022	Suirbhé SEAI uimh. 1	An tUas. Kevin Sheehan	Foras na Mara	11/03/2013	19/03/2013	9
CV13005	SMART DCU Brath & Bithshalú 2013	An Dr Pauhla McGrane	Institiúid Teicneolaíochta na Gaillimhe-Maigh Eo	21/03/2013	22/03/2013	2
CV13006	Cómhodúl SMART Earrach 2013	An Dr Pauhla McGrane	Institiúid Teicneolaíochta na Gaillimhe-Maigh Eo	23/03/2013	26/03/2013	4
CV13004	Tearmainn De Facto d'ealásmabrainciaigh i Muir Éireann agus sa Mhuir Cheilteach	An Dr Samuel Shephard	Institiúid Teicneolaíochta na Gaillimhe-Maigh Eo	27/03/2013	05/04/2013	10
CV13023	SUIRBHÉ SEAI CÉIM 2	An tUas. Kevin Sheehan	Foras na Mara	06/04/2013	15/04/2013	10
CV13024	SUIRBHÉ SEAI CÉIM 3	An tUas. Kevin Sheehan	Foras na Mara	17/04/2013	25/04/2013	9
CV13007	INFOMAR 1	An Dr Fabio Sacchetti	Foras na Mara	26/04/2013	04/06/2013	40
CV13025	Seirbhís Baoi Aimsire	An tUas. Kieran Adlum	P&O Maritime Services	05/06/2013	08/06/2013	4
CV13016	UWTV ar Árainn & an Torcáin	An Dr Colm Lordan	Foras na Mara	10/06/2013	19/06/2013	10
CV13026	Bataiméadracht ar Oileáin Árann	An Dr Ronadh Cox	Neamhsananta	20/06/2013	20/06/2013	1
CV13015	Suirbhé UWTV sa Mhuir Cheilteach	Jennifer Doyle, Uasal	Foras na Mara	24/06/2013	03/07/2013	10
CV13019	Dino13	An Dr Robin Raine	Ollscoil na hÉireann, Gaillimh	04/07/2013	09/07/2013	6
CV13029	Mapáil bithéagsúlachta ar sceireacha coiréil fuaraisce	An tUas. Xavier Monteys	Suirbhéireacht Gheolaíochta na hÉireann	13/08/2013	19/08/2013	7
CV13027	INFOMAR	An Dr Fabio Sacchetti	Foras na Mara	10/07/2013	07/08/2013	29
CV13028	HABWEST2013	An Dr Robin Raine	Ollscoil na hÉireann, Gaillimh	08/08/2013	12/08/2013	5
CV13012	Suirbhé ar choiréil agus ar phurláin Chiarraí	An Dr Louise Allcock	Ollscoil na hÉireann, Gaillimh	20/08/2013	27/08/2013	8

Aguisíní

Cód an tSuirbhé	Ainm an tSuirbhé	Príomheolaí	Eagraíocht	Dáta Tosaigh	Dáta Deiridh	Suirbhé Laethanta
CV13014	Muir Éireann agus an Mhuir Cheilteach	Jennifer Doyle, Uasal	Foras na Mara	28/08/2013	06/09/2013	10
CV13032	Aisghabháil baoi aimsire M4	Príomheolaí RVOp	Foras na Mara	09/09/2013	10/09/2013	2
CV13033	SEAI UIMH. 4	An tUas. Kevin Sheehan	Foras na Mara	12/09/2013	17/09/2013	6
CV13031	Pailéithimpeallacht agus scaipeadh dríodair siar ó Éirinn	An tUas. Jared Peters	Ollscoil Uladh	18/09/2013	23/09/2013	6
CV13030	Measúnú ar Iompar Dríodair, Cósta Thuaidh na hÉireann	An tUas. William Evans	Ollscoil Uladh	27/09/2013	01/10/2013	5
CV13009	Clár Breathnóireachta SMART 2013	An tUas. John Boyd	Institiúid Teicneolaíochta na Gaillimhe-Maigh Eo	10/10/2013	13/10/2013	4
CV13018	Oiliúint fochéimithe loinge maidir le taighde aigéaneolaíochta, beantach, meigeafhána agus iascaigh	An Dr Ian O'Connor	Institiúid Teicneolaíochta na Gaillimhe-Maigh Eo	26/10/2013	31/10/2013	6
CV13010	SMART: Taiscéaladh Geolaíoch Amach ón gCósta	An tOllamh Andrew Wheeler	Coláiste na hOllscoile, Corcaigh	03/11/2013	06/11/2013	4
CV13013	MSc sa Bhitheolaíocht Mhuirí, Coláiste na hOllscoile, Corcaigh (Iarratas Bliantúil)	An Dr Rob McAllen	Coláiste na hOllscoile, Corcaigh	07/11/2013	08/11/2013	2
CV13011	Cómhódúl SMART Geimhreadh 2013	An Dr Pauha McGrane	Institiúid Teicneolaíochta na Gaillimhe-Maigh Eo	10/11/2013	19/11/2013	10
CV13021	Cómhódúl Geimhridh 2	An Dr Pauha McGrane	Institiúid Teicneolaíochta na Gaillimhe-Maigh Eo	25/11/2013	30/11/2013	6
CV13034	Glanadh Láithreán Tonnfhuinimh	Príomheolaí RVOp	Foras na Mara	03/12/2013	4/12/2013	2

RV Celtic Explorer Sonraí ar Thuras Mara 2013

Cód an tSuirbhé	Ainm an tSuirbhé	Príomheolaí	Eagraíocht	Dáta Tosaigh	Dáta Deiridh	Laethanta Suirbhé
CE13001	Rannóga ar Aeráid Aigéin agus Geolaíocht: Limistéar an Torcáin, Rocail.	An Dr Glenn Nolan	Foras na Mara	05/01/2013	20/01/2013	16
CE13002	Céiticigh ar an Teorainn 4	An Dr Conor Ryan	Institiúid Teicneolaíochta na Gaillimhe-Maigh Eo	21/01/2013	04/02/2013	15
CE13016	Suirbhé MDACS	An Dr Yvonne Leahy	An tSeirbhís Páirceanna Náisiúnta agus Fiadhúlra	09/02/2013	12/02/2013	4
CE13003	Ag forbairt Geoiteicneó-stratagrafaíochta (DGS)	An tOllamh Andrew Wheeler	Coláiste na hOllscoile, Corcaigh	13/02/2013	17/02/2013	5
CE13004	Suirbhé ar Uibheacha Ronnach Márta 2013	An tUas. Brendan O'Hea	Foras na Mara	18/02/2013	10/03/2013	21
CE13005	BSH 2	Sieglinde Weigelt Krenz, Uasal	BSH	14/03/2013	22/03/2013	9
CE13006	Suirbhé Fuaimiúil an Fhaoitín Ghoirm	An tUas. Ciaran O'Donnell	Foras na Mara	26/03/2013	15/04/2013	21
CE13007	CE2013 Suirbhé Fuaimiúil ar Iascaigh i dTalamh an Éisc	An Dr George Rose	Iascaigh Thalamh an Éisc agus Fhoras na Mara de chuid Ollscoil Memorial	24/04/2013	22/05/2013	29
CE13008	Feidhm Bithfhionnachtana agus Éiceachórais Cainneon	An Dr Louise Allcock	Ollscoil na hÉireann, Gaillimh	30/05/2013	21/06/2013	23
CE13009	Suirbhé Fuaimiúil Scadáin an Iarthuaiscirt	An Dr Cormac Nolan	Foras na Mara	22/06/2013	12/07/2013	21
CE13010	Suirbhé ar Uibheacha Ronnach Iúil 2013	An tUas. Brendan O'Hea	Foras na Mara	13/07/2013	02/08/2013	21
CE13012	BSH 3 Suirbhé na Mara Thuaidh	An tUas. Holger Klein	BSH	10/08/2013	17/09/2013	39
CE13013	Suirbhé Éisc Thalún na hÉireann 2013	An tUas. Dave Stokes	Foras na Mara	25/09/2013	06/10/2013	12
CE13015	Suirbhé Fuaimiúil Scadáin na Mara Ceiltí	An tUas. Ciaran O'Donnell	Foras na Mara	07/10/2013	27/10/2013	21
CE13014	Suirbhé Éisc Thalún na hÉireann 2013	An tUas. Hans Gerritsen	Foras na Mara	28/10/2013	01/12/2013	35

AGUISÍN 7: GNÍOMHAÍOCHTAÍ TAIGHDE EOLAÍOCHTA MUIRÍ (MSR) EACHTRANNACH IN UISCÍ NA HÉIREANN IN 2013

Gníomhaíocht Árthaí Eachtrannacha 2013

Laethanta Eolaithe Éireannacha	Laethanta Eolaithe Eachtrannacha
3551	3135

Ainm an Árthaigh	Tír	Líon na Laethanta	Líon na nEolaithe	Laethanta Eolaithe
Benaiah IV	An Bhreatain	60	2	120
Endeavour*	An Bhreatain	16	7	112
Scotia	An Bhreatain	7	7	49
Vilnyus	An Rúis	10	11	110
FV Altaire*	An Bhreatain	7	6	42
Tridens*	An Ísiltír	12	6	72
Walther Herwig III	An Ghearmáin	27	12	324
Scotia*	An Bhreatain	11	6	66
Havglans	An Iorua	18	5	90
Tridens*	An Ísiltír	23	6	138
Eros*	An Iorua	13	8	104
Christina S	An Bhreatain	13	6	78
Corsytes	An Bhreatain	1	4	4
James Cook*	An Bhreatain	20	25	500
Corsytes	An Bhreatain	5	6	30
Vizconde de Eza*	An Spáinn	25	14	350
Scotia	An Bhreatain	17	8	136
Endeavour*	An Bhreatain	18	7	126
Stelissa	An Bhreatain	5	1	5
Govenek of Ladram	An Bhreatain	5	1	5
Nova Spero	An Bhreatain	6	1	6
Corsytes	An Bhreatain	15	8	120
Corsytes	An Bhreatain	4	4	16
Pelagia*	An Ísiltír	20	11	220
Alboran	An Spáinn	4	5	20
Discovery	An Bhreatain	5	5	25
Thalassa	An Fhrainc	9	15	135
Scotia*	An Bhreatain	4	12	48
Scotia*	An Bhreatain	7	12	84
IOMLÁN		387	229	3135

Aguisíní

AGUISÍN 8: PLEAN STRAITÉISEACH FHORAS NA MARA - ACHOIMRE FEIDHMIÚCHÁIN

Scríobhadh an plean seo le rannpháirtíocht ghníomhach fhoireann agus bhord Fhoras na Mara d'fhoillíocht a thabhairt ar ár gcreat oibríochta agus ar an gcur chuige straitéiseach a ghlacfar i leith príomhchinní nach mór a ghlacadh sa tréimhse 2013–2016.

Leagtar amach sa chéad dá chuid den doiciméad seo na bunsraitheanna le haghaidh oibríochtaí agus ról reatha Fhoras na Mara.

I gCuid 3 luaimid ár gcúig phríomhspríoc ardleibhéil lena n-áirítear: soláthraí seirbhíse; gníomhaí taighde; cataláoch agus maoinitheoir taighde; soláthraí bonneagair; agus oibriú eagraíochta atá éifeachtúil agus éifeachtach. Tacáíonn na spríocanna sin lenár bhfís maidir le “Geilleagar mara a mbeidh borradh faoi gan dochar don éiceachóras agus a mbeidh ár gcuid sárseirbhísí mar thaca aige” (Fíor 1). Tá príomhchuspóirí agus gníomhaíochtaí tosaíochta ag gabháil le gach spríoc a thugann treoir dár bpleananna oibríochta mionsonraithe maidir leis an réimse seirbhíse agus ár gcórais bainistíochta agus forbartha feidhmíochta (PMDS). Tugtar foramharc i dTábla 1 ar chúig Spríoc an Fhorais agus ar na príomhchuspóirí gaolmhara.

Tábla 1: Spríocanna Fhoras na Mara agus na Príomhchuspóirí gaolmhara



SPRIOC 1: SOLÁTHRAÍ SEIRBHÍSÍ

- > Tabhairt faoi shraith suirbhéanna agus cláir monatóireachta reachtúla comhshaoil, iascaigh agus dobharshaothraithe atá sannta ag an Rialtas d'Fhoras na Mara, ionas go gcomhlíonadh Éire a hoibleagáidí dlíthiúla náisiúnta agus idirnáisiúnta.
- > Seirbhísí sonraí eolaíochta, teicniúla agus geilleagracha a sheachadadh lena dtreoraítear beartas agus a thugann comhairle don Rialtas, a bheidh mar bhonn agus taca ag forbairt earnála agus an mhuirthimpeallacht a chosaint.
- > Barrfheabhais idirnáisiúnta a choimeád in eolaíocht agus i dtaighde mara d'fhoillíocht níos fearr a fháil ar shláinte agus ar fheidhmiú na n-éiceachóras mara agus comhairle eolaíochta a chur ar fáil chun freastal ar riachtanais cinnteoirí sa réimse rialaithe aigéin atá ag athrú go tapa.
- > Leanúint den chomhpháirtíocht agus den chomhoibriú leis an earnáil Ardoideachais agus le gníomhaithe taighde eile.
- > Seirbhísí, sonraí, agus foilseacháin a sholáthar ar líne, ag teacht le Straitéis Ríomhsheirbhísí an Rialtais, chun seirbhísí do chustaiméirí a fheabhsú. Áirítear leo seo rochtain trí ghléasanna soghluaiste agus úsáid na meán sóisialta.

SPRIOC 2: GNÍOMHAÍ TAIGHDE

- > Ár gcuntas teiste mar ghníomhaí taighde a choimeád i sprioc-réimsí agus deiseanna breise a lorg chun bheith rannpháirteach i dtionscadail agus i gcláir taighde iomaíocha go náisiúnta agus go hidirnáisiúnta.
- > Oibriú le príomhpháirtithe leasmhara chun rannpháirtíocht taighde Fhoras na Mara a uasmhéadú mar aon le deiseanna chun luach a chur le cláir taighde atá ann cheana.

SPRIOC 3: CATALAÍOCH AGUS MAOINITHEOIR TAIGHDE

- > Príomhról a fhorbairt agus a ghlacadh i gcur i bhfeidhm clá(i) r taighde mara náisiúnta trí chomhoibriú tras-rannach/ gníomhaireachta agus le hInstitiúidí Ardoideachais.
- > Forbairt bhreise ar chlár náisiúnta a bhrú chun cinn in Ardteicneolaíocht Mhara agus i mBiteicneolaíocht Mhara.
- > Rannpháirtíocht na hÉireann i gcláir idirnáisiúnta Taighde, Teicneolaíochta, Forbartha agus Nuálaíochta na mara a uasmhéadú, agus leas a bhaint astu.

SPRIOC 4: SOLÁTHRAÍ BONNEAGAIR

- > Príomhshaoráidí agus sócmhainní Fhoras na Mara a chothabháil agus, nuair is féidir, iad a fheabhsú.
- > Deiseanna a chothú agus a iniúchadh d'fhonn príomhbhonneagair náisiúnta mhara a fheabhsú.
- > A chinntiú go mbeidh an bonneagar sonraí, an treoir agus na tacaí is gá ann ionas go mbeifear in ann oibríochtaí TFC ó lá go lá a bheith éifeachtúil agus éifeachtach a sheachadadh; tacú le bainistíocht dea-chleachtais shonraí Fhoras na Mara; agus rochtain ar thacair sonraí mara náisiúnta a chur chun cinn.

SPRIOC 5: EAGRAÍOCHT ÉIFEACTÚIL AGUS ÉIFEACTACH

- > Seirbhísí acmhainní daonna a sheachadadh atá dírithe ar réitigh, agus ar dhea-chleachtas agus fócas daingean ar riachtanais na foirne aonair agus na bhfoirne seirbhíse, ag baint úsáide as córais faisnéise bhainistíochta agus cleachtais oibríochta éifeachtacha.
- > Cló leis na leibhéil rialachais chorpáráidigh is airde, agus leibhéal an-ard seirbhísí dírithe ar an gcustaiméirí a sheachadadh a thugann luach ar airgead.
- > An cháil agus an cumas atá ag Foras na Mara ardchaighdeán anailíse agus seirbhísí a chur ar fáil a chothú agus a fheabhsú trí chórais cháilíochta iomchuí agus eagraíocht éifeachtúil.
- > A chinntiú go bhfuil cumarsáid sheachtrach éifeachtach, cuimsitheach agus ábhartha agus cabhrú chun feachtas maidir le hacmhainn mhara na hÉireann a chur chun cinn.

Déantar cur síos i gCuid 4 ar ár gcur chuige maidir lenár spriocanna a bhaint amach, taobh istigh de chomhthéacs na timpeallachta oibríochta reatha. Tá obair foirne lárnach sa chur chuige sin. Oibreoidimid ar ár bpróisis pleanála oscailte agus uilechuimsitheacha chun aghaidh a thabhairt ar dhúshláin agus ar dheiseanna a d'fhéadfadh teacht chun cinn i rith na chéad trí bliana eile.

Leanfaimid ag aithint bealaí inar féidir linn ár mbearta oiriúnaitheacha agus cost-éifeachtúlachta a chur i bhfeidhm chun an tionchar a bheidh ag gearradh siar breise sa bhuiséad ar sheachadadh seirbhísí tosaigh a íoslaghdú. Déanfaimid iniúchadh freisin ar réitigh nua agus nuálacha ar ár samhail seachadta seirbhíse agus déanfaimid imscrúdú ar an deis atá ann le haghaidh comhpháirtíochtaí nua leis na hInstitiúidí Ardoideachais, le gníomhaireachtaí rialtais eile agus leis an earnáil phríobháideach. Ina theannta sin, déanfaimid ár ndícheall cur lenár dtaifead tuillimh den scoth mar ghníomhaí taighde, trí chlár a gheobhaidh maoiniú seachtrach.

Tá roinnt uirlisí aitheanta ag an bhForas a d'fhéadfaimis a úsáid chun aghaidh a thabhairt ar na bearnaí a tugadh faoi deara. Is uirlisí nuálacha iad sin a léiríonn an tsolúbthacht, an fhreagrúlacht agus an tiomantas do sheirbhís phoiblí a bhíonn ag teastáil i gcomhlacht poiblí nua-aimseartha, éifeachtúil. Bealach amháin atá thar a bheith cost-éifeachtúil chun seirbhísí nua a sheachadadh is ea maoiniú AE agus comhpháirtíochtaí idirnáisiúnta a ghiaí. Tá cuntas teiste an-láidir ag an bhForas ó thaobh comhpháirtíochtaí rathúla a bhunú le gníomhaireachtaí agus le hInstitiúidí eile san Eoraip. Dá bhrí sin, cuirtear fáilte mhór roimh phrótacal a comhaontaíodh go luath in 2013 chun foirne a earcú faoi chlár maoinithe eile phoiblí, phríobháideacha agus AE agus is uirlis chriticiúil é le cur ar chumas an Fhorais a chuspóirí a bhaint amach.

Sa chás ina sroichimid teorainn maidir leis an bhféidearthachta atá ag na bearta seo chun an tionchar a bheadh ag gearradh siar eile sa bhuiséad ar sheirbhísí tosaigh a iompar, beartóimid tabhairt faoi bhearta oiriúnaitheacha chun cothromaíocht a bhaint amach idir buiséad/cumas agus seachadadh seirbhíse. Bheadh gá plé a dhéanamh le príomhchlaínt sa chur chuige seo d'fhonn tosaíochtaí maidir le héileamh ar sheirbhísí a shoiléiriú, d'fhonn an toradh is cothroime is féidir a bhaint amach a aithint, agus a chuirfidh ar ár gcumas dá réir sin ár seirbhísí tosaigh a bhfuil tosaíocht acu a chosaint chomh mór agus is féidir.

Mar fhocal scoir, leagtar amach sa phlean seo conas a aithneoidimid agus a ullmhóimid pleananna chun leas a bhaint as deiseanna nua. Tá comharthaí follasacha ann go dtiocfaidh méadú ar an éileamh ar sheirbhísí ó Fhoras na Mara, i bhfianaise deiseanna forbartha geilleagair a sainathnódh in *Feidhm a Bhaint as Saibhreas ár nAigéin* agus ceanglais bainistíochta agus monatóireachta acmhainní an Rialtais/AE. Anuas air sin, is údar misnigh é go bhfuiltear ag súil go dtiocfaidh méadú ar an tosaíocht agus ar an tacaíocht a shanntar do thaighde mara agus do nuálaíocht ar leibhéal an AE.

Cuideoidh an cur chuige straitéiseach seo, ina bhfuil cothromaíocht idir bearta frithghníomhacha agus réamhghníomhacha, mar aon le fíis, luachanna agus tiomantas fhoireann Fhoras na Mara, chun treoir a thabhairt d'Fhoras na Mara trí dhúshláin agus trí dheiseanna thar an tréimhse 2013-2016.

Aguisíní

AGUISÍN 9: RÁITEAS NA GAILLIMHE AR CHOMHAR AN AIGÉIN ATLANTAIGH AG SEOLADH CHOMHAONTAS TAIGHDE AN AE-CHEANADA-SAM

Galway Statement on Atlantic Ocean Cooperation Launching a European Union - Canada - United States of America Research Alliance

The Signatories of this Statement meeting on the occasion of the high level event

The Atlantic – a Shared Resource, held on

23 and 24 May 2013

at the Marine Institute, Galway, Ireland

Recognizing the importance of the Atlantic Ocean to our citizens, prosperity, human health and well-being, adaptation to climate and other environmental change, and security,

Cognizant of our reliance upon the best available science and knowledge to inform decisions affecting the Atlantic Ocean,

Realizing that our countries face similar challenges in promoting a healthy and well-understood Atlantic Ocean,

Acknowledging the critical interlink between the Atlantic Ocean and the portion of the Arctic region that borders the Atlantic,

Appreciating the value of our ongoing cooperation on ocean science and observation in the Atlantic Ocean, and

Valuing the essential role of international partnership to achieve our shared objectives and the potential of greater cooperation to advance our knowledge of the Atlantic Ocean,

Intend to advance our shared vision of an Atlantic Ocean that is healthy, resilient, safe, productive, understood and treasured so as to promote the well-being, prosperity, and security of present and future generations.

This cooperation is intended to increase our knowledge of the Atlantic Ocean and its dynamic systems - including interlinks with the portion of the Arctic region that borders the Atlantic - by aligning our ocean observation efforts to improve ocean health and stewardship and promote the sustainable management of its resources. Observation is fundamental to understanding the ocean and forecasting its future. Activities may include efforts to better coordinate data sharing, interoperability and coordination of observing infrastructures and seabed and benthic habitat mapping.

This cooperation may result in mutual benefits including better ecosystem assessments and forecasts and deeper understanding of vulnerabilities and risk, including those relating to the global climate system and climate change impacts. It can also help to generate new tools to increase resilience, conserve rich biodiversity, manage risk and determine social, environmental and economic priorities.

We further intend to promote our citizens' understanding of the value of the Atlantic by promoting oceans literacy. We intend to show how results of ocean science and observation address pressing issues facing our citizens, the environment and the world and to foster public understanding of the value of the Atlantic Ocean.

We intend to advance this agenda by

- taking stock of and utilizing existing bilateral science and technology cooperation (e.g. the U.S. - European Union Science and Technology Joint Consultative Group and the Canada - European Union Science and Technology Joint Coordinating Committee) and multilateral cooperation frameworks including those related to ocean observation, and ocean literacy initiatives;
- recommending priorities for future cooperation and, where possible,
- coordinating the planning and programming of relevant activities in these areas, including promoting researcher mobility.

This cooperation could potentially involve national partners and European Commission representatives, the private sector, and the scientific community to further our efforts by harnessing the value of public-private partnerships.



This initiative is also expected to reinforce existing international efforts to advance our knowledge of the ocean, including the World Ocean Assessment.

Signed in Galway on 24 May 2013 in three originals in the English language.

For the European Union

**For the Government of
Canada**

**For the Government of the
United States of America**

**Máire GEOGHEGAN-
QUINN**
Commissioner for Research,
Innovation and Science

Edward FAST
Minister of International
Trade and Minister for the
Asia-Pacific Gateway



Dr Kerri-Ann JONES
Assistant Secretary of State
for Oceans and International
Environmental and Scientific
Affairs



Maria DAMAKI
Commissioner for Maritime
Affairs and Fisheries

AGUISÍN 10: ACMHAINN CHOMHROINTE AN ATLANTAIGH - TUARASCÁIL CEARDLAINNE

An tAtlantach - Acmhainn Chomhroinnte, Gaillimh, an 23 Bealtaine 2013 Tuarascáil na ceardlainne eolaíochta

Ar an 23 Bealtaine 2013, chruinnigh eolaithe mara as Stáit Aontaithe Mheiriceá, as Ceanada agus as an Eoraip i nGaillimh, Éire ionas go sainaithneofar na príomhdhúshláin eolaíochta agus sochaíocha nach mór aghaidh a thabhairt orthu chun acmhainn thuarthach a sheachadadh (faoi 2020) [idir thuatha gearrthéarmacha agus réamhaisnéisí fadtéarmacha] i gcás mhóramh na rioscá agus na n-athruithe i bhforbairt an Atlantaigh Thuaidh mar atá le fáil sa ráiteas físe thíos.

Agus príomhdhúshláin á sainaithint, tacaíonn na rannpháirtithe leis an tuairim go bhfuil Acmhainn Breathnóireachta agus Fáistine d'Aigéan an Atlantaigh Thuaidh riachtanach chun aghaidh a thabhairt ar phríomhdhúshláin eolaíochta, chomhshaoil, rialachais, bheartais agus shochoíocha a bhfuil inné ar gach dream fúthu agus go mbainfeadh gach taobh tairbhe as comhoibriú lena n-áirítear measúnuithe agus réamhaisnéisí níos fearr maidir le héiceachórais, tuiscint níos fearr ar leochaileachtaí agus ar rioscá lena n-áirítear iad sin a bhaineann le hathrú aeráide domhanda agus le tionchar aeráide (e.g. ardú ar leibhéal na farraige, athruithe i mbithgheografaíocht speiceas a bhfuil tábhacht thráchtála leo, etc.) agus tionchar antrapaigineach eile lena n-áirítear iad sin a bhaineann le saothrú acmhainní (e.g. iascaigh, mianadóireacht domhainfharraige, etc.). Ina theannta sin cruthófar deiseanna nua leis na gníomhaíochtaí sin chun poist a chruthú agus fás geilleagrach a spreagadh, dá dtagraítear dó san Eoraip mar Fhás Gorm.

Ráiteas Físe:

Tríd an eolaíocht agus teicneolaíocht a chomhtháthú go hiomlán agus comhoibriú feabhsaithe idir Ceanada, an tAontas Eorpach agus Stáit Aontaithe Mheiriceá, is iad ár gcuspóirí coiteanna iad seo a leanas a bheith bainte amach againn faoi 2020:

Acmhainn tuartha fheabhsaithe i gcás fhormhór na rioscá agus na n-athruithe ar Aigéan an Atlantaigh Thuaidh, an éiceolaíocht a bhaineann leis, a chóras imshruthaithe, idirghníomhartha idir an tAtlantach agus an tArtach chomh maith le naisc idir an t-aigéan agus an t-atmaisféar.

Bunaithe ar acmhainn reatha agus ar acmhainn nua, córas sainoiriúnach il-ardáin breathnóireachta agus réamhaisnéisithe aigéin a bheith suiteáilte don Atlantach Thuaidh a bheidh á thiomáint ag riachtanais eolaíochta agus na sochaí agus sonraí fíor-ama agus sraith ama fadtéarmach á soláthar.

An tAtlantach a bheith mapáilte mar bhonn agus mar thaca ag cruinneas na samhlacha tuartha agus réamhaisnéisí agus príomhláithreáin theicteonacha/bholcánacha a bheith aitheanta, mar aon le gnáthóga colún uisce agus ghrinneall na farraige (agus cinn b'fhéidir nach bhfuil aimsithe go fóill) a mbeidh tábhacht éiceolaíoch agus gheilleagrach leo.

An timpeallacht bainistíochta riosca agus oibríochta is sábháilte a bheith cumasaithe chun feidhmiú ar muir agus é sin a dhéanamh chomh maith céanna i gcás úsáideoirí cladaigh agus cósta.

Gnóthais chomhpháirteacha chomhoibriúchá oibríochta agus eolaíochta atá neartaithe go mór a bheith bunaithe agus na gníomhaíochtaí sin a chomhtháthú de réir a chéile ar fud an Atlantaigh Thuaidh idir an Eoraip agus Meiriceá Thuaidh.

Tacaíocht d'fhorbairt, trí chomhpháirtíochtaí na hearnála poiblí, acadúla agus príobháidí (e.g. braislí nuálaíochta), raon táirgí agus seirbhísí nua agus nuálacha atá eolasbhunaithe agus a thrádáiltear go domhanda, lena n-áirítear teicneolaíochtaí breathnóireachta úrnua agus nuálaíocht chun deiseanna nua le haghaidh fás socheacnamaíoch inbhuanaithe a chur chun cinn.

Athrú ó bhonn ar an tuiscint atá againn ar ról an Atlantaigh Thuaidh i leagan amach chóras na cruinne, go mór mór maidir le hidirghníomhaíochtaí le criosanna cósta agus leis an Artach, leis an

Atlantach Láir agus leis an Mheánmhuir.

Cur chun cinn ar litearthacht aigéin, rannpháirtíocht le páirtithe leasmhara sa tsochaí (lena n-áirítear rannpháirtíocht saoránach) agus spreagadh agus oideachas curtha ar an gcéad ghlúin eile d'eolaithe agus d'innealtóirí ar fud na ndisciplíní go léir.

Sainaithníodh i gceardlann 'An tAtlantach - Acmhainn Chomhroinnte' i bhfoirm cur i láthair agus plé, sraith leathan dúshlán ó na dúshláin a bhaineann leis an eolas is gá a fháil chun measúnú a dhéanamh agus freagra a thabhairt ar thionchar an athraithe aeráide; cur chuige éiceachórais a chur i bhfeidhm; neamhchinnteacht a chruthaítear trí bhreathnóireacht agus samhltú a laghdú; sábháilteacht ar muir, sláinte agus féinleas an duine a fheabhsú; teicneolaíochtaí nua agus éiritheacha a aithint agus a úsáid; caighdeánú a dhéanamh ar phrótacail samplála; rochtain agus úsáid (agus athúsáid) sonraí; agus chomhchuihbhiú na gcóras aicmithe gnáthóg. Coinneofar an stór saibhir sonraí sin chun tacaíocht agus treoir a thabhairt do na staidéir agus do na tionscnaimh níos mionsonraithe nach mór tabhairt fúthu ina dhiaidh seo má táimid chun an fhís maidir le Córas Breathnóireachta agus Réamhaisnéisithe d'Aigéan an Atlantaigh Thuaidh a thabhairt chun crích.

Príomhdhúshláin:

- > Comhtháthú a dhéanamh ar shonraí stairiúla agus ar phailéa-shonraí, ar chórais breathnóireachta agus réamhaisnéisithe aigéin d'fhonn táscairí níos fearr a thabhairt maidir le stádas comhshaoil roimhe seo, faoi láthair agus sa todhchaí.
- > Teicneolaíochtaí reatha (lena n-áirítear cineálacha cuir chuige ag teacht ó dhisciplíní eile), samhlacha éiceachórais agus bithgheocheimice a bhrú chun cinn, mar aon le cur chuige eimplreach agus samhaltaithe a fhorbairt ionas go mbeifear in ann athrú éabhlóideach ar chórais aigéin a chainníochtú
- > Na héifeachtaí a bhíonn ag an iomad ábhar struis ar bithgheocheimic, ar orgánaigh agus ar éiceachórais a mheas
- > Eolas a aistriú go forghníomhach, bunaithe ar chur chuige éiceachórais, d'fhonn maoirseacht acmhainní nádúrtha a fheabhsú.
- > Braiteoirí ceimiceacha agus bitheolaíocha (lena n-áirítear braiteoirí géanómaíocha) a bheidh cost-éifeachtúil a phríomhshruthú mar aon le córais róbataice agus uathrialaitheacha le haghaidh breathnóireacht aigéin.
- > Ról na bithéagsúlachta i sláinte agus i bhfeidhmiú éiceachóras agus cothabháil na seirbhísí éiceachórais a mheas.
- > Na meicníochtaí lena gcuirtear tús faoi imeachtaí guaiseacha a chinneadh agus táscairí a aithint d'fhonn feabhas a chur ar an réamhaisnéis maidir le tarlú spás-ama na n-imeachtaí sin.
- > An acmhainn atá ann mearfheagra a thabhairt ar imeachtaí gan choinne agus ar imeachtaí teagmhasacha a fhorbairt agus a chothú, imeachtaí óna dteastaíonn imscrúdú eolaíoch práinneach chun eolas a thabhairt.
- > Fís a thógáil a bheidh mar chuid den tionscal, den saol acadúil agus d'earnálacha éagsúla rialtais ina gcuimseofar bonneagar bailliúcháin sonraí comhroinnte, agus bonneagar bainistíochta agus faisnéise.
- > Oibriú le líonraí idirnáisiúnta reatha (e.g. GEO - Tionscnamh Blue Planet) chun an tAtlantach a bhunú i gcomhthéacs domhanda.
- > Caighdeánú a dhéanamh ar theicnící samplála agus breathnóireachta, ar chaighdeán sonraí coiteanna agus ar chórais chomhchuihbhithe um aicmiú gnáthóg d'fhonn rochtain oscailte sonraí agus úsáid agus athúsáid sonraí a éascú.

Mar fhreagra ar an gceist a cuireadh ag an gCeardlann “An bhfuil Córais Breathnóireachta Aigéin mar atá siad faoi láthair oiriúnach dá bhfeidhm chun aghaidh a thabhairt ar phríomhdhúshláin na sochaí? Is é an tuairim choitianta maidir leis an meascán reatha d’inniúlachtaí breathnóireachta aigéin agus cósta, trí bhunús a thabhairt maidir le bonneagar breathnóireachta agus réamhaisnéisithe aigéin agus cósta atá oiriúnach dá fheidhm, nach bhfuil an cumhdach spásúlachta agus ama ann atá riachtanach, ná idir-oibritheacht ná an raon iomlán de bhraiteoirí ceimiceacha agus bitheolaíocha a theastaíonn chun an fhís chomhroinnte a chur i ngníomh agus a sheachadadh.

Moltaí

Is féidir dul chun cinn mór a dhéanamh i dtreo na físe sin trí chlár agus bonneagair reatha a chomhtháthú ar bhonn tras-Atlantach. Sa chomhthéacs sin, molaimid sraith Ceardlanna Tras-Atlantacha d’fhonn:

- > Na moltaí go léir a cuireadh chun cinn ag an gComhdháil a léirimhíniú agus a scagadh agus sraith príomhdhúshláin eolaíochta maidir leis an Atlantach / Artach a bhainfeadh tairbhe as cur chuige comhpháirteach a bheachtú.
- > Measúnú a dhéanamh ar an mbunús agus ar an bhféidearthacht a bhainfeadh le clár taighde cómhaoinithe iomaíoch chun dul i ngleic le saincheistanna taighde an Atlantaigh Thuaidh a bhfuil leas coiteann iontu.
- > Tabhairt faoi athbhreithniú níos mionsonraithe ar an acmhainn breathnóireachta aigéin reatha don Atlantach Thuaidh, agus dul i ngleic le bearnaí agus dúshláin aitheanta agus an acmhainn tuartha is gá a sheachadadh faoin mbliain 2020.
- > Sásraí a leagan síos chun comhroinnt sonraí tras-Atlantach a chur chun cinn, ag baint úsáide as cás tástála de léarscáiliú ghrinneall na farraige.
- > Moltaí a dhéanamh maidir leis an gcur chuige is fearr i dtaca le mapáil gnáthóg ionas go mbeifear in ann tionscnaimh mhapála, a dhéanfar go leithleach nó go comhpháirteach, a chumasc gan aon fhadhb. Áireofar leis sin athbhreithniú ar theicnící mapála reatha agus atá ag teacht chun cinn, ar chaighdeán chomhchoiteanna agus ar chórais aicmithe gnáthóg.
- > Roghanna a imscrúdú le haghaidh comhghníomhartha tras-Atlantacha ar litearthacht aigéin agus rannpháirtíocht le páirtithe leasmhara sa tsochaí.

Tuascálacha Seisiúin:

Seisiún 3.1. Léarscáiliú Gnáthóg Mara agus Ghrinneall na Farraige

- > Sásra a bhunú chun cumarsáid a imscrúdú agus a leathnú chun grúpaí léarscáilithe gnáthóg mara agus ghrinneall na farraige atá ann cheana a thabhairt le chéile agus nósanna imeachta a fhorbairt chun (a) críocha náisiúnta agus (b) an mórmhuir a mhapáil, agus d’fhéadfaí é sin a dhéanamh ar bhunús costais roinnte.
- > Réamhchém de léarscáiliú ghrinneall farraige an Atlantaigh a chur i gcrích (il-léas, cúlscaipthe agus bataiméadracht). Beidh an léarscáiliú sin mar bhonn is mar thaca ag cruinneas na samhlacha tuartha agus réamhaisnéisí, ag cruinneas a gcuid torthaí agus sainaithe neofar réimsí óna dteastóidh léarscáiliú dara céime (leantach) chun príomhláithreáin theicteonacha/bholcánacha, gnáthóga criticiúla, gnáthóga ghrinneall na farraige agus colún uisce agus léarscáiliú sraith-ama a áireamh.
- > Caighdeán uilíocha/córais aicmithe a bhunú le haghaidh léarscáiliú gnáthóg mara agus ghrinneall na farraige.

Seisiún 3.2: Saincheistanna trasteorann an Atlantaigh-Artaigh

- > Idirghníomhartha fisiceacha, ceimiceacha agus bitheolaíocha débhealaí a aithint agus a mheas don Artach-Atlantach.
- > Cur leis an acmhainn le haghaidh breathnóireachtaí ildisciplíneacha ar feadh na bliana.
- > Príomhphróisis Artacha a chuimsiú, cosúil le hoighear mara i gcórais tuartha an Atlantaigh Thuaidh/Artaigh.

Seisiún 3.3: Aigéaneolaíocht/Réamhaisnéisiú Oibríochta

- > Tá oibríochtaí ag athrú de shíor mar sin tá sé ríthábhachtach líonraí breathnóireachta reatha agus acmhainn (córas) samhaltaithe gaolmhar a choinneáil – ionas nach dtarlóidh meath. Níor chóir go mbeadh meath ar acmhainní reatha mar thoradh ar theicneolaíochtaí breathnóireachta nua ach ba chóir measúnú leanúnach a dhéanamh orthu féachaint cibé an bhfuil siad oiriúnach dá bhfeidhm.
- > Ní mór aigéaneolaíocht oibríochta a fhorbairt agus a thabhairt chun cinn. Tá taighde agus nuálaíocht ag teastáil go leanúnach d’fhonn torthaí a fheabhsú, éifeachtúlacht a fheabhsú agus costais ‘ionchuir’ a ísliú agus acmhainn a leathnú chuig réimsí nua, mar shampla seirbhísí éiceachórais.
- > Tá sásra ag teastáil chun seirbhísí oibríochta aigéaneolaíochta amach anseo a chomhfhorbairt agus a dhearadh. Tá sé cruthaithe go n-éiríonn go maith le comhoibriú ag úsáid fóram bunaithe i gcomhthéacs domhanda (e.g. an aeráid).
- > Chinnteodh Comhaontas de sheirbhísí oibríochta aigéaneolaíochta go ndéanfaí monatóireacht agus réamhaisnéisiú níos comhsheasmhaí agus níos éifeachtaí maidir leis an Atlantach Thuaidh.
- > Tá sé mar sprioc sna chéad deich mbliana seo romhainn an acmhainn freagrúlachta a fheabhsú (e.g. acmhainn déileáil le géarchéimeanna cosúil le Deep Water Horizon).

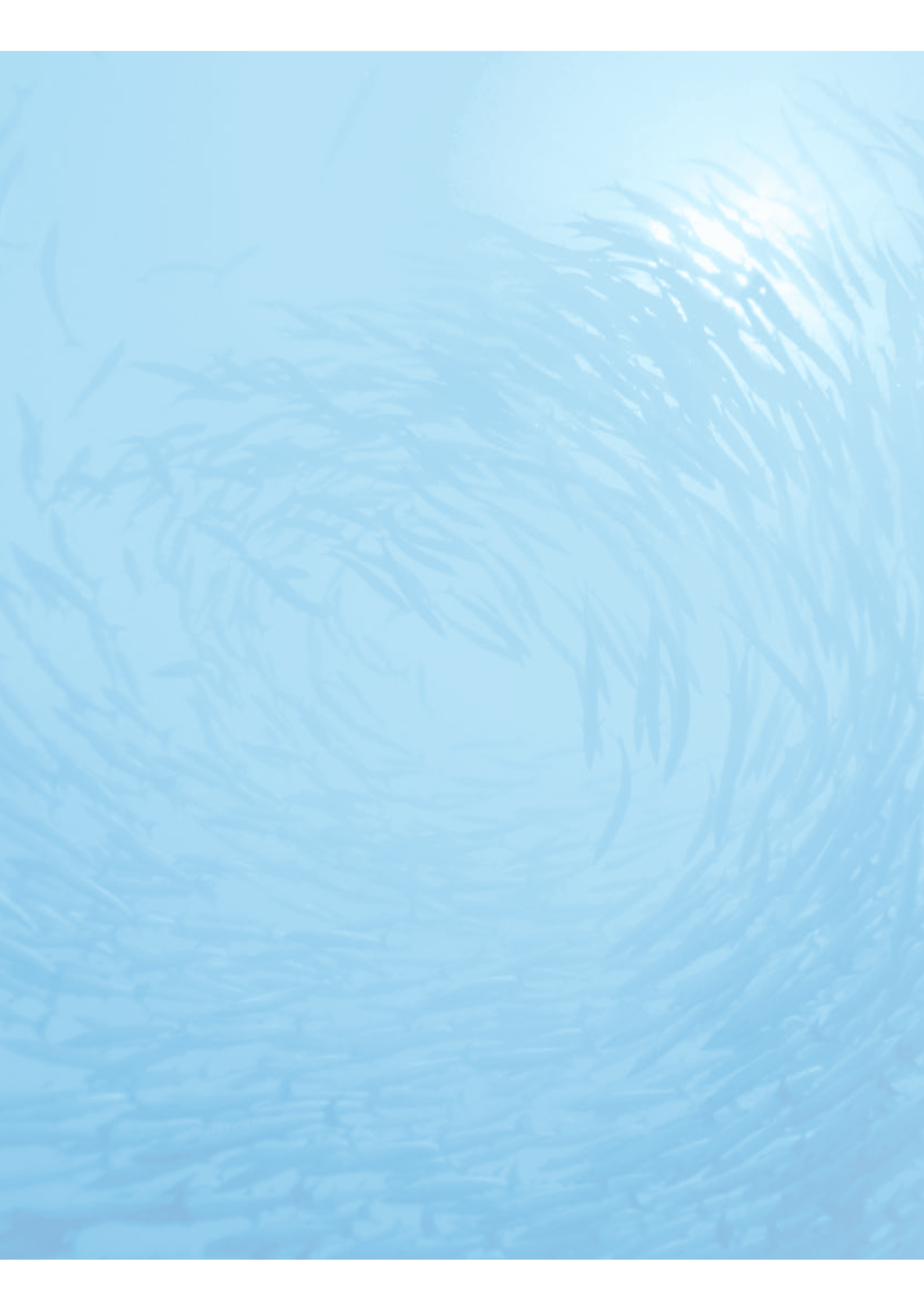
Seisiún 3.4. Córais Reatha um Breathnóireacht Aigéin

- > Úsáid níos fearr as acmhainní daonna: Cé go bhfuil na hacmhainní teicneolaíochta atá againn suntasach agus ag feabhsú go tréan, ní mór dúinn ár gcumais oibriú thar dhisciplíní a fheabhsú agus le cúnamh ó phobail áitiúla/úsáideoirí. Ba chéim thábhachtach chun cinn a bhí inár gcumas feabhsaithe sonraí breathnóireachta a chur ar fáil go tapa, ach má táimid chun sintéis agus tuiscint a thabhairt céim níos faide fós, ní mór dúinn freisin comhtháthú níos fearr a bhaint amach thar dhisciplíní.
- > Mearfhreagairt Oiriúnaitheach: Teastaíonn deiseanna solúbtha maoinithe má táthar chun mearfhreagairt do thubaistí nó d’imeachtaí teagmhasacha eile (e.g. clár dámhachtainí RAPID Fhondúireacht Náisiúnta Eolaíochta na Stát Aontaithe) agus teastaíonn líonraí freagróirí freisin a bheith réidh le dhul ag obair go scafánta. Nuair atáthar ag pleanáil do theagmhas gan choinne ní mór féachaint ar conas a d’fhéadfaí samhlacha a thiontú go tapa le cur i bhfeidhm ar chórais seachas na cinn dar forbraíodh iad an chéad lá riamh.
- > Beartú tosaíochta: Ní mór don phobal breathnóireachta trí chéile dul i ngleic níos fearr leis an gcúram deacair tosaíocht a thabhairt do bhreathnóireachtaí lena chinntiú – go fadtéarmach – go ndéanfar na breathnóireachtaí is tábhachtaí. Ba cheart struchtúr bonnlíne a leagan síos le haghaidh na mbreathnóireachtaí is criticiúla. Dá ndéanfaí é a dhearadh i gceart, d’fhéadfadh an struchtúr a bheith mar uirlis tharraingteach le haghaidh staidéar ar phróisis.

Gluais na nGiorrúchán

AA	Measúnuithe lomchuí	FEAS	Seirbhísí Comhairleacha um Éiceachórais lascaigh (de chuid Foras na Mara)
ACA	Comhlachas na gCuntasóirí Deimhnithe Cairte	FIRM	Beart Taighde Thionscal an Bhia
ACEobs	Lárionad an Atlantaigh um Breathnóireachtaí na Cruinne	FIX03	ag nascadh gníomhaíochtaí AE maidir le breathnóireachtaí mara de phointe fosaithe
ACRUNET	Líonra Acmhainní an Phortáin Atlantaigh	FP7	An Seachtú Creatchlár
AMS	Ardseirbhísí Léarscáilithe	FSAI	Údarás Sábháilteachta Bia na hÉireann
AMTP	Clár Ardteicneolaíocht Mhara		
ASIMUTH	Ionsamhlúcháin fheidhmeacha agus Samhaltú Comhtháite chun tuiscint a fháil ar bhlás algach atá tocsaineach agus díobhálach	GEO	Grúpa Bhreathnóireachtaí na Cruinne
ASTOX	Measúnú Tocsaineolaíoch ar Asaispioraigéid, Modhanna Tástála agus Sainaithe an Orgánaigh Fhoinsigh	GEPETO	Bainistíocht lascaigh agus Cuspóirí Trasnáisiúnta
		GMIT	Institiúid Teicneolaíochta na Gaillimhe-Maigh Eo
		GSI	Suirbhéireacht Gheolaíochta na hÉireann
BA	Baitsiléir Ealaíon		
BENTHIS	Staidéar ar Thionchar Éiceachórais Bheantaigh ar lascaigh	HAB	Blás Algach Díobhálach
BSc	Baitsiléir Eolaíochta	HEA	An tÚdarás um Ard-Oideachas
BSc Arch	Baitsiléir Eolaíochta - Ailtireacht	HEAnet	Gréasán Náisiúnta Oideachais agus Taighde na hÉireann
BSH	Bundesamt für Seeschifffahrt und Hydrographie – Gníomhaireacht Mhuirí agus Hidreagrafach Chónaidhm na Gearmáine		
		ICES	An Chomhairle Idirnáisiúnta um Thaiscéalaíocht na Mara
CEO	Príomhoifigeach Feidhmiúcháin	ICT	Teicneolaíocht Faisnéise agus Cumarsáide
CFP	Comhbheartas lascaigh	ILV	Árthach Soilse na hÉireann
CITES	An Coinbhinsiún maidir le Trádáil Idirnáisiúnta ar Speicis i mBaol	IMDO	Oifig Forbartha Muirí na hÉireann (de chuid Foras na Mara)
CoFASP	Líonra um dhobharshaothrú iascaigh agus próiseáil bia mara.	IMTE	<i>The Irish Maritime Transport Economist</i>
CoOPEUS	Comhoibriú idir SAM agus an AE i réimse na mbonneagar um thaighde comhshaoil	INAB	Bord Náisiúnta na hÉireann um Chreidiúnú
CPMR	Comhdháil na Réigiún Muirí Forimeallach	INFOMAR	Léarscáiliú Comhtháite d'Fhorbairt Inbhuanaithe Acmhainní Mara na hÉireann
		INIS	Clár na hÉireann - Thuaisceart Éireann - na hAlban
DAFM	An Roinn Talmhaíochta, Bia agus Mara	INTERREG	Clár Comhoibrithe Idir-Réigiúnach an AE
DAHG	An Roinn Ealaíon, Oidhreacht agus Gaeltachta	IS&D	Seirbhísí Faisnéise agus Forbartha
DAMARA	Tacaíocht Eolaíochta chun Plean Bainistíochta a Fhorbairt sa Mhuir Cheilteach	ISEAS	Scéim Cúnamh Oideachais do Mharaithe na hÉireann
DCENR	An Roinn Cumarsáide, Fuinnimh agus Acmhainní Náúúrtha	ISGEI	Céimí Idirnáisiúnta SmartOcean: Tionscnamh Fiontraíochta (ISGEI)
DCF	An Creat um Bailiú Sonraí	ISSC	Ionad Seirbhísí Loingseoireachta na hÉireann
DCU	Ollscoil Chathair Bhaile Átha Cliath		
DG Mare	Ard-Stiúrthóireacht na nGnáthaí Muirí agus na hlascaireachta	JERICO	I dtreo chomhghríasán bonneagar taighde na hEorpa d'fhaireachlanna cósta
DOMMRS	Stáisiún Taighde Mara Dháithí Uí Mhurchú		
DTTAS	An Roinn Iompair, Turasóireachta agus Spóirt	MA	Máistir Ealaíon
		MCG	Grúpa Comhordaithe Muirí
		MEFS	Seirbhísí Timpeallachta Mara agus Sábháilteachta Bia (de chuid Foras na Mara)
ECOKNOWS	I bhfeidhm ó Usáid Eolais Eiceachórais agus Bitheolaíocht in Iascaireacht	MESH	Gnáthóga Eorpacha Ghrinneall na Farraige a Léarscáiliú
EIA	Measúnacht Tionchair Timpeallachta	MPlan	Máistreacht i bPleanáil agus i bhForbairt Inbhuanaithe
EMEA	Réigiún na hEorpa, an Mheánoirthir, agus na hAfraice	MSc	Máistreacht san Eolaíocht
EMSO	Faireachlann Ildisciplíneach Eorpach Ghrinneall na Farraige	MSFD	Creat-Treoir na Straitéise Mara
EPA	An Ghníomhaireacht um Chaomhnú Comhshaoil	MLVC	An Coiste um Sheiceáil na gCeadúnas Mara
ERIC	An Cuibhreannas Eorpach um Bonneagar Taighde	MRIAI	Comhalta d'Institiúid Ríoga Ailtirí na hÉireann
ESA	Gníomhaireacht Spáis na hEorpa	MYFISH	Uastoradh Inbhuanaithe
ETP	Gradam 'Scothsheirbhís ó Scothfhostaithe'		
AE	An tAontas Eorpach	NATURA	Is ionann láithreáin NATURA 2000 agus láithreáin chosanta maidir le flóra agus fána a bhfuil tábhacht Eorpach ag baint leo
EUROBASIN	Tionscadal Comhtháite ar Imchuach – Anailís Scála	NDP	An Clár Forbartha Náisiúnta
		NOC	Lárionad Aigéaneolaíochta Náisiúnta
		NPWS	An tSeirbhís Páirceanna Náisiúnta agus Fiadhúlra
		NSAI	An tÚdarás um Chaighdeán Náisiúnta na hÉireann
		NYSE:SWI	SolarWinds Inc

OÉG	Ollscoil na hÉireann, Gaillimh
OJEU	Iris Oifigiúil an Aontais Eorpaigh
OsHV-1 µvar	Víreas Heirpéis
OSPAR	Comhdháil Osló agus Pháras (1992)
OSIS	Seirbhís Aigéaneolaíochta agus Faisnéise (de chuid Fhoras na Mara)
PhD	Dochtúireacht Fealsúnachta
PMDS	Córais Bainistíochta agus Forbartha Feidhmíochta
PWC	PriceWaterhouse Coopers
R&D	Taighde agus Forbairt
RAC	Comhairle Chomhairleach Réigiúnach
RIAN	Tairseach Náisiúnta um Rochtain Oscailte le haghaidh Fhoilseacháin Taighde na hÉireann
RIBA	Institiúid Ríoga Ailtirí na Breataine
ROV	Feithicil Chianoibrithe
RV	Árthach Taighde
RVOpanna	Oibríochtaí Árthaí Taighde
SACanna	Limistéir Chaomhantais Speisialta
SBM	Bainistiú Bánna Singile
SEAI	Údarás Fuinnimh Inmharthana na hÉireann
SECA	Limistéar Rialaithe Astaíochtaí Sulfair
SFI	Fondúireacht Eolaíochta Éireann
SFPA	An tÚdarás um Chosaint lascaigh Mhara
SIDERI	Gné Idirnáisiúnta Taighde Euro-Argo a Neartú
SMART	An Comhaontas Straitéiseach Mara um Thaighde agus Oiliúint
SMEs	Fiontair Bheaga agus Mheánmhéide
SPA	Limistéir faoi Chosaint Speisialta
SSCE	An Buanchoiste Eolaíochta le haghaidh Eascann
SSCE	An Buanchoiste Eolaíochta le haghaidh Bradán
STAMAR	Taispeántas Teicneolaíochta atá Infheidhme d'Fhiontair Bheaga agus Mheánmhéide Mhuirí
STECF	An Coiste Eolaíochta, Teicniúil agus Eacnamaíochta um lascaigh
STOCKMAN	Iarratas chun monatóireacht a dhéanamh ar stoic éisc pheiligeacha agus ghrinnill in uiscí na hÉireann
TD	Teachta Dála
TEU	Aonad Coibhéiseach Fiche Troigh arb ionann é agus aonad coimeádáin amháin
RA	An Ríocht Aontaithe
SA	Na Stáit Aontaithe
SAM	Stáit Aontaithe Mheiriceá



Ráitis Airgeadais

Tuarascáil an Ard-Reachtaire Cuntas agus Ciste

Lena Leagan faoi bhráid Thithe an Oireachtais

Tá iniúchadh déanta agam ar ráitis airgeadais Fhoras na Mara don bhliain dar críoch an 31 Nollaig 2013 faoin Acht um Fhoras na Mara, 1991. Is éard atá sna ráitis airgeadais, arna n-ullmhú de réir na mbeartas cuntasafóchta dá dtagraítear, na beartais chuntasafóchta, an cuntas ioncaim agus caiteachais, an ráiteas ar ghnóthachain agus cailleanais aitheanta iomlána, an clár comhardaithe, an ráiteas ar shreabhadh airgid agus na nótaí gaolmhara. Ullmhaíodh na ráitis airgeadais san fhoirm a fhorordaítear faoi Alt 12 den Acht, agus de réir an chleachtais chuntasafóchta a bhfuil glacadh leis in Éirinn.

Freagrachtaí Chomhaltaí an Bhoird

Tá an Bord freagrach as na ráitis airgeadais a ullmhú, as a chinntiú go dtugann siad léargas fírinneach cóir maidir le staid chúrsaí an Fhorais agus maidir lena ioncam agus lena chaiteachas, agus as rialtacht na n-idirbheart a chinntiú.

Freagrachtaí an Ard-Reachtaire Cuntas agus Ciste

Is é an fhreagracht atá orm na ráitis airgeadais a iniúchadh agus a thuairisciú de réir an dlí is infheidhme.

Déantar m'iniúchadh trí thagairt do na léirbhreithnithe speisialta a bhaineann le comhlachtaí Stáit maidir lena mbainistíocht agus lena n-oibriú.

Déantar m'iniúchadh de réir na gCaighdeán Idirnáisiúnta Iniúcháireachta (an Ríocht Aontaithe agus Éire) agus i gcomhlíonadh na gCaighdeán Eiticiúil d'Iniúcháirí de chuid an Bhoird um Chleachtais Iniúcháireachta.

Scóip an Iniúchta ar na Ráitis Airgeadais

Baineann iniúchadh le fianaise a fháil ar na suimeanna agus na nochtuithe sna ráitis airgeadais, iad a bheith dóthanach chun dearbhú réasúnach a thabhairt go bhfuil na ráitis airgeadais saor ó mhíráiteas ábhartha, cibé acu de bharr calaoise nó earráide. Áirítear leis seo measúnú na nithe seo a leanas:

- > cibé acu an cuí nó nach cuí iad na beartais chuntasafóchta ó thaobh chúinsí an Fhorais de, agus cibé acu an bhfuil nó nach bhfuil siad curtha i bhfeidhm go comhsheasmhach agus cibé acu an bhfuil nó nach bhfuil siad nochta go cuí
- > réasúntacht na meastachán suntasach cuntasafóchta a rinneadh in ullmhú na ráiteas airgeadais, agus
- > cur i láthair iomlán na ráiteas airgeadais.

Déanaim iarracht freisin fianaise a fháil ar rialtacht na n-idirbheart airgeadais le linn an iniúchta.

Ina theannta sin, léim tuarascáil bhliantúil an Fhorais chun aon neamhréireachtaí ábhartha i dtaca leis na ráitis airgeadais iniúchta a aithint. Má thugaim aon mhíráiteas nó neamhréireacht ábhartha dealraitheach i dtaca leis na ráitis airgeadais faoi deara, déanaim na himpleachtaí ar mo thuarascáil a mheas.

Tuairim faoi na Ráitis Airgeadais

I mo thuairim, tugann na ráitis airgeadais, a ullmhaíodh mar ba cheart de réir an chleachtais cuntasafóchta a bhfuil glacadh leis in Éirinn, léargas fírinneach cóir maidir le staid chúrsaí an Fhorais amhail an 31 Nollaig 2013 agus maidir lena ioncam agus lena chaiteachas don bhliain dar críoch sin.

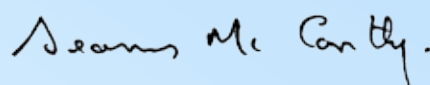
I mo thuairim, tá leabhair chuntais chuí á gcoimeád ag an bhForas. Tá na ráitis airgeadais ag teacht leis na leabhair chuntais.

Nithe ar a dtuairiscím trí eisceacht

Tuairiscím trí eisceacht sna cásanna seo a leanas:

- > ní bhfuair mé an fhaisnéis agus na mínithe ar fad a theastaigh uaim le haghaidh m'iniúchta, nó
- > tugadh faoi deara i m'iniúchadh aon chás ábhartha inar caitheadh airgead ar fheidhmeanna eile seachas na feidhmeanna beartaithe nó i gcás nach raibh na hidirbhearta de réir na n-údarás atá á rialú, nó
- > níl an fhaisnéis a tugadh i dtuarascáil bhliantúil an Fhorais comhsheasmhach leis na ráitis airgeadais, nó
- > ní léirítear sa ráiteas ar rialú inmheánach airgeadais gur chomhlíon an Foras an Cód Cleachtais um Rialú Comhlachtaí Stáit, nó
- > braithim go bhfuil nithe ábhartha eile a bhaineann leis an dóigh a ndearnadh gnó poiblí.

Níl aon rud le tuairisciú agam maidir leis na hábhair siúd ar a dtuairiscítear trí eisceacht.



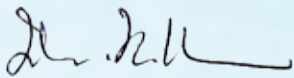
Seamus McCarthy

An tArd-Reachtaire Cuntas agus Ciste
18 Nollaig 2014

Ráiteas ar Fhreagrachtaí an Bhoird

Ceanglaíonn alt 12 den Acht um Fhoras na Mara, 1991, ar an bhForas ráitis airgeadais a ullmhú i cibé foirm a cheadóidh an tAire Talmhaíochta, Bia agus Mara. Agus na ráitis airgeadais sin á n-ullmhú acu, ceanglaítear ar Bhord an Fhorais:

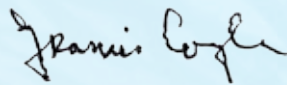
- Beartais chuntasaíochta oiriúnacha a roghnú agus iad a chur chun feidhme go comhsheasmhach;
- Breithiúnais agus meastacháin atá réasúnach agus stuama a dhéanamh;
- Cibé acu ar comhlíonadh nó nár comhlíonadh caighdeáin chuntasaíochta infheidhme, faoi réir aon imeacht ábhartha a nochtadh agus a míníodh sna ráitis airgeadais;
- Na ráitis airgeadais a ullmhú ar bhonn gnóthas leantach ach amháin mura bhfuil sé cuí glacadh leis go leanfaidh an Foras air ag feidhmiú.



An tUasal John Killeen
Comhalta Boird
9 Nollaig 2014

Tá an Foras freagrach as leabhair chuntais chearta a choinneáil a nochtann le cruinneas réasúnta ag am ar bith seasamh airgeadais an Fhorais agus a chuireann ar a chumas a chinntiú go gcomhlíonann na ráitis airgeadais Alt 12(1) den Acht.

Tá an Foras freagrach chomh maith as a chuid sócmhainní a chosaint agus as bearta réasúnta a dhéanamh chun calaois agus neamhrialtachtaí eile a chosc agus a bhrath.



An tUasal Francis Coyle
Comhalta Boird
9 Nollaig 2014

Ráiteas ar Rialú Inmheánach Airgeadais

Thar ceann Bhord Foras na Mara, tuigim an fhreagracht atá orainn a chinntiú go gcothaítear agus go gcuirtear i bhfeidhm córas éifeachtach um rialú inmheánach airgeadais.

Ní féidir leis an gcóras ach dearbhú réasúnta, agus ní dearbhú iomlán, a chur ar fáil go gcosnaítear sócmhainní, go dtugtar údarás do gach idirbheart agus go dtaifeadtar iad i gceart, agus go ndéanfaí earráidí nó neamhrialtachtaí ábhartha a chosc nó a bhrath go tráthúil.

Tá céimeanna glactha ag an mBord chun a chinntiú go mbíonn timpeallacht rialaithe oiriúnach i bhfeidhm mar seo a leanas:

- > Sainmhíniú freagrachtaí agus cumhachtaí na bainistíochta go soiléir;
- > Bunú nósanna imeachta foirmiúla chun monatóireacht a dhéanamh ar ghníomhaíochtaí agus chun sócmhainní na heagraíochta a chosaint;
- > Nós freagrachta a fhorbairt i ngach réimse den eagraíocht.

Tugadh faoi athbhreithniú ar bhainistíocht riosca in 2013 agus cuireadh na gnéithe seo a leanas san áireamh ann:

- > Measúnú ar oiriúnacht agus ar éifeachtacht an bheartais reatha agus na nósanna imeachta reatha i dtaca le sainaitheint agus le measúnú ar rioscaí gnó;
- > Cineál, méid agus impleacht airgeadais na rioscaí atá roimh an bhforas a shainaithint, lena n-áirítear an mhéid agus na cineálacha atá inghlactha, dar leo;
- > Measúnú a dhéanamh ar an dealraitheacht go dtarlódh na rioscaí sainaitheanta agus a dtionchar;
- > Gealltanais go rachaidh an creat riosca i ngleic le ceanglais an Chóid Cleachtais um Rialú Comhlachtaí Stáit (2009)

Tá an córas um rialú inmheánach airgeadais bunaithe ar chreatlach d'fhaisnéis rialta bhainistíochta, nósanna imeachta riaracháin, lena n-áirítear deighilt dualgas, agus córas tarmhligin agus freagrachta.

Áirítear leis seo go sonrach:

- > Córas cuimsitheach buiséadaithe le buiséad bliantúil a dhéanann an Bord a athbhreithniú agus a chomhaontú;
- > Athbhreithnithe rialta ag an mBord ar thuarascálacha airgeadais tréimhsiúla agus bliantúla a thaispeánann comhlíonadh airgeadais i gcoinne réamhaisnéise;

- > Socrú spriocanna chun comhlíonadh airgeadais agus comhlíonadh eile a thomhas;
- > Disciplíní foirmiúla bainistíochta tionscadail.

Chuir Foras na Mara feidhm iniúchta inmheánaigh ar bun a fheidhmíonn de réir an Chreatchóid Dea-chleachtais a leagtar amach sa Chód Cleachtais um Rialú Comhlachtaí Stáit. Cuireann obair an iniúchta inmheánaigh bonn taca faoin anailís ar an riosca a bhfuil an Foras nochta dó, agus tá pleananna bliantúla maidir le hiniúchadh inmheánach bunaithe ar an anailís seo. Thug an Coiste Iniúcháireachta tacaíocht don anailís ar riosca agus don phlean maidir le hiniúchadh inmheánach in 2013 agus d'fhaomh an Bord iad. Fuair an Coiste Iniúcháireachta an tuarascáil um ghníomhaíocht iniúchta inmheánaigh in 2013, agus cuireadh í seo faoi bhráid an Bhoird. Áiríodh leis an tuarascáil tuairim an Iniúcháir Inmheánaigh faoi fhiúntas agus éifeachtúlacht an chórais um rialú inmheánach airgeadais. Múnlaítear an mhonatóireacht agus an t-athbhreithniú a dhéanann an Bord ar éifeachtúlacht an chórais um rialú inmheánach airgeadais de thoradh obair an iniúcháir inmheánaigh, obair an Choiste Iniúcháireachta a dhéanann maoirsiú ar obair an iniúcháir inmheánaigh, na bainisteoirí feidhmiúcháin i bhForas na Mara atá freagrach as forbairt agus as cothabháil na creatlaí rialaithe airgeadais, agus tuairimí an Ard-Reachtair Cuntas agus Ciste ina litir bhainistíochta.

Rinne an Bord athbhreithniú ar éifeachtacht an chórais um rialuithe inmheánacha airgeadais le haghaidh 2013 agus rinne siad iad a fhaomhadh.

Thar ceann an Bhoird:



An tUasal John Killeen

Cathaoirleach

9 Nollaig 2014

Beartais Chuntasaíochta

Don Bhliain dar Críoch an 31 Nollaig 2013

1. Ginearálta

Ullmháodh na ráitis airgeadais faoin modh fabhráithe chuntasaíochta, ach amháin nuair a chuirtear a mhalaire in iúl anseo thíos, agus de réir chleachtais chuntasaíochta a bhfuil glacadh leo tríd is tríd. Glactar le caighdeán maidir le tuairisciú airgeadais atá molta ag na comhlachtaí chuntasaíochta aitheanta nuair a chuirtear i bhfeidhm iad.

2. Ioncam

Aithnítear ioncam a eascraíonn ó Dheontas i gCabhair an Oireachtais de réir fáiltais airgid.

3. Ioncam Iarchurtha

Caitear le hioncam agus le réamhíocaíochtaí a fuarthas ón Aontas Eorpach agus ó thionscadail taighde eile ar conradh mar ioncam iarchurtha i gcás ina mbíonn an tionscadal taighde ar bun agus ina bhfuil caiteachas toghcháin ann le muirearú in aghaidh an tionscadail. Aithnítear an t-ioncam seo sa tréimhse chuntasaíochta ina muirearaítear an caiteachas gaolmhar. Nuair a chuirtear tionscadal ar leith i gcrích, tugtar aon iarmhéid neamhúsáidte ar an gcuntas ioncaim iarchurtha don tionscadal sin chun cuntais freisin mar ioncam.

4. Sócmhainní Seasta agus Dímhéas

Cuirtear dímhéas ar fáil sa mhodh dronlíneach de réir rátaí a measadh chun na sócmhainní a laghdú go dtí a luach inréadaithe faoi dheireadh a saoil ionchais. Is iad seo a leanas na rátaí atá i gceist:

Foirgnimh	2%
Gléasra agus Trealamh	25%
Daingneáin agus Feistis	25%
Ríomhairí	33%
Árthach Taighde	4%
Trealamh Árthach Taighde	25%
Athghléasadh Árthach Taighde	20%
Mótarfheithiclí	20%
Ní dhéantar dímhéas ar thalamh	

5. Sócmhainní ar Léas

Gearrtar íocaíochtaí faoi léasanna oibriúcháin (Nóta 17) ar an gcuntas ioncaim agus caiteachais sa bhliain lena mbaineann siad.

6. Cuntas Caipitil

Nochtann an Cuntas Caipitil an luach gan amúchadh atá ar an ioncam a cuireadh i bhfeidhm ar mhaithe le cúrsaí caipitil.

7. Airgeadraí Coigríocha

Aistrítear sócmhainní agus dliteanais airgid arna n-ainmniú in airgeadraí coigríche de réir rialachán na rátaí malairte ar an dáta a luaitear sa Chlár Comhardaithe. Aistrítear ioncam agus costais de réir rialachán na rátaí malairte ar na dátaí a luaitear leis na bunbhearta.

8. Tionscadail Mhara: Taighde, Teicneolaíocht, Forbairt agus Nuálaíocht (RTDI)

Déanann Foras na Mara gealltanais maidir le conarthaí a bhronntar ar thionscadail RTDI Mhara. Gearrtar caiteachas sna ráitis airgeadais de réir íocaíochtaí tosaigh a dhéantar tar éis chonradh an tionscadail a shíniú, d'fhéadfaí íocaíocht eatraimh a dhéanamh faoi réir feidhmíocht shásúil agus gearrtar íocaíochtaí breise tar éis éilimh maidir leis an obair atá críochnaithe a fháil agus a fhíorú. Maoiníonn an Plean Forbartha Náisiúnta (NDP) na costais a thabhaítear ar an bhForas de bharr riar tionscadal RTDI agus gearrtar iad ar na ráitis airgeadais de réir mar a thabhaítear iad.

9. Sócmhainn Mhaoinithe Iarchurtha um Pinsin

Tá scéimeanna pinsin le sochar sainithe i bhfeidhm ag Foras na Mara atá á maoiniú gach bliain ar bhonn 'íoctar mar a úsáidtear' ón airgead a chuirtear ar fáil dóibh, lena n-áirítear airgead ón Roinn Talmhaíochta, Bia agus Mara.

Léiríonn na costais phinsin na sochair pinsin a shaothraíonn fostaithe sa tréimhse lena mbaineann agus cuirtear in iúl iad mar ghlan-ranníocaíochtaí pinsin na mball foirne a chuirtear chun na Roinne Talmhaíochta, Bia agus Mara. Breathnaítear ar mhéid a chomhfhreagraíonn don mhuirear pinsin mar ioncam inghnóthaithe, agus fritháirítear ag deontais a fhaightear i rith na bliana le híocaíochtaí pinsin a urscaoileadh.

Léirítear gnóthachain nó caillteanais achtúireacha a eascraíonn ó dhliteanais scéime sa Ráiteas ar Ghnóthachain agus Caillteanais Aitheanta Iomlána agus tá coigeartú comhfhreagrach aitheanta sa tsuim atá inghnóthaithe ón Roinn Talmhaíochta, Bia agus Mara.

Léiríonn dliteanais phinsin luach reatha na n-íocaíochtaí pinsin amach anseo a ghnóthaigh baill foirne go dtí seo. Is éard atá i gceist le maoiniú pinsin iarchurtha an tsócmhainn chomhfhreagrach a ghnóthófar amach anseo ón Roinn Talmhaíochta, Bia agus Mara.

Cuntas Ioncaim agus Caiteachais

Don Bhliain dar Críoch an 31 Nollaig 2013

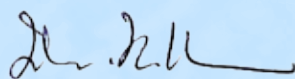
		2013		2012	
	Nóta	€'000	€'000	€'000	€'000
Ioncam					
Deontais an Oireachtais	2		22,916		23,523
Ioncam Eile	3		12,764		11,882
Glanmhaoiniú larchurtha le hAghaidh Pinsean	16		3,038		2,857
			38,718		38,262
Aistriú (chuig)/ón gCuntas Caipitil	10		1,364		738
			40,082		39,000
Caiteachas					
Seirbhísí Corparáideacha	4	4,419		4,488	
Seirbhísí Muirthimpeallachta agus Sábháilteacht Bhia	5	6,798		7,665	
Seirbhísí Comhairleacha um Éiceachórais lascaigh	6	4,786		4,815	
Seirbhísí Aigéaneolaíochta agus Faisnéise	7	12,524		11,900	
Oifig Forbartha Muirí na hÉireann	8	665		895	
Clár SSTI agus RTDI Mara	12	7,750		6,772	
Costais Phinsean	16	2,966		2,878	
Aisíoc leis an Státhchiste		0		270	
Caiteachas Iomlán	13		39,908		39,683
Barrachas/(Easnamh) don bhliain			174		(683)
Barrachas amhail an 1 Eanáir			1,781		2,464
Barrachas amhail an 31 Nollaig			1,955		1,781

Ráiteas ar Ghnóthachain agus Caillteanais Aitheanta Iomlána

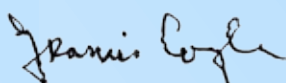
Barrachas/(Easnamh) don bhliain	174	(683)
Gnóthachain/(Caillteanais) Achtúireacha ar Dhliteanais na Scéime Pinsin	2,339	1,360
Athruithe ar Thóimhdí		
Coigeartú ar Mhaoiniú larchurtha Pinsin	(2,339)	(1,360)
Gnóthachain agus Caillteanais Aitheanta Iomlána don Bhliain	174	(683)

Baineann torthaí na bliana le hoibríochtaí leanúnacha.

Is cuid de na ráitis airgeadais seo an Ráiteas ar Bheartais Chuntasaíochta agus Nótaí 1 – 22.



An tUasal John Killeen
Comhalta Boird
9 Nollaig 2014



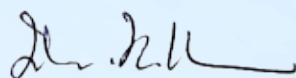
An tUasal Francis Coyle
Comhalta Boird
9 Nollaig 2014

Clár Comhardaithe

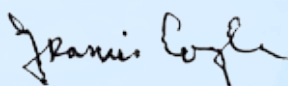
Don Bhliain dar Críoch an 31 Nollaig 2013

		2013		2012	
	Nóta	€'000	€'000	€'000	€'000
Sócmhainní Seasta	11		21,188		22,552
Sócmhainní Reatha					
Féichiúnaithe agus Réamhíocaíochtaí	14	3,966		3,045	
Bainc agus Airgead		458		1,211	
		4,424		4,256	
Dlíteanais Reatha					
Creidiúnaithe agus Fabhruithe	15	2,469		2,475	
Glansócmhainní Reatha			1,955	-	1,781
Sócmhainní Iomlána Lúide Dlíteanais Reatha roimh Phinsin					
Maoiniú larchurtha Pinsin		28,200		27,501	
Dlíteanais Phinsin		(28,200)		(27,501)	
Sócmhainní Iomlána Lúide Dlíteanais Reatha			23,143		24,333
Maoinithe ag:					
Cuntas Caipitil	10	21,188		22,552	
Cuntas Ioncaim agus Caiteachais		1,955		1,781	
			23,143		24,333

Tá an Ráiteas ar Bheartais Chuntasafóchta agus Nótaí 1 – 22 ina gcuid de na ráitis airgeadais seo.



An tUasal John Killeen
Comhalta Boird
9 Nollaig 2014



An tUasal Francis Coyle
Comhalta Boird
9 Nollaig 2014

Ráiteas ar Shreabhadh Airgid

don Bhliain dar críoch an 31 Nollaig 2013

Réiteach an bharrachais/(easnaimh) oibriúcháin go glansreabhadh airgid ó ghníomhaíochtaí oibriúcháin			
	Nóta	2013 €'000	2012 €'000
Barrachas/(Easnamh) i gCuntas Ioncaim agus Caiteachais		174	(683)
Ús a fuarthas		0	0
Aistriú chuig/(ó) Chuntas Caipitil	10	(1,364)	(738)
Dímheas	11	3,726	2,906
(Méadú) / Laghdú ar Fhéichiúnaithe agus Réamhíocaíochtaí	14	(921)	3,515
Méadú / (Laghdú) ar Chreidiúnaithe agus Fabhrúithe	15	(6)	(2,217)
Glan-insreabhadh airgid ó ghníomhaíochtaí oibriúcháin		1,609	2,783

Ráiteas ar Shreabhadh Airgid			
		2013 €'000	2012 €'000
Glan-insreabhadh airgid ó ghníomhaíochtaí oibriúcháin		1,609	2,783
Torthaí ar infheistíochtaí agus fónamh a dhéanamh ar airgeadas			
Ús a fuarthas		0	0
Glanchaiteachas caipitil			
Gnóthú sócmhainní seasta	11	(2,362)	(2,168)
Méadú / (Laghdú) ar airgead		(753)	615

Réiteach glansreafa airgid go gluaiseacht i nglanchistí			
		2013 €'000	2012 €'000
Méadú / (Laghdú) ar airgead tirim		(753)	615
Glanchistí amhail an 1 Eanáir		1,211	596
Glanchistí amhail an 31 Nollaig		458	1,211

Nótaí leis na Ráitis Airgeadais

Don Bhliain dar Críoch an 31 Nollaig 2013

1. Ginearálta

Bunaíodh Foras na Mara an 30 Deireadh Fómhair, 1992, de réir fhorálacha an Achta um Fhoras na Mara, 1991,

“chun taighde agus forbairt mhuirí a ghabháil de láimh, a chomhordú, a chur chun cinn agus a chuidiú agus na seirbhísí sin a bhaineann le taighde agus forbairt mhuirí a chur ar fáil, a chuirfidh i dtuairim an Fhorais, forbairt eacnamaíoch chun cinn agus a chruthóidh fostaíocht agus a chosnóidh an timpeallacht mhuirí.”

Clúdaíonn na Ráitis Airgeadais an Bhliain dar Críoch an 31 Nollaig 2013

2. Deontas i gCabhair

	€'000	€'000	€'000	€'000
Críocha reatha				
Foras na Mara - Vóta 30, Fothideal A.7	13,920		14,449	
Lúide ranníocaíochtaí Aoisliúntais in-aisíochta*	(433)	13,487	(421)	14,028
Críocha caipitiúla				
Suirbhé Náisiúnta ar Ghrinneall na Farraige - Vóta 29, Fothideal D.7	1,404		1,495	
Foras na Mara - Vóta 30, Fothideal A.7	1,650		1,500	
Beaufort (Nóta 12) - Vóta 30, Fothideal A.7	2,167		2,167	
Bonneagar Taighde agus Forbartha Teicniúla (RTDI)				
(Nóta 12) - Vóta 30, Fothideal A.7	4,208	9,429	4,333	9,495
		22,916		23,523

* De réir chomhaontú na Roinne Talmhaíochta, Bia agus Mara, tá an tsuim seo in-aisíochta maidir le ranníocaíochtaí pinsin na mball foirne.

Nótaí leis na Ráitis Airgeadais

Don Bhliain dar Críoch an 31 Nollaig 2013

3. Ioncam Eile

	2013		2012	
	€'000	€'000	€'000	€'000
Taighde Conartha an AE				
An Creat um Bailiú Sonraí (feic an nóta thíos)	3,340		2,841	
Eile	800		1,258	
		4,140		4,099
Ioncam Eile				
Cairtfhostú Árthaigh Taighde	2,028		2,542	
Baoi Sonraí – an Roinn Iompair	418		370	
Creat-Treoir na Straitéise Mara (DECLG)	479		996	
Natura (DAFM agus DECLG)	333		571	
Creat-Treoir Uisce maoinithe ag an EPA	940		956	
Tionscadal Mara NDP cómhaoinithe ag an EPA	107		0	
Tionscadal Mara NDP cómhaoinithe ag Teagasc	893		288	
Láithreáin Tástála Tonnfhuinnimh á Maoiniú ag an SEAI	1,085		766	
Tionscadal Cábla Chuan na Gaillimhe – Á Mhaoiniú ag an HEA	300		0	
Ilnithe agus Ioncam ó Chonarthaí Eile	2,041	8,624	1,294	7,783
IOMLÁN		12,764		11,882

Is creat é an Creat um Bailiú Sonraí atá i bhfeidhm ar fud na hEorpa chun sonraí a bhailiú, a bhainistiú agus a úsáid san earnáil iascaigh agus tugtar tacaíocht le haghaidh comhairle eolaíochta maidir leis an gComhbheartas Iascaireachta.

4. Seirbhísí Corparáideacha

	2013	2012
	€'000	€'000
Pá agus Tuarastail	1,232	1,209
Riarachán	2,713	3,014
Dímheas	474	265
IOMLÁN	4,419	4,488

Áirítear le costais riaracháin táille iniúchóireachta €19,270 in 2013 (2012: €19,270)

Nótaí leis na Ráitis Airgeadais

Don Bhliain dar Críoch an 31 Nollaig 2013

5. Seirbhísí Muirthimpeallachta agus Sábháilteacht Bhia

	2013	2012
	€'000	€'000
Pá agus Tuarastail: Croffhoireann	2,749	2,736
Foireann Chonartha an AE	42	78
	2,791	2,814
Cláir Taighde agus Forbartha	3,749	4,595
Dímheas	258	256
IOMLÁN	6,798	7,665

6. Seirbhísí Comhairleacha um Éiceachórais Iascaigh

	2013	2012
	€'000	€'000
Pá agus Tuarastail: Croffhoireann	1,913	1,926
Foireann Chonartha an AE	1,412	1,378
	3,325	3,304
Cláir Taighde agus Forbartha	1,383	1,401
Dímheas	78	110
IOMLÁN	4,786	4,815

7. Seirbhísí Aigéaneolaíochta agus Faisnéise

	2013	2012
	€'000	€'000
Pá agus Tuarastail	1,289	1,339
Cláir Riaracháin agus Cláir Forbartha	8,320	8,288
Dímheas	2,915	2,273
IOMLÁN	12,524	11,900

Ba ionann costais reatha iomlán na nÁrthach Taighde agus an ROV (feithicil cian-oibríochta) in 2013 agus €7.520m (2012: €8.060m). Aithnítear €7,179m den chaiteachas sin sa chuntas Ioncaim agus Caiteachais. Cuirtear €4.679m chun dochair Seirbhísí Aigéaneolaíochta agus Faisnéise (nóta 7) agus cuirtear an €2.5m eile chun dochair an Chláir Muirí RTDI agus SSTI (nóta 12). Baineann €0.341m le caiteachas atá caipitlithe agus áirithe i sócmhainní seasta (nóta 11).

Nótaí leis na Ráitis Airgeadais

Don Bhliain dar Críoch an 31 Nollaig 2013

8. Oifig Forbartha Muirí na hÉireann

	2013	2012
	€'000	€'000
Pá agus Tuarastail	230	326
Cláir Riaracháin agus Cláir Forbartha	435	569
Dímheas		0
IOMLÁN	665	895

9. Costais Tuarastail

	2013	2012
	€'000	€'000
Pá agus Tuarastail: Croífhóireann	134 7,414	136 7,538
Pinsinéirí agus Costais Phinsin	15 2,966	14 2,878
Foireann Chonartha agus costais phárolla eile	43 3,073	47 3,104
	192 13,453	197 13,520

Rinneadh laghduithe pinsin €0.433m ó thuarastail agus tarchuireadh é chuig an Roinn Talmhaíochta, Bia agus Mara.

10. Cuntas Caipitil

	2013	2012
	€'000	€'000
Iarmhéid amhail an 1 Eanáir	22,552	23,290
Aistriú (go)/ó Chuntas Ioncaim agus Caiteachais		
Maoiniú Caipitil	2,362	2,168
Amúchadh de réir dímheas sócmhainní	(3,726) (1,364)	(2,906) (738)
Iarmhéid amhail an 31 Nollaig	21,188	22,552

Nótaí leis na Ráitis Airgeadais

Don Bhliain dar Críoch an 31 Nollaig 2013

11. Sócmhainní Seasta

Déantar na Sócmhainní Seasta faoi mar a chuirtear in iúl sna ráitis airgeadais iad mar seo a leanas:

	Talamh & Foirgnimh	Árthaí Taighde	Trealamh Árthaigh	Daingneáin agus Feistis	Ríomhairí	Mótarfheithiclí	IOMLÁN
	€'000	€'000	€'000	€'000	€'000	€'000	€'000
Costas nó Luacháil							
Iarmhéid amhail an 1 Eanáir 2013	3,743	32,391	4,127	20,330	8,039	358	68,988
Suimiúcháin ar chostas Diúscairtí ag Costas		140	251	1,559	416	14 (18)	2,380 (18)
Costas amhail an 31 Nollaig 2013	3,743	32,531	4,378	21,889	8,455	354	71,350
Dímheas							
Iarmhéid amhail an 1 Eanáir 2013	926	14,686	3,656	19,048	7,820	300	46,436
Táille don bhliain Diúscairt ag Costas	75	1,918	296	1,141	282	32 (18)	3,744 (18)
Iarmhéid amhail an 31 Nollaig 2013	1,001	16,604	3,952	20,189	8,102	314	50,162
Glanluach de réir na Leabhar							
Amhail an 31 Nollaig 2013	2,742	15,927	426	1,700	353	40	21,188
Amhail an 31 Nollaig 2012	2,817	17,705	471	1,282	219	58	22,552

Tá ceanncheathrú Fhoras na Mara lonnaithe i Rinn Mhaoile, Órán Mór, Co. na Gaillimhe. Is faoi úinéireacht an OPW atá an foirgneamh. Ní íoctar aon chíos leis an OPW ar an áitreabh seo.

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12. NDP Mara (2000-2006), Beaufort agus NDP Mara (2007-2013)

B'ionann an maoiniú iomlán agus na suimeanna a cuireadh i bhfeidhm in 2013 agus é seo a leanas:

		2013	2012
		€'000	€'000
		NDP	€'000
		2007-2013	iomlán
Ioncam ón Oireachtas	(Nóta 2)	6,375	6,500
Ioncam Eile	(Nóta 3)	1,000	288
Ioncam Iomlán		7,375	6,788
Caiteachas:			
Suimeanna a íocadh le tríú páirtithe		6,659	5,546
Suimeanna a íocadh le Foras na Mara		913	919
Riarachán		178	307
Caiteachas Iomlán Cláir		7,750	6,772
(Easnamh)/Barrachas sa bhliain		(375)	16

NDP Mara 2007-2013

Faoi Fhochlár Taighde Mara an NDP, 2007-2013, dírtar infheistíocht i dtaighde mara sa tréimhse 2007-2013 ar chuspóirí, gníomhaíochtaí taighde agus torthaí Chasadh na Taoide, an straitéis náisiúnta eolais, taighde agus nuálaíochta mara a bhaint amach. Dírtar an maoiniú ar Bhearta agus ar Chláir Taighde na straitéis trí roinnt modhanna, lena n-áirítear glaonna iomaíocha le haghaidh tograí taighde (dámhachtainí bunaithe ar thionscadail, staidéar ar fhoinsí reatha, PhDanna, lardhochtúireachtaí, etc.) agus tairiscint le haghaidh soláthar bonneagair/seirbhísí. Tacaíodh le 142 tionscadal san iomlán suas go dtí deireadh 2013 faoi Fhochlár Taighde Mara an NDP. Tá 80 tionscadal díobh seo fós ar bun.

Ba ionann an caiteachas iomlán faoin bhFochlár Taighde Mara go dtí 31 Nollaig 2013 agus €57.5m. Ba ionann na gealltanais amhail an 31 Nollaig 2013 agus €12.6m.

Bíonn Tionscadail Taighde a bhronntar faoi réir conartha a chuireann in iúl go ndéanfar íocaíocht tosaigh tar éis an conradh a shíniú; d'fhéadfaí íocaíocht eatraimh a dhéanamh faoi réir feidhmíocht shásúil agus déanfar an íocaíocht dheireanach tar éis éilimh a fháil agus a fhíorú. Cuirtear caiteachas chun dochair sna ráitis airgeadais de réir Bheartas Cuntasafóichta 8.

Amhail an 31 Nollaig 2013, bhí íocaíochtaí gan íoc fós ar shuimeanna a gearradh ar na ráitis airgeadais mar seo a leanas (nóta 15).

	2013	2012
	€'000	€'000
Suimeanna gan íoc	218	0

Amhail an 31 Nollaig 2013, ba ionann na gealltanais a rinneadh ach nár gearradh ar na ráitis airgeadais go fóill maidir le tionscadail RTDI agus €12.6m; is é seo a leanas an miondealú lena mbaineann.

	Iomlán
	€'000
Gealltanais amhail an 01 Eanáir 2013	14,233
Geallta in 2013	6,147
Dídhílsithe in 2013	(67)
Íochta in 2013	(7,750)
Gealltanais amhail an 31 Nollag 2013	12,563

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13. Caiteachas

	2013	2012
	€'000	€'000
Costais Phárolla	10,330	10,496
Costais Phinsin	2,966	2,878
Costais Bhoird	63	39
Táille Bliantúil Iniúchóireachta	19	19
Árachas	219	240
Cíos, Rátaí agus Muirir Sheirbhíse	328	368
Costais Saoráide	1,657	1,766
Cumarsáid Teileafóin agus Sonraí	170	211
Costais TF	704	627
Costais Saotharlainne agus Oibre Allamuigh	786	878
Costais Riaracháin Eile	918	1,687
Costais Taistil	867	917
Tástáil Reachtúil, Taighde agus Suirbhéanna	3,710	4,195
NDP Mara (2007-2013)	5,250	4,272
Clár Am Loinge an NDP	2,500	2,500
Costais Oibríochta Árthaigh	4,679	5,394
Trealamh Éagsúil Eile	69	131
Fruiliú Trealamh agus Árthaí	947	159
Dímheas (Nóta 11)	3,726	2,906
Caiteachas iomlán i gCuntas Ioncaim agus Caiteachais	39,908	39,683

Maidir leis na figiúirí sa nóta ní áirítear caiteachas caipitil de €2.38m.

B'ionann costais i ndáil le taisteal coigríche a áiríodh faoi speansais taistil agus €338,492 in 2013.

14. Féichiúnaithe agus Réamhíocaíochtaí

	2013	2012
	€'000	€'000
Féichiúnaithe Trádála	359	140
Ioncam Conarthaí	2,961	2,604
Réamhíocaíochtaí	646	301
	3,966	3,045

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15. Creidiúnaithe agus Fabhrúithe

	2013	2012
	€'000	€'000
Creidiúnaithe Trádála	1,017	981
Ioncam Iarchurtha	856	837
Fabhrú RTDI (Nóta 12)	218	0
Fabhrúithe	292	565
Párolla and Fabhrúithe Ioncaim	86	92
	2,469	2,475

16. An Scéim Aoisliúntais agus an Scéim Phinsin Ranníocaigh do Chéilí agus Leanaí

Is áisíneacht reachtúil de chuid an Stáit é Foras na Mara, a bunaíodh faoi alt 3(1) den Acht um Fhoras na Mara, 1991 (Uimh. 2 de 1991). Foráiltear le halt 9(1) den Acht go ndéanfaidh an Foras scéimeanna chun sochair aoisliúntais a dheonú do bhaill foirne agus i ndáil le baill foirne, faoi réir cheadú an Aire. Tá dhá scéim fhormheasta, is iad sin an Scéim Aoisliúntais d'Fhoireann Fhoras na Mara 1998 agus Scéim Phinsin Ranníocaigh do Chéilí agus Leanaí Fhoras na Mara 1998, i bhfeidhm ag an bhForas i láthair na huaire. Cuirtear sochair scoir (cnapshuim agus pinsean) ar fáil sa chéad scéim thuas do bhaill foirne, agus sochair aisce bháis maidir le bás le linn seirbhíse. Faoin dara scéim thuas, cuirtear sochair phinsin ar fáil do chéilí a mhaireann agus do leanaí cleithiúnacha na ndaoine a fuair bás. Sroictear an ghnáthaois phinsin ar an dáta a bheidh 65 bliain d'aois slánaithe ag an mball. Sainmhínítear an dá scéim mar scéimeanna aoisliúntais le sochar sainithe. Íoctar ranníocaíochtaí aoisliúntais na mball foirne leis an Roinn Talmhaíochta, Bia agus Mara.

Fearacht scéimeanna aoisliúntais na seirbhíse poiblí i gcoitinne, ní chothaítear ciste faoi leith ná ní choimeádtar sócmhainní chun íocaíocht pinsean agus aiscí a mhaoiniú.

Chun tuairisc a dhéanamh de réir an Chaighdeáin um Thuairisciú Airgeadais 17 (athbhreithnithe) – Sochair Scoir, fuair an Foras comhairle ó achtúire cáilithe. D'ullmhaigh an t-achtúire luacháil chun na dliteanais a bhaineann leis na scéimeanna aoisliúntais a mheas an 31 Nollaig 2013.

Is iad seo a leanas na mórthoimhdí achtúireacha:

	2013	2012	2011
Méadú ar an ráta boiscithe (a)	2% in aghaidh na bliana	2% in aghaidh na bliana	2% in aghaidh na bliana
Méadú ar ráta tuarastail	4% in aghaidh na bliana	4% in aghaidh na bliana	4% in aghaidh na bliana
Méadú ar ráta pinsin	4% in aghaidh na bliana	4% in aghaidh na bliana	4% in aghaidh na bliana
Ráta liúntais na ndlíteanas scéime	5.5% in aghaidh na bliana	5.5% in aghaidh na bliana	5.5% in aghaidh na bliana

Is mar seo a leanas a mheastar meánionchas saoil don todhchaí a bheidh fanta de réir na dtáblaí básmhairreachta arna n-úsáid chun dliteanais phinsin a shocrú:

	2013	2012
Fear 65 bliain d'aois	22	22
Bean 65 bliain d'aois	25	25

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Ag glacadh leo seo agus le toimhdí eile agus ag cur mhodh chreidiúint réamh-mheasta an aonaid a leagtar amach in FRS 17 (Athbheithnithe) i bhfeidhm, tá an tsócmhainn mhaoinithe iarchurtha um pinsean agus an dliteanas pinsin mar seo a leanas:

	2013	2012
Dlitéanas pinsin fabhráithe iomlán	€28.2m	€27.5m

Ós rud é go bhfuil méaduithe pinsin faoi scéimeanna Foras na Mara bunaithe ar mhéaduithe tuarastail seachas ar mhéaduithe praghaís, níl gá le toimhde bhoilscithe praghsanna chun an luacháil seo a dhéanamh. Mar sin féin, ós rud é go mbíonn tagairt do ráta toimhde boilscithe riachtanach faoi FRS 17, bheadh an ráta thuas oiriúnach ar mhaithe leis seo.

Anailís ar Chostais Iomlána Phinsin gearrtha ar Chaiteachas

	2013	2012
	€'000	€'000
Costas Seirbhíse Reatha	1,900	1,900
Ús ar dhliteanais scéimeanna pinsin	1,500	1,400
Ranníocaíochtaí Fostaithe	(434)	(422)
	2,966	2,878

Anailís ar an tsuim aitheanta i ráiteas ar ghnóthachain agus ar chaillteanais aitheanta iomlána (STRG)

	€'000	€'000
Gnóthachain agus (caillteanais) ó thaithí	2,339	1,360
Athruithe i dtoimhdí mar bhunús le luach reatha na scéime	0	0
Gnóthachan agus (caillteanas) achtúireach aitheanta in STGRL	2,339	1,360

Glanmhaoiniú iarchurtha le hAghaidh Pinsean Aitheanta sa bhliain

	2013	2012
	€'000	€'000
Costas Seirbhíse agus Úis Reatha	3,400	3,300
Lúide sochair a íocadh sa bhliain	(362)	(443)
	3,038	2,857

Aithníonn Foras na Mara gurb ionann méideanna atá dlite ón Stát agus sócmhainn a chomhfhreagraíonn don dliteanas neamhchistithe iarchurtha um pinsin ar fhoras na dtoimhdí a míníodh thuas agus roinnt imeachtaí san am a chuaigh thart. Ar na himeachtaí seo, tá an bonn reachtúil le bunú na scéime aoisliúntais agus an bheartais agus an chleachtais atá i bhfeidhm maidir le maoiniú pinsean na seirbhíse poiblí, lena n-áirítear ranníocaíochtaí fostaithe agus an próiseas bliantúil meastacháin. Níl aon fhianaise ag Foras na Mara nach bhfreastalóidh an beartas maoinithe seo mar is gnách ar na suimeanna sin de réir an chleachtais reatha. Ba ionann an tsócmhainn mhaoinithe iarchurtha le haghaidh pinsean amhail an 31 Nollaig 2013 agus €28.2 milliún (2012: €27.5 milliún). Tá cainníochtú an dliteanais bunaithe ar na toimhdí Airgeadais a leagtar amach sa Nóta seo. Cuirtear na toimhdí a úsáidtear, atá bunaithe ar chomhairle ghairmiúil achtúire, in iúl don Roinn Talmhaíochta, Bia agus Mara, ach ní chomhaontaítear iad go foirmiúil leis an Roinn.

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Anailís ar ghluaiseacht i nglandliteanas pinsin le linn na bliana

	2013	2012	2011	2010	2009	2008
	€'000	€'000	€'000	€'000	€'000	€'000
Easnamh ag tús na bliana	27,501	26,004	25,900	24,700	19,300	18,300
Costas Seirbhíse Reatha	1,900	1,900	2,200	2,100	1,900	1,900
Ús ar Dhliteanais Scéimeanna	1,500	1,400	1,400	1,400	1,100	1,000
(Gnóthachan)/Caillteanas achtúireach a aithnítear sa STRGL	(2,339)	(1,360)	(3,080)	(2,075)	2,625	(1,679)
Sochair a íocadh sa bhliain	(362)	(443)	(416)	(225)	(225)	(221)
Easnamh ag deireadh na bliana	28,200	27,501	26,004	25,900	24,700	19,300

Stair Oibleagáidí le Sochar Sainithe

	2013	2012	2011	2010	2009	2008
	€'000	€'000	€'000	€'000	€'000	€'000
Oibleagáidí le sochar sainithe	28,200	27,501	26,004	25,900	24,700	19,300
Gnóthachain/(Caillteanais) ó thaithí ar Dhliteanais Scéimeanna	2,339	1,360	3,080	2,075	(2,625)	1,679
Céatadán de Dhliteanais Scéimeanna	8.29%	4.96%	11.8%	8.0%	(10.6%)	8.7%
Gnóthachain/(Caillteanais) ó thiomhdí ar Dhliteanais Scéimeanna	0	0	0	0	0	0
Céatadán de Dhliteanais Scéimeanna	0%	0%	0%	0%	0%	0%

Is é €6,436,000 an gnóthachan achtúireach carnach atá aitheanta sa ráiteas ar ghnóthachain agus caillteanais aitheanta iomlána.

17. Gealltanais léasa

Léasanna oibriúcháin

Áitíonn Foras na Mara áitribh faoi léas sna láithreacha a leanas:

Léas 1: 80 Sráid Fhearchair, Baile Átha Cliath 2 – cuireadh tús leis i 1993 ar feadh tréimhse 22 bliain. Déantar athbhreithniú cíosa air gach cúig bliana. Déantar an cíos a athbhreithniú gach cúig bliana, agus ní bheidh briseadh léasa ann go dtí deireadh an léasa in 2015.

Léas 2: Páirc Oifigí na Páirce Móire, Gaillimh – cuireadh tús leis i 1999 ar feadh tréimhse 25 bliain. Déantar athbhreithniú cíosa air gach cúig bliana.

Léas 3: Trádstóras Red Sail, Calafort na Gaillimhe – cuireadh tús leis in 2013 ar feadh tréimhse 11 bliain. Déanfar athbhreithniú cíosa air in 2018.

Is ionann an muirear cíosa bliantúil reatha as na léasanna seo agus €375,002 (2012: €327,720).

	2013	2012
Ag dul in éag laistigh de 1 bhliain	0	0
Ag dul in éag idir bliain 2 agus bliain 5	235,735	235,735
Ag dul in éag ina dhiaidh sin	139,267	91,985

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18. Infheistíocht

Tá scair 1.3% atá go hiomlán caolaithe ag Foras na Mara i gcomhlacht ar a dtugtar Wavebob Ltd. Bunaíodh an comhlacht seo chun coincheap a fhorbairt maidir le Tonnfhuinneamh a sheachadadh. Is é €127,000 costas iomlán an deontais infheistíochta a bhí ag Foras na Mara. Ós rud é nárbh fhéidir luach na hinfeistíochta seo a mheas go cruinn, ní raibh na scaireanna mar chuid den chaipiteal sa Chlár Comhardaithe. Foirceannadh an chuideachta an 26 Márta 2013. Ní raibh aon chostais eile tabhaithe ag Foras na Mara.

19. Idirbhearta le Páirtithe Gaolmhara

Bhunaigh Foras na Mara, DCU agus OÉ Gaillimh SmartBay Ltd, mar chuideachta faoi theorainn ráthaíochta le linn mhí Feabhra 2012 d'fhonn saoráidí tástála agus taispeántais mara na hÉireann a bhainistiú i gCuan na Gaillimhe. Faigheann an chuideachta maoiniú ón HEA a úsáidtear chun foireann a mhaoiniú chun costais oibríochta na cuideachta a íoc sa tréimhse idir 2012 agus 2015. Is í Ollscoil Chathair Bhaile Átha Cliath an phríomheagraíocht taighde a sholáthraíonn an maoiniú HEA do SmartBay. Tá cuntas ag Ollscoil Chathair Bhaile Átha Cliath den ioncam a fuarthas ón HEA agus den chaiteachas a thabhaigh SmartBay Ltd.

Is Comhalta Boird é Príomhoifigeach Feidhmiúcháin an Fhorais agus is é Ceann Seirbhísí Corparáideacha an Fhorais Rúnaí na Cuideachta. Le linn 2013, thug an Foras maoiniú €38,016 do SmartBay Ltd (2012 €320,814). Tá an caiteachas sin áirithe faoi chaiteachas Seirbhísí Aigéaneolaíochta agus Faisnéise i Nóta 7 san cuntais.

20. Clár leasanna

Tá nósanna imeachta curtha i bhfeidhm ag an bhForas de réir na dtreoirilínte a d'eisigh an Roinn Caiteachais Phoiblí agus Athchóirithe faoi nochtadh leasa ag comhaltaí an Bhoird agus tá an Foras tar éis cloí leis na nósanna imeachta sin. Ní raibh aon idirbheart i rith na bliana ó thaobh ghníomhaíochtaí an Fhorais de ina raibh leas tairbhiúil ag comhaltaí an bhoird.

21. Táillí Boird, Freastal ar an mBord agus Tuarastal an Phríomhfheidhmeannaigh

Chloígh an Foras leis an gCód nua Cleachtais um Rialú Comhlachtaí Stáit a d'fhoilsigh an tAire Airgeadais an 15 Meitheamh 2009. Ba é an luach saothair iomlán a íocadh le Príomhfheidhmeannach Fhoras na Mara i leith 2013 ná €141,358. Níor íocadh aon rud leis an bPríomhfheidhmeannach faoi scéim phá i gcoibhneas le feidhmíocht ná níor íocadh sochair ar bith eile mar chuid de phacáiste luach saothair. Níl an Príomhoifigeach Feidhmiúcháin i dteideal aon rud lasmuigh de shamhail scéim na hearnála poiblí ó thaobh pinsin de. Ba ionann na costais iomlána chun críche gnó a íocadh leis an bPríomhoifigeach Feidhmiúcháin le haghaidh 2013 agus €14,604 ina n-áirítear costais €1,328 a bhain le taisteal coigríche.

Rinneadh na híocaíochtaí seo a leanas le comhaltaí Bhord Fhoras na Mara in 2013

Comhalta Boird	Catagóir 3	Olltáillí 2013	Costais 2013	Iomlán 2013
Jim Fennell	Cathaoirleach	0	1,697	1,697
Michael Walsh	Stiúrthóir	0	1,568	1,568
Lorcan Ó Cinnéide	Stiúrthóir	7,695	6,755	14,450
Francis Coyle	Stiúrthóir	7,695	6,308	14,003
Paul Hyde	Stiúrthóir	7,695	7,049	14,744
David Owens	Stiúrthóir	7,695	1,865	9,560
Patricia Barker	Stiúrthóir	2,073	282	2,355
Donal Kelly	Stiúrthóir	4,488	0	4,488
		37,341	25,524	62,865

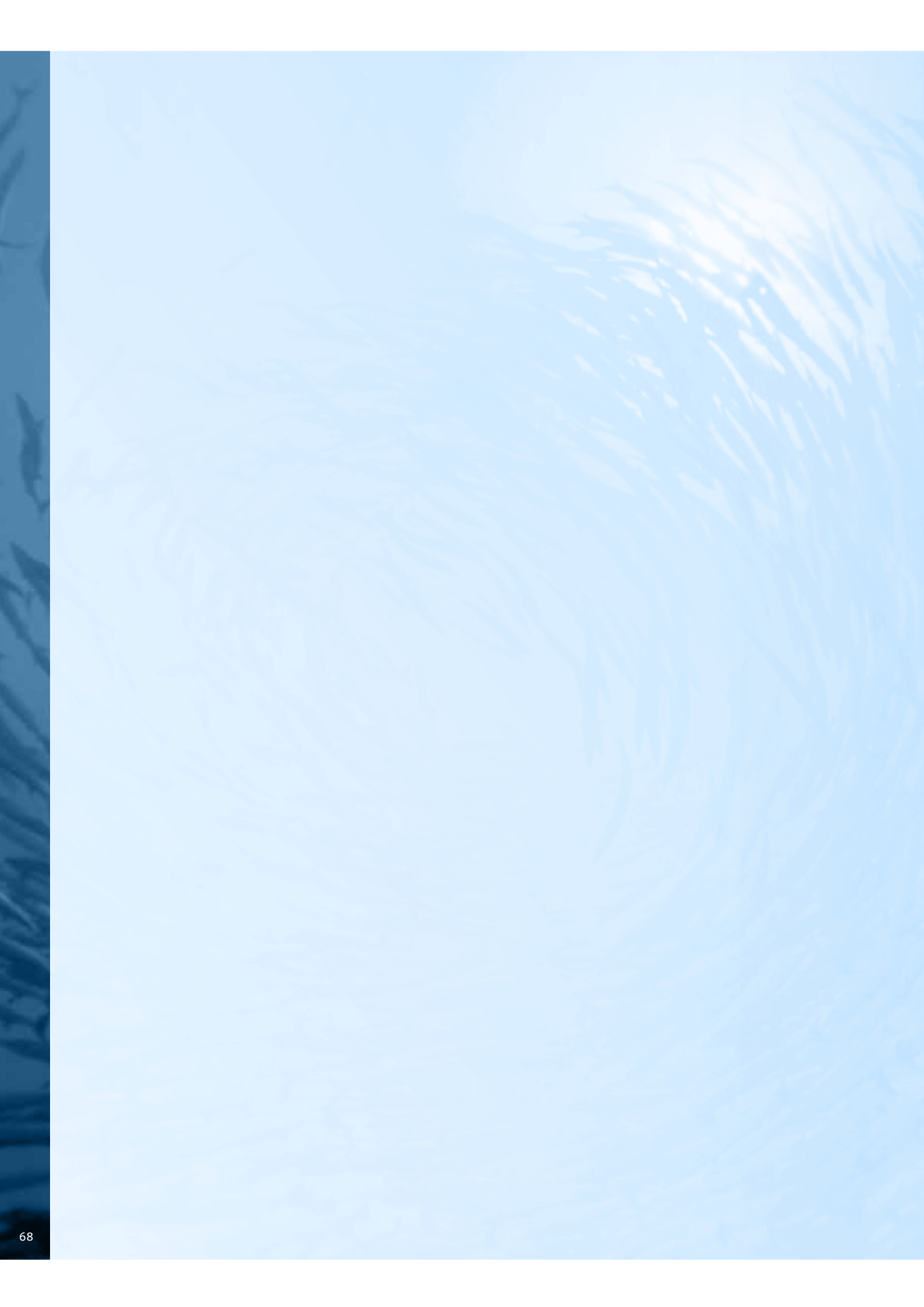
Nótaí leis na Ráitis Airgeadais

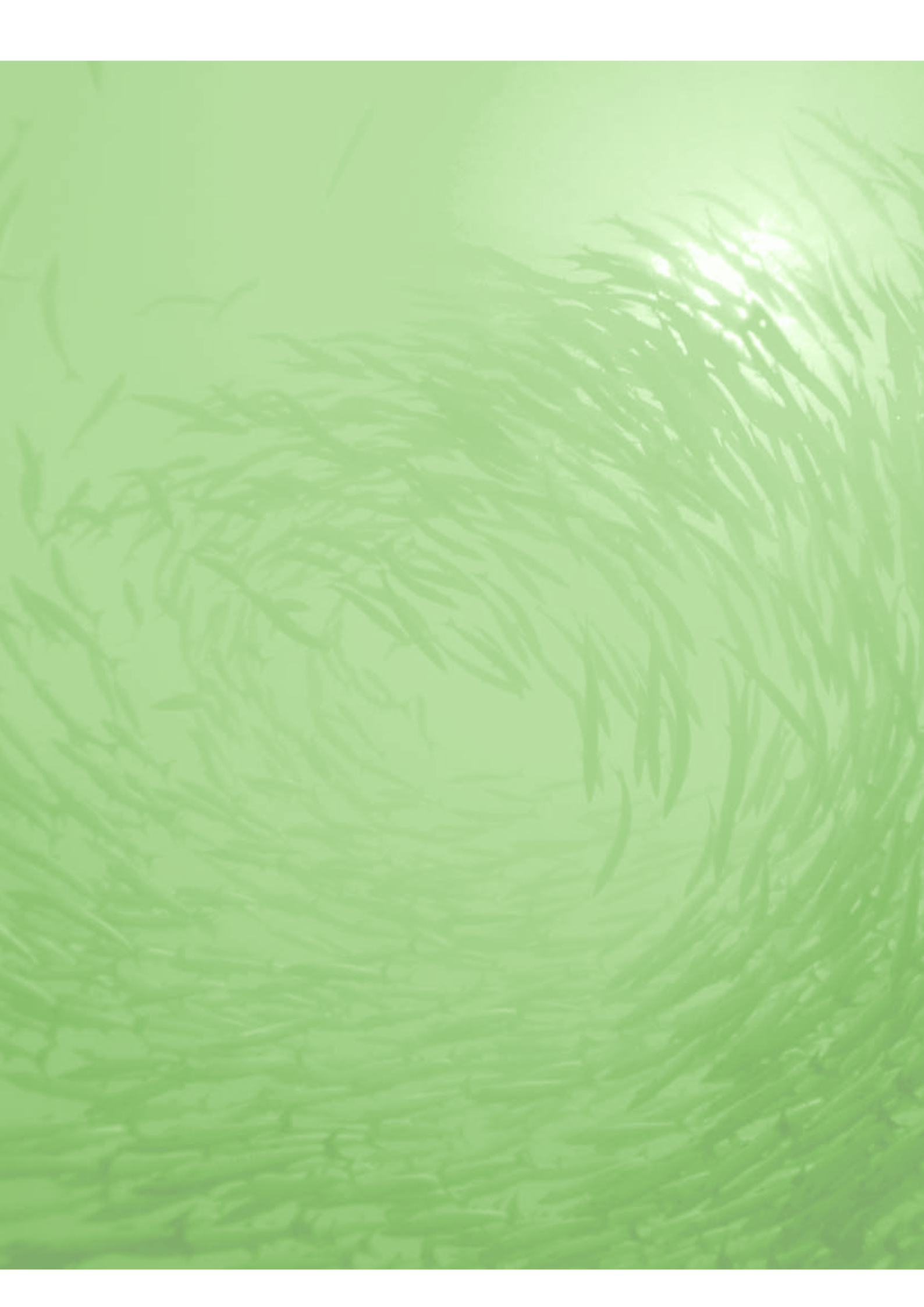
Don Bhliain dar Críoch an 31 Nollaig 2013

Comhalta Boird	Catagóir 3	Cruinnithe Boird 2013	Cruinnithe Boird ar ar Freastalaíodh in 2013	Tús/Deireadh Téarma
Jim Fennell	Cathaoirleach	10	10	Deireadh Téarma Samhain 2013
Lorcan Ó Cinnéide	Stiúrthóir	10	10	
Francis Coyle	Stiúrthóir	10	10	
Paul Hyde	Stiúrthóir	10	10	
David Owens	Stiúrthóir	10	9	
Patricia Barker	Stiúrthóir	10	3	Tús leis an Téarma in Aibreán 2013
Donal Kelly	Stiúrthóir	10	5	Tús leis an Téarma i mBealtaine 2013

22. Faomhadh an Bhoird

D'fhaomh an Bord na ráitis airgeadais an 09/12/2014.





Is féidir leagan Gaeilge de thuarascáil
bhliantúil Fhoras na Mara a íoslódáil ó
www.marine.ie

www.vermiliondesign.com

www.marine.ie



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Ceanncheathrú agus Saotharlanna

Foras na Mara
Rinn Mhíl
Órán Mór
Co. na Gaillimhe.
Guthán: +353 91 387 200
Facs: +353 91 387 201
Ríomhphost:
institute.mail@marine.ie

Oifigí agus Saotharlanna Réigiúnacha Fhoras na Mara

Foras na Mara
80 Sráid Fhearchair
Baile Átha Cliath 2
Guthán: +353 1 476 6500
Facs: +353 1 478 4988

Foras na Mara
An Fhoirnéis
Baile Uí Fhiacháin
Co. Mhaigh Eo
Guthán: +353 98 42300
Facs: +353 98 42340