SCOTLAND EUROPA



In partnership with





EU funded project Case-Studies from Scottish partners

As part of organising the "EU Cooperation and Innovation - delivering value from our European partnerships" event held in Edinburgh on the 29th of September 2017, we have collated case-studies of EU funded projects, which help tell the story of the importance of #EUcooperation.

We invited a broad range of organisations to submit case-studies, which were self selected by their project managers.

The views expressed within the case-studies are those of the authors and do not necessarily represent the views of Scotland Europa or its members and partners.

If you would like to share your experiences or indeed offer your own case studies for publication on the Socttish EU Funding Portal, we would be very pleased to hear from you.

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Contents

Towards Regional specialisation for Smart growth spirit (TRES)	5
Ocean Energy ERA-NET (OCEANERA-NET)	7
Additive Printing for Cell-Based Analysis (ANAPRINT)	9
Create Converge	11
Advanced Limes Applications (ALApp)	13
Sustainable Accessibility between Hinterlands and Gateways around the North	1
Sea (SustAccess)	15
Synthesis of Systematic Resources (SYNTHESYS3)	17
Strategic Transnational Cluster Cooperation - unlocking the potential for	
regional innovation (Northern Connections)	19
Enabling Future Arrays in Tidal (EnFAIT)	21
Integrated aquatic resources managment across Scotland, Ireland and Norther	rn
Ireland (IBIS)	23
A New Approach for Rural Development in Georgia	25
Innovative Learning Approaches in Staff Training and Young Offenders'	
Employability Support (ILA Employability)	27
Aberdeen Hydrogen Bus Project (HyVLow and HyTransit)	30
Recruitment and Retention of Health Care Providers and Public Service Sector	
Workers in Remote Rural Areas (Recruit & Retain)	33
Novel biocontrol agents for insect pests from neuroendocrinology	
(nEUROSTRESSPEP)	37
Supporting Higher Education to Integrate Learning Analytics (SHEILA)	40
Creating a leadership for maritime industries - New industries in Europe	
(CLIPPER)	42
Building a local digital innovation culture (LIKE!)	44
Implementing Transnational Telemedicine Solutions (ITTS)	46
Scottish European Growth Co-Investment Programme (SEGCP)	49
Slow Adventure in Northern Territories (SAINT)	51
EU US eHealth Work Project (EU US eHealth Programme)	53
Hydrogen Transport Economy (HyTrEc)	55
Circular Ocean	57
Compact Ultrafast Laser Sources Based on Novel Quantum Dot Structures	
(FAST-DOT)	60
Marine Energy Research Innovation and Knowledge Accelerator (MERIKA)	63

Enhancing policies through interregional cooperation: New industrial value	
chains for growth (S34Gowth)	66
Energy Efficiency for EU Historic Districts' Sustainability (EFFESUS)	68
Tools for Assessment and Planning of Aquaculture Sustainability (TAPAS)	70
North Sea Solutions for Innovation in Corrosion for Energy (NeSSIE)	72
North Atlantic Climate (NACLIM)	75
City Logo	77
Integrated Environmental Solutions Ltd	79

Towards Regional specialisation for Smart growth spirit (TRES)

INTERREG Europe IVC Programme

PARTNERS

- 1. Tecnalia (Spain)
- 2. Regional Development Agency of the Basque Country (SPRI) (Spain)
- 3. Pannon Business Network Association (Hungary)
- 4. Scottish Enterprise (Scotland)
- 5. Valga County Government (Estonia)
- 6. Piedmont Region (Italy)
- 7. Bucharest-Ilfov Regional Development Agency (Romania)
- 8. Lubelskie Voivodeship (Poland)
- 9. The Baltic Institute of Finland (Finland)
- 10. Stuttgart Region Economic Development Corporation (Germany)

Project Launch 01 January 2012

Project Completed 02 August 2017

Further Information

Scottish Enterprise Gunjan Yadav gunjan.yadav@scotent.co.uk Website http://www.tr3s-project.eu/

OVERVIEW

For Scotland it has helped shape the thinking and development of:

- Customer driven innovation which led to the development of a Seek and Solve initiative to support SMEs working as solvers with large companies as seekers of solutions
- How to extend business Innovation support and how this can be developed and delivered in partnership through Wider Innovation
- Open innovation which led to the development of an Open Innovation programme through which companies are supported to developing a culture of innovation, leading to demand for innovation
- How you can work more intensely on innovation capability with a group of businesses and the core elements of an Innovation Strategy which is now part of the Innovation Master Class series
- Public procurement innovation which saw the launch of the first NHS SBRI (Small Business Research Initiative) in Scotland

BENEFIT DERIVED FROM EU COLLABORATIVE ENGAGEMENT

The value from this collaborative EU engagement has been the opportunity to understand and examine how some of the other leading innovation regions in Europe are developing their policies to support regional economies, what works and why. This has directly contributed to the evolution of innovation policy in Scottish Enterprise as evidenced above.

The other benefit is to have a framework that allow the opportunity to assess Scotland's position and performance relative to that of the other regions and get feedback from a group of highly experienced economic development specialists from across Europe.

HOW THE PROJECT AFFECTED CHANGE

Scottish Enterprise has taken learning from the TRES project to help refresh our innovation support offering and we continue to use the contacts and relationships build with people in other Innovation and Development agencies to further our approach and to build consortia for other EU funded projects.

LESSONS LEARNED

Learning and sharing with other EU partners pays much bigger dividends than the financial funding from these projects.





The best bit about the project is definitely the enriching experience of working with some amazing people from interesting places and developing an appreciation of different places and cultures - vital to build a forward looking nation!

Gunjan Yadav, Project Manager, Scottish Enterprise

Ocean Energy ERA-NET (OCEANERA-NET)

Framework Programme 7

PARTNERS	Project Launch
	01 December 2013
Scottish Enterprise (UK)	
Engineering and Physical Sciences Research Council (UK)	
Innovate UK (UK)	Project Completed
Knowledge Transfer Network (UK)	28 February 2018
The Sustainable Energy Authority of Ireland (Ireland)	
Swedish Energy Agency (Sweden)	
Instituto de Desarrollo Economico del Principado de Asturias (Spain)	Further Information
Platforma Oceanic de Canarias (Spain)	Scottish Enterprise
Sociedad para el Desarrollo Regional de Cantabria (Spain)	Karen Fraser
Ente Vasco De La Energia (Spain)	Karen fraser@scotent.co.uk
Agence de l'Environnement et de la Maitrise de l'Energie (France)	
Vlaams Gewest (Belgium)	
Flanders Innovation and Entrepreneurship (Belgium)	Website
Netherlands Enterprise Agency (Netherlands)	http://oceaneranet.eu
Centro para el Desarrollo Tecnologico Industrial (Spain)	
Fundacao para a Ciencia e a Tecnologia (Portugal)	

OVERVIEW

The project is a collaboration between economic development, energy and innovation support agencies who have a common interest in funding research and development projects and in the development of the ocean (wave, tidal, OTEC and salinity gradient) energy sector. The objective is to improve coordination between national and regional agencies to increase the impact of funding. The main focus has been on two joint calls for trans-national, collaborative R&D projects in ocean energy. The budget for the 2 calls was €13m, provided by the funding agencies. A total of 15 projects were selected for funding, covering a wide range of topics important to the sector. One is completed, the others are in implementation. The impacts from these projects will be quantified on completion.

BENEFIT DERIVED FROM EU COLLABORATIVE ENGAGEMENT

The project has had benefits for the project partners from exchanging experience and joint working to improve our understanding of the ocean energy sector and how best we can support it, and trusted partners for future projects. It has led to the successful application for funding for the follow-on OCEANERA-NET project which has secured €6m of EU funding under Horizon 2020, with a total funding pot of €17m made available to fund collaborative demonstration projects. Strong relationships have been built with the European Commission and key stakeholders and the project has established a community of companies, particularly SMEs, and research organisations that have got to know each other through OCEANERA-NET events, calls and funded projects, creating a strong base for future collaboration.

HOW THE PROJECT AFFECTED CHANGE

The project has built Scottish Enterprise's capacity for involvement in, leadership and management of EU funded projects and has demonstrated the value of working with other agencies to support collaborative innovation. This has led directly to the follow on OCEANERA-NET COFUND and the Scottish Enterprise Energy and Low Carbon Technologies team is now actively involved in a number of projects.

LESSONS LEARNED

The involvement in the project has provided a lot of learning in terms of effective management of multi-partner projects and the importance of building good relationships. We have learnt a lot about the ERA-NET joint funding model, which has pros and cons, and how to make best use of it, and considered options for improvement.

Engagement with stakeholders has been key to the success of the project and built a base for future collaboration, in particular active, face-to-face engagement through events, workshops and the joint calls.



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OCEANERA-NET has played a key role in supporting innovation in the ocean energy sector and facilitating an active community of companies, particularly SMEs, and research organisation, providing a basis for future collaboration.

Karen Fraser, Scottish Enterprise

Additive Printing for Cell-Based Analysis (ANAPRINT)

Horizon 2020 Programme – SME Instrument

PARTNERS

AvantiCell Science Ltd (UK)

OVERVIEW

The ANAPRINT project which is funded via the SME Instrument (Phase 2) has assisted AvantiCell Science Ltd pursue a global market opportunity in the field of preclinical life science, by integrating and optimising technologies which demonstrate technical and commercial viability in the scalable manufacturing of complex cell models. These models are widely used by industry to test biological activity and biosafety of materials ranging from candidate drugs through healthcare products and functional foods to medical devices.

No means of scalable manufacture presently exists. Our technical solution is to use ethically-sourced human cells; to assemble cell models by additive printing; to supply the models to customers as pre-assembled, frozen products. The solution is unique, proprietary and highly positive-disruptive in its industrial sector.

Project Launch 01 November 2015

Project Completed 30 April 2018

Further Information

AvantiCell Science Ltd Colin Wilde colin.wilde@avanticell.com

Website

http://www.avanticell.com/tec hnologies/projects/anaprint

BENEFIT DERIVED FROM EU COLLABORATIVE ENGAGEMENT

The EASME-driven SME Instrument programme comprehensively supports the commercial ambition of individual European SMEs with exceptional, positive-disruptive technologies. As such, ANAPRINT is the sole award recipient. Unlike the other Framework and Horizon 2020 projects to which AvantiCell has contributed, where collaboration and cross-fertilisation of scientific ideas can bring rewards of technical innovation and new scientific knowledge, the single participant SME Instrument model acknowledges this competition's aim of wealth creation and European industry advancement. This ethos has been a strong catalyst of AvantiCell business evolution, which has happened alongside the progressive achievement of ANAPRINT technical milestones.

HOW THE PROJECT AFFECTED CHANGE

ANAPRINT has accelerated both the technical development of an innovative product portfolio whilst supporting activities that ensure its commercial readiness, target-market focus and industry visibility. This has been assisted by access to EASME-supported business

mentoring, and supported by participation as an "SME Instrument Champion" in overseas trade fairs,

The impact of this innovative approach, unique amongst European programmes, has been reflected in a progressive uplift in AvantiCell market traction, and a growing interest from prospective new investors.

LESSONS LEARNED

The integrated nature of the project has provided valuable lessons on product launch, and the organizational structures needed to coordinate technical goal attainment with prospective customer engagement. The installation of these operational structures, and the extension of project management principles across the entire product development process, has consolidated AvantiCell's transition from an R&D-focused business to commercial maturity.





The pivotal point in our ANAPRINT project has been the market launch of our first Cryotix[™] plug and play cell-based analysis kit. This first-to-market product arguably represents the next generation of cell-based analysis, and its launch with high impact, enabled by the EASME Overseas Trade Fair programme, is a landmark in AvantiCell' s business development.

Colin J Wilde PhD, Chief Scientific Officer

Create Converge

North Sea Region VB Programme

PARTNERS

Dundee City Council/FifeScreen+TayScreen/Digital Dundee, Scotland (UK) Abertay University, Scotland (UK) Filmby Aarhus (Denmark) Filmförderung Hamburg Schleswig-Holstein (Germany) Media Evolution (Sweden) Screen South, England (UK) Subatomic (Netherlands) University of Hertfordshire, England (UK) VIA University College (Denmark)

Project Launch

02 April 2016

Project Completed 31 March 2019

Further Information

Dundee City Council

Julie Craik

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Website <u>http://www.createconverge.eu</u>

OVERVIEW

Creative Digital Solutions to Show, Tell and Sell: this new €3

million project is helping companies in the North Sea region make the most of creative technology to show, tell and sell. The Hollywood movie "Interstellar" saw calls from eminent science journals for it to be shown in schools. Why? Because top scientists said it accurately showed wormholes in space.

The partners in the project celebrated this news because it's a story of creative technology working in partnership with science to entertain, educate and inform. Creative technologies are seeing increasing convergence. Using the perfect mix is invaluable for helping people to enjoy content, understand information and interact with it.

Beyond entertainment, they offer applications for training, service delivery and marketing. For example, people could watch a film about ocean diving, get more information on different habitats and then try a virtual dive, all from the safety of the sofa. Even for experienced divers, they could learn about equipment before installing it underwater. Companies selling equipment could promote it and demonstrate how it works all in glorious 3D or virtually using a headset.

The project is all about fostering collaboration between producers of animation, live action, visual effects, virtual reality and games and with markets for digital solutions beyond entertainment from architecture to fashion, energy to medicine.

BENEFIT DERIVED FROM EU COLLABORATIVE ENGAGEMENT

Whether content is for entertainment, professional or industrial purposes, it requires the necessary facilities and technology for production and, crucially, production services and workforces with specialist skills. Global consumer demand for film, TV and video games has consistently risen over decades from the birth of cinema to the advent of broadcast television, the internet and smart, mobile devices. Screen media goes far beyond

entertainment. It is also used across many industries and sectors - from medicine to energy, architecture to fashion - for education, training and service delivery. And demand is growing for these services also.

Countries whose regions form the NSR include locations that are key global centres for production and post-production (including editing and addition of computerised visual effects and animation) of content including feature films and TV, both home-grown and inward investing. For example, at the top end, over the last 5 years, the UK has successfully attracted its fair share of projects with budgets over US\$100m and has increased exports of UK content and formats. This has particularly been driven by the extension of tax credits to high end TV, postproduction, animation and games. This has equally presented a challenge and created a skills shortage previously predicted in the Next Gen report on the future of the UK visual effects and games sectors.

Partners in CC recognise that similar challenges and problems are encountered for information sharing and service delivery by screen entertainment and other sectors such as medicine, architecture, engineering and construction. They recognise the need to develop economies of scale that are not being achieved within eligible individual member countries/regions of the NSR. No single eligible region has the corporate tools, expertise and capacity that are required to deliver the holistic service needed and compete at European and global levels.

The sector also faces competition from regions such as the Pacific Rim where there are industry subsidies and sector investment well beyond that available in the NSR. Collaboration and pooling of resources offers a means to address this challenge.

The NSR is home to developing centres of expertise and skills. People working in such sectors also tend to be highly mobile; therefore transnational solutions are an appropriate response with transnational, virtual, cooperative working activities helping to deliver common solutions.





Here to make waves and showcase the North Sea region's digital creativity. We' re on a mission to help companies move into the spotlight and get the help they need to continue making awesome, kick-ass digital products.

Julie Craik, Project Manager, Dundee City Council

Advanced Limes Applications (ALApp)

Creative Europe Programme

PARTNERS

Historic Environment Scotland (UK), the lead public body established to investigate, care for and promote Scotland's historic environment, as Project Coordinator; the Bavarian State Office for Monument Conservation (Germany), EduFilm & Medien (Austria) and the Centre for Digital Documentation and Visualisation (Scotland)

OVERVIEW

ALApp is developing and disseminating digital technologies and content for advanced mobile applications (apps) to interpret the transnational World Heritage Site Frontiers of the Roman Empire, with a focus on the Antonine Wall in Scotland and the Raetian Limes in Bavaria. Supported by the European Union's Creative Europe programme, the project scans archaeological artifacts and sites and makes the produced 3D objects available in smartphone and tablet apps using augmented and virtual reality. These activities are supported by stakeholder events and publications for a variety of audiences.

BENEFIT DERIVED FROM EU COLLABORATIVE ENGAGEMENT

The European collaboration allows us to accelerate, advance and extend our current World Heritage activities, by developing more digital content and using new technological dissemination methods. The European aspect of ALApp is particularly suitable for the content developed, as it relates to a European transnational World Heritage Site. The same app technology will be used for the Scottish and Bavarian apps and will later be transferred across Europe to other sites relating to the archaeology of the Frontiers of the Roman Empire. Furthermore, the collaboration helps to exchange experiences and knowledge between the project partners, both with regard to technological aspects as well as site-related, comparative audience research.

HOW THE PROJECT AFFECTED CHANGE

ALApp is allowing us to develop more digital content for our Antonine Wall app and present the content in state-of-the-art formats (augmented and virtual reality). Thereby, the project is helping us to perform our current World Heritage activities faster and more rigorously. The project is also enabling us to critically review our approaches to the contents' presentation through audience research, conducted jointly by the German and Scottish partners. The international dissemination activities (including seminars and a public international conference) are an excellent way to engage with international partners in the fields of digital heritage presentation and World Heritage management, especially with a

> Networking Scotland in Europe www.scotlandeuropa.com

Project Launch 01 May 2016

Project Completed 30 April 2019

Further Information

Historic Environment Scotland Carsten Hermann carsten.hermann@hes.scot

Website www.alapp.eu focus on locations of the World Heritage Site Frontiers of the Roman Empire as well as locations which intent to join this World Heritage.

LESSONS LEARNED

Approaches to heritage interpretation vary between Germany and Scotland. ALApp is providing us with an excellent opportunity to learn from each other about these differences. Furthermore, the project is giving us the fantastic opportunity to reach a wider audience, both with regard to specialist stakeholders and members of the general public interested in the archaeology of the World Heritage Site Frontiers of the Roman Empire.





"Over the last twelve months we have made great strides in digitally interpreting the Antonine Wall. Thanks to this significant commitment from Creative Europe, as well as Historic Environment Scotland's own substantial investment, we are now able to build on that work and expand our use of innovative technologies to engage the widest audience possible."

Dr. Patricia Weeks, Antonine Wall World Heritage Site Coordinator for Historic Environment Scotland

Sustainable Accessibility between Hinterlands and Gateways around the North Sea (SustAccess)

North Sea IIIB Programme

PARTNERS

VZW Mobiel Kortrijk (BE) Padborg Udviklingscenter (DK) Emsland District (Landkreis Emsland), (DE) Vest-Agder Fylkeskommune (NO) Municipality of Sluis (NL) Aberdeenshire Council (UK) Perth and Kinross Council (UK) Essex County Council (UK) Southend Borough Council (UK)

OVERVIEW

The central aims of the project were to improve the accessibility between rural areas/hinterlands and gateways around the North Sea and secondly to develop the integration of hinterland areas in national and international transport networks. Emphasising an increased use of more

sustainable modes of transport, the project covered both goods and passenger transport.

The overall aim of the project was to raise awareness of the Hinterland - Gateway concept at the political level. Partner activities and pilot projects included a wide variety of activities such as supporting the development of different gateway cities and their connection to their hinterland as well as improving public transport and making it more accessible.

For Perth and Kinross, the Sustaccess Project has played a vital role in the development of the Harbour by funding important studies into the long term direction of Perth Harbour as an inspirational pilot example. Situated 30 kilometres inland in the estuary of the river Tay and within a 90 minute drive of Perth, the harbour serves the Scottish inland and 90% of the population. Accessibility improvements would strengthen Perth's position as a freight gateway. Research had been carried out regarding the creation and links with the new rail head and supporting quay extension by providing additional berthing, Harbour dredging and new system of navigational aids and improved tide level monitoring.

BENEFIT DERIVED FROM EU COLLABORATIVE ENGAGEMENT

The SustAccess project achieved an increased knowledge and awareness about the public transport interchanges, promotion of biking and methods of user and stakeholder involvement, particularly with a focus on peripheral areas.

Networking Scotland in Europe www.scotlandeuropa.com Project Launch 27 February 2004

Project Completed 30 September 2007

Further Information Perth & Kinross Council Serge Merone SMerone@pkc.gov.uk

Website goo.gl/9KhHS5 At the various "Road Shows" in September 2007, the results of the freight and passenger strands in SustAccess were presented to major stakeholders in the different regions; this included port authorities, terminal operators, transport operators, scientific institutions and neighbouring authorities. Hence the project supported a cross-sectoral sharing of gained knowledge about strategies and concepts in the Gateway Hinterland perspective

HOW THE PROJECT AFFECTED CHANGE

The SustAccess project has from the start aimed at involving politicians in the project work where for example the chairman of the steering group was a leading regional politician. At major conferences from most of the project partners, politicians played a reasonable role in the delegations. This enabled the project to address the access items directly to responsible politicians.

The Lead Partner in particular arranged various feedback meetings with leading regional politicians in order to anchor progress. The political agreement on the value of good Hinterland connections can also be seen in the additional investments made in several project areas (i.e. Emsland). In addition, the concept of dryport where a transport hub in the hinterland operates as a virtual extension of the gateway has been implemented in the Interreg IV B project.





Synthesis of Systematic Resources (SYNTHESYS3)

Seventh Framework Programme

PARTNERS

Natural History Museum London (UK)	
Royal Botanic Gardens Kew (UK)	['] Proiect Launch
Royal Botanic Garden Edinburgh (UK)	1 Contombor 2012
Museum National D'Histoire Naturelle (France)	i September 2013
Kobenhavns Universitet (Denmark)	
Agencia Estatal Consejo Superior De Investigaciones Cientificas (Spain)	Project Completed
Naturhistoriska Riksmuseet (Sweden)	31 August 2017
Stichting Naturalis Biodiversity Center (Netherlands)	
Freie Universitaet Berlin (Germany)	
Museum Fur Naturkunde - Leibniz-Institut Fur Evolutions- Und	Further Information
Biodiversitatsforschung An Der Humboldt-Universitat Zu Berlin (Germany)	Royal Botanic Gardens
Naturhistorisches Museum (Austria)	Edinburah
Magyar Termeszettudomanyi Muzeum (Hungary)	Elenoth Haston
Institut Royal Des Sciences Naturelles De Belgique (Belgium)	Eispetri Hastori
Musee Royal De L'Afrique Centrale (Belgium)	e.haston@rbge.org.uk
Narodni Muzeum-National Museum (Czech Republic)	
Vizzuality (Spain)	Website
Stichting VU-VUMC (Netherlands)	
Hellenic Centre For Marine Research (Greece)	www.syntnesys.imo
Senckenberg Gesellschaft Fur Naturforschung (Germany)	×
Staatliches Museum Fuer Naturkunde Stuttgart (Germany)	
Simbiotica SL (Spain)	

OVERVIEW

The project produced an accessible, integrated European resource for research users in the natural sciences, by creating a shared, high quality approach to the management, preservation, and access to leading European natural history collections.

The project consists of three main activities:

- A core element in SYNTHESYS was to provide funded researcher visits (Access) to the 390,000,000 specimens housed by SYNTHESYS institutions. In particular, the 4,049,800 type specimens.
- Supporting the development of virtual collections within natural history institutions
- Enhancing the quality and quantity of online collections information to virtual users by working together to implement best practice benchmarks in collections care to raise standards and improve accessibility.

Project outputs include software, new tools and methodologies, new and more developed networks and new and expanded public engagement with natural history collections.

Featured outputs:

- Inselect: digitization by automating the capture of individual specimens from wholedrawer scans. https://doi.org/10.1371/journal.pone.0143402
- 'Magnified' Crowdsourcing Projects, which harness the power of the crowd to capture label data from mass-digitised specimens.
- ZooSphere, a digitization tool generates an open, international repository for highresolution, multi-angle image sequences of biological specimens. Please see http://www.zoosphere.net/project for updates

BENEFIT DERIVED FROM EU COLLABORATIVE ENGAGEMENT

The project has enabled us to build stronger relationships with other European institutes. As the work package leader for the Joint Research Activity (JRA) it promoted the reputation of the Royal Botanic Garden Edinburgh and has led to further involvement in additional EU projects such as Herbadrop (within the EUDAT project).

HOW THE PROJECT AFFECTED CHANGE

Through the project we have advanced our digitisation capacity, including developing our use of Optical Character Recognition. We have developed policies for management and preservation of digital data.

Through the project, software for a crowdsourcing website to transcribe specimen labels has been made available by the Museum National D'Histoire Naturelle in Paris. We have now installed it at RBGE and will be launching our first crowdsourcing mission shortly.

We have become a member of the Global Genome Biodiversity Network (GGBN) which is helping us develop and follow data and collections standards.

Building on our existing experience with genetic bar-coding, RBGE has built a stronger network of experts working on bar-coding, particularly in relation to natural history collections, as part of one of the Networking Activities.

Thanks to the Access part of SYNTHESYS3 we have hosted a number of international scientists who have spent days working at RBGE. This has strengthened the international reputation of RBGE and added scientific value to our collections.

LESSONS LEARNED

Collaboration can be difficult and we need to build better mechanisms for effective collaboration in the future. Good communication is vital.

Strategic Transnational Cluster Cooperation - unlocking the potential for regional innovation (Northern

Connections)

North Sea VB Programme

PARTNERS

Aarhus (Denmark) Alkmaar (Netherlands) Business Region Göteborg (Sweden) Central Denmark Region (Denmark) CLEAN (Denmark) Energy Valley (Netherlands) Falkirk Council, Scotland (UK) Hafen City University (Germany) Hamburg (Germany) iCleantech Vlaanderen (Belgium) Innovatum (Sweden) North Denmark Region (Denmark) Ontwikkelingsbedrijf Noord-Holland Noord (Netherlands) **OREEC** (Norway) Oslo (Norway) Region South Denmark (Denmark) Renewable Energy Hamburg (Germany) Schleswig-Holstein (Germany) Scottish Enterprise, Scotland (UK) Sustainable Business Hub (Sweden)

Project Launch

01 November 2016

Project Completed 30 April 2020

Further Information Falkirk Council Matthew Farrell matthew.farrell@falkirk.gov.uk

Website http://northsearegion.eu/northe rn-connections/

OVERVIEW

The joint challenge is to test the use of domestic innovation support measures transnationally and address the barriers to collaboration that exist between clusters and regions.

In Scottish terms, that means identifying where there are gaps in collaboration activity and shortcomings in innovation support in order to identify programmes working successfully in partner regions that can be transposed to Scotland.

BENEFIT DERIVED FROM EU COLLABORATIVE ENGAGEMENT

The objective is to support more enterprises to participate in transnational innovation collaboration via strengthening transnational cluster and city/region cooperation.

On a Scottish level, having both Falkirk Council and Scottish Enterprise as full project partners has improved local cooperation and has also helped to better define how both parties can support each other to focus on opportunities to develop the Grangemouth Industrial complex as a 'living lab', a test-bed for applying the innovation and business support programmes developed through the Northern Connections project.

Grangemouth's role as a primary economic hub for Scotland offers opportunities to test a varied range of initiatives but also increases the prospect of amplifying the potential beneficial outcomes by identifying which measures can be rolled out across the rest of the county.

LESSONS LEARNED

This project is in its early phases but what is evidently clear is that the potential opportunity for transnational collaboration is significantly greater then the current levels of partnership and cooperation would suggest and that if participation in these programmes is to cease then Scotland's economy and society will be losing a valuable resource.

Additionally, programmes such as this highlight the value of working with partners which have a well-developed specialisation or particular expertise, and, across a programme with 21 partners there is a breadth of knowledge and experience available.





"What initially attracted Falkirk to this project was the chance to explore the opportunities for clustering and transnational collaboration and we are already starting to see benefit of that. However, as a local authority, what has convinced us of the value of the INTERREG programme is the depth of knowledge and experience that the programme makes available through our interaction with the other partnership members."

Matthew Farrell, Economic Development Officer, Falkirk Council

Enabling Future Arrays in Tidal (EnFAIT)

Horizon 2020 Programme

PARTNERS

The project consortium of 9 organisations brings together complementary world leading expertise:

Nova Innovation (tidal turbine device and project developer) UK ELSA (renewable energy project developer & operator) Belgium ORE Catapult (communications & dissemination) UK RSK (environmental & socio-economic impact appraisal) France Mojo Maritime (offshore operations expertise) UK HMK (power electronics and drive train) UK SKF GmbH (bearing and seals) Germany University of Edinburgh (knowledge and modelling) UK Wood Group (verification) France. Project Launch 01 July 2017

Project Completed 01 July 2022

Further Information Nova Innovation Gain McPherson gavin.mcpherson@nova innovation.com

Website

www.enfait.eu

OVERVIEW

Enabling Future Arrays in Tidal (EnFAIT) is a €20.2 million flagship European tidal energy project which demonstrates the full project

lifecycle of an offshore tidal array: from development, through 5 years of operation, to decommissioning.

The array, located in Shetland, will be the world's largest in terms of the number of currently-deployed devices (which number six at the present time). The project aims to prove a cost reduction pathway for tidal energy, which allows it to compete with other forms of renewable energy.

The project partnership of nine European organisations, led by Scottish tidal energy developer Nova Innovation, will demonstrate a grid-connected tidal energy array which:

- Delivers a step change in the lifetime cost of energy for tidal power
- Proves that high array reliability and availability can be achieved with best practice maintenance regimes
- Captures and disseminates substantial learning on fundamental issues for the ocean energy industry
- Builds investor confidence
- Takes a significant step towards creating a commercial, bankable tidal energy sector

BENEFIT DERIVED FROM EU COLLABORATIVE ENGAGEMENT

The collaborative engagement approach fostered in this project has helped to build a consortium of leading European organisations with a complementary mix of skills and experience. Sharing information and being able to communicate seamlessly has enabled the consortium to work efficiently and effectively. With offices in various EU countries, video

conferencing and desktop sharing has enabled this collaborative approach, which has already resulted in the development of innovative ideas, and a strong team identity and ethos.

HOW THE PROJECT AFFECTED CHANGE

The project encouraged Nova Innovation to adopt a collaborative approach to sector development. The tidal energy industry is in its infancy, and no organisation can deliver a commercial tidal energy sector working on their own. This project encouraged Nova Innovation to seek partners and take on a leading role in the growth of the tidal energy sector in Europe.

LESSONS LEARNED

The project has only recently started (July 2017), but the main lesson learned to date is the exciting and valuable cross-fertilisation of ideas that happens when partners with a range of experience from across Europe come together work together towards a common goal.





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This project represents a major step change in the development of the European tidal energy sector, and will demonstrate the strong business growth opportunities for companies from a strong tidal energy market. It will build investor confidence in tidal energy and take a significant step towards creating a commercial, bankable tidal energy sector.

"The EnFAIT project will prove that the reliability and Pavailability of tidal energy arrays can be increased significantly ond that we can reduce the cost of tidal energy by at least 40%, creating a commercial, bankable tidal energy sector."

Simon Forrest, CEO Nova Innovation

Integrated aquatic resources management across Scotland, Ireland and Northern Ireland (IBIS)

Northern Ireland, the Border Region of Ireland and Western Scotland INTERREG IVA programme

PARTNERS

IBIS is a partnership between the Loughs Agency (Lead Partner), the University of Glasgow and Queen's University Belfast in an £8m cross-border project to help protect aquatic resources across Northern Ireland, the Border Region of Ireland and Western Scotland.

OVERVIEW

Funded from August 2011, IBIS has delivered 70 years' worth of applied research in doctoral and masters projects, leaving a legacy of expertise in sustainable aquatic resources management in the three jurisdictions. The project further delivered, by June 2015, 16 Continuing Professional Development courses and 12 Knowledge Transfer workshops by - leaving a legacy of expertise in sustainable aquatic resources management in the three jurisdictions.

The project delivered research, education, and training at SCENE

(the Scottish Centre for Ecology and the Natural Environment, based at the University of Glasgow) and at the Marine Laboratory in Portaferry (Queen's University Belfast), in collaboration with the staff and facilities of the Loughs Agency. The project has provided training, empirical data and sharing of best practice in the field of aquatic resources management across the programme area and beyond.

IBIS has made a significant contribution to 70 years of empirical research which will impact at a national and international level.

The high-level CPD training courses, knowledge exchange events (plus the training of practitioners to higher degree levels) have enhanced empirical data provided to agencies involved in resources management at both a National and International level.

BENEFIT DERIVED FROM EU COLLABORATIVE ENGAGEMENT

01 August 2011 Project Completed 30 September 2016

Project Launch

Further Information University of Glasgow Colin Adams colin.adams@glasgow.ac.uk

Website www.loughsagency.org/ibis-projects/

A key benefit of the project has been the merging of complementary skills across Europe, the creation of a more unified approach to policy and management across Europe, in addition to the unique experience in learning from partners at an EU and international level.

HOW THE PROJECT AFFECTED CHANGE

Much of the technical expertise which came from this project has provided a springboard upon which we were successfully able to develop at an International level and engage in other funding opportunities apart from INTERREG.

LESSONS LEARNED

Key lessons learned from the project are that the management of large EU-funded projects is difficult, and requires professional management expertise. Furthermore, extensive dialogue between scientists and managers/policy makers leads to much more useful science at an international level.





"IBIS represents a great partnership between government" agencies, stakeholders and universities. The participation of cutting edge research universities such as Queen' s University Belfast and our partners at Glasgow University means that we can provide quality assurance and make sure that the research that informs policy comes in a global context and that we provide the best cutting edge tools to answer the questions that are needed for local policy".

Dr Julia Sigwart, Queen's University Belfast

A New Approach for Rural Development in Georgia

European Neighbourhood Programme for Agriculture and Rural Development

PARTNERS

Angus Council (UK) Borjomi Municipality Self-Government (Georgia) Mercy Corp (International) Austrian Federal Institute for Mountainous and Less Favoured Areas (Austria)

OVERVIEW

The objective of this project is to contribute to the reduction of rural poverty in Georgia. Specifically, the project will promote and develop a bottom-up, community-driven rural development approach which supports socio-economic development within Borjomi Municipality and which facilitates future replication throughout Georgia.

The overall process culminates in a final national level workshop (2018) where a replication strategy will be presented to the EU representatives, relevant state ministries, donor organisations and NGOs to stimulate the debate on the adoption of a rural development policy.

As a pilot project, the action has developed a number of methodologies, processes and tools, and through consultation sessions and workshops this information has been disseminated to local, regional and national stakeholders.

BENEFIT DERIVED FROM EU COLLABORATIVE ENGAGEMENT

To achieve the above objectives, Mercy Corps and Angus Council delivered a pilot rural development initiative that has utilised key methodologies of the LEADER approach and provided a replicable model for future development initiatives in Georgia. The project supported a bottom-up approach to local development in the Borjomi Municipality, which brought together private and public-sector representatives in the form of a Local Action Group (LAG) to help determine development priorities and then to financially support community-driven sub-project applications that will assist the economic, social and cultural development of the municipality.

Through the partnership working as a group we have delivered a very successful programme in Borjomi which was evidence based and followed all the required EU legislative requirements which was new to this municipality. This approach was facilitated by a core project team that brought significant experience of community and rural development implementation in Georgia and across Europe. Mercy Corps has been supporting agricultural, economic and community initiatives in Georgia for the past 15 years and was joined in this project by Angus Council that has a long track record in facilitating LEADER

> Networking Scotland in Europe www.scotlandeuropa.com

Project Launch 27 May 2015

Project Completed 31 March 2018

Further Information Organisation Name

Email

Website www.domain.com programming and supporting LAGs in Scotland. Angus Council has supported the LAG in its development and provided the project with proven systems, tools and methodologies that can be adapted to fit the local context and the needs of the target region. Borjomi Municipality brought its representatives' knowledge and experience of the local context, the development needs and managerial oversight. Through its direct involvement in the action Borjomi Municipality gained a deeper understanding of the LEADER methodology and the role of local authorities in this approach. The engagement of the "third party" the Austrian Federal Institute for Mountainous and Less Favoured Areas brought broader experience of the LEADER programme from across multiple countries and regions within the EU and also provided specific expertise of establishing LAGs and developing Local Development Strategies in mountainous regions similar to Borjomi.

LESSONS LEARNED

Working with localities that are so far apart can be a challenge and a crucial factor is to have designated staff who can ensure consistency across the organisation – different people coming in at different stages created issues.







"Working on this innovative and transformative project has not only supported a developing region but improved our own area through sharing good practice and learning"

Shelley Hague, Business Manager (Funding, Policy & Projects), Angus Council

Innovative Learning Approaches in Staff Training and Young Offenders' Employability Support (ILA Employability)

Erasmus+Programme

PARTNERS

Centrul de Reeducare Buzias (Romania) G.G. Eurosuccess Consulting Limited (Cyprus) Universita Degli Studu Di Salerno (Italy) Asociación DAE (Spain) Fife Council (United Kingdom)

OVERVIEW

Social exclusion and high levels of re-offending are very costly to individuals, communities and to countries. The aim of this ERASMUS+ project is to support social inclusion and to enhance youth employability by developing, implementing and promoting an evidence-based, integrated, training and development model which can be expanded to at-risk groups other than young offenders.

It is an ambitious project focusing on young offenders, but also looking at youth unemployment more widely. The training and development model the project will create will focus on new, innovative curricula, educational methods and training courses, as well as looking at entrepreneurial learning and entrepreneurship education.

The project aims to:

- Get 100 young offenders into employability education
- Bring 20 young ex-offenders into youth-based, transnational 'blended mobility' schemes, the results of which will be recognised by employers
- Train 140 educators from centres/prisons for young offenders in the delivery of employability education to young offenders, through hands-on and developmental events, including short term mobility
- Decision-makers, researchers and practitioners agree that provision for education is crucial in ensuring a reduction in youth re-offending; and that focusing on education can

Networking Scotland in Europe www.scotlandeuropa.com Project Launch 01 October 2014

Project Completed 31 December 2016

Further Information Fife Council Maciej Dokurno Maciej.dokurno@fife.gov.uk

Website ila-employability.eu



turn offenders from crime towards work - improving their skills and encouraging them to lead productive lives in their communities.

BENEFIT DERIVED FROM EU COLLABORATIVE ENGAGEMENT

The project brings a number of benefits to communities and the local, regional and national levels.

- At the local and regional level, through a strong, transnational network developed between potential employers and re-education centres/prisons, the project is develops a real mechanism for supporting young offenders post-release, and it reduces the gap the young offenders and their communities, and brings young offenders closer to perspective employers.
- At the national level, the project has already shown strong results in Romania in particular, where the combination of post-release blended mobility and youth services offered the Probation Service has already led to different perspectives on delinquent behaviours, and new learning methods (such as project-based learning) are being employed. This is reinforced by a staff training programme accessible in all 45 of the country's prisons delivered as part of life-long learning strategy.
- At the European level, our model can be easily transferred to all EU countries, and can be used as a model for to develop strategic partnerships, emphasising the project life cycle approach. So far, staff involved training have shared their experiences, and have learned from other colleagues' experience regarding young offenders' across European prisons
- Through the project, young offenders involved in blended mobility have had the opportunity to interact with peers from other EU countries; leading to self-discovery of their own abilities and learning of new skills.

LESSONS LEARNED

- Initial difficulties were encountered by project partners, in staff selection for staff training, mainly due to the fact that English is not a native language for all participants. These were overcome by adding the selection criteria – fluent English (speaking and writing skills).
- Language difficulties were also encountered in selecting ex-young offenders for blended mobility, again due to lack of English fluency. These were overcome by organising an English language module during the training and learning materials development phase.
- Further lessons were learned through the blended mobility process itself, as for some participants, this has been their first stint abroad. This has been addressed through counselling activities during the six months prior to release from prison, and by a thorough selection of the accompanying persons during the mobility period. These accompanying persons offered ex-offenders counselling during the blended mobility every time when needed.
- A further difficulty has been the translation of the project's outputs in the national partners' language (without a specific budget). The partners used their own resources and all the outputs have been translated.

EU offers young offenders better future

New programme focuses youth with high risk of social exclusion

The internative Learning Approaches in Suff Training and Young Offinders' Employability Support - EA Employability, is an EU project to resport social in clusion, and exchance youth employability. It aims to do this through developing, implementing and prostoring a train-ing and developing, implementing and prostoring a train-ing and developing, implementing and prostoring a train-ring and developing implements in groups at rack, as well as other house your a offenders. other than young offenders.

What is the ILA project? The project was approved for funding under the RU's new ERASHOS-projeum, Ending on Sepander 10, is seeks to impact on quality of Ia, engloyability and indusion of youth. It also seeks to enhance and processor painterships berswess emgloyment and learning and is the result of cooperation for insonnion is programiting focused on coordining to counselling to

counselling to increase the employability chances of young increase and prepare them for social The primary target groups of the pro-juct are the young disider who need to be prepared for the labour mades and for so-chances of propare them for social This most immediate and for so-them for social

The most knowlaw aims of the EA en-promoting young people's social inclusion taking izm consideration file ame of youth incomplayment, developing basic and trans-versibilities, such as interpretenting polagical approaches, and partnerships between whe canon provides and partnerships between whe

Staff Training

them for social inclusion after release

> A ten day staff training took place tast May in the UK. It A ten day risk training toos pace an oldy as the or, it was impulsed by one of the proper partners the File Costol in Secolard. A total of 28 employees (including two prior on gaards from the Notatia Central Present) working with young offendars from Rohamis, Spain and Cryptus participated in a training programme focused on vocational comfling to increase the employability chances of young its



THE num from the Scotland training me

stion of topics of gross importance, education and reinlegistics, of inmakes - best practices in the field. The products developed in the project will benefit both specialists working in the prison system and detainser. The staff training even javed the way for developing a mersock between specialism work-ne in training eventoping a mersock between specialism worknor: education on and reint ing in peninentary systems in Europe.

Transfer workshop A usander workshop in taking place in Segmenher 2008 in all project partner countries, during which the staff who participated in the Scodard training will have the opportu-tioly to reacher their learning offender. In cyccus, the trainfer workshop will be organized with the upport and active involvement of the Cyprox Price Department and additional members of the Cyprox Price Department and additional members of the process call will be trained along with young offenders. Not young knewer

be trained along with young offenders. Four young terms prismers board of the given the channel to participate in the Banded Mobility programme in April 2008, with the main aim of their easier integration into the society and la



EU close to sealing US deal on data

The European Commission is we with the US on the final details of a mercial date sharing deal that we up for renegotiation following leal years ago that exposed US mass y

years ago this appoint of a superior products. Innor practices. Parties have been regulating sime any 2014 to reform an existing sign allowing comparises to transfer do by herween the two areas, hinterna International

Bruzzels has demanded guerson the United States that the collection citizens," data far national securi control data for mational securi-posts would be limited to what i sary and proportionata. To have not conditions for not acropping Sub-legal protection, which facultate ryday loadness activisies of som constraints have been companies, both European and

Under the new deal, US regist panies will face stricter rules wh isoting data to third parties.

Mogherini seeks Iran trade by early 2016

The European Union should level tolks with fran on energy by the beginning of 2016. RU It cy chief Pederica Megharini wi door meeting of RU policyauk The dwy after a depl on litari's a gramme wan sealed this more ful wild the European Commiss proparing for renewed ocor proparting air resolutions with lears, seconding to min-maeting on July 15, seen by R Mogharini snet lean's Forsi Moharomad Javad Zarif in ecoperation terroritam and regional insue Mogheolai told the Commit-"provide support for prep-numption of ocnessiic an tions with from following th contrational sanctions, or

Aberdeen Hydrogen Bus Project (HyVLow and HyTransit)

Horizon 2020 Programme

PARTNERS

Project Partners: Van Hool N.V (The Netherlands) Riviera Trasporti SPA (Italy) Viaamse Vervoersmaatschappij De Lijn (Belgium) Ballast Nedam International Product Management B.V. (The Netherlands) Universita Degli Studi Di Genova (Italy) Pitpoint CNG BV (The Netherlands) FIT Consulting SRL (Italty) Ballard Power Systems Europe AS (Denmark) Waterstofnet VZW (Belgium & The Netherlands) QBuzz B.V (The Netherlands) Regione Liguria (Italy) Solvay SA (Belgium) HYER (Belgium) BOC Ltd (UK) Planet Planungsgruppe Energie Und Technik (Germany) Stagecoach Bus holdings Ltd, Scotland (UK) Element Energy Ltd (UK) Ballard Power Systems Europe AS (Denmark)

Funding partners:

FCHJU Innovate UK (Technology Strategy Board) Aberdeen City Council Stagecoach Bus Holdings First Group Scottish Government Scottish Enterprise Scottish Hydro Electric Power Distribution Scotland Gas Network (SGN)

OVERVIEW

The overall aim of the Hydrogen Bus Project is to develop hydrogen infrastructure in Aberdeen. The project has backing from public and private sector organisations from the UK and Europe, and has so far seen two separate EU-funded projects, High Vlo City (which funds four buses) and HyTransit (which funds 6 buses). Both of these projects are supported by the Fuel Cells and Hydrogen Joint Undertaking (FCHJU).

Networking Scotland in Europe www.scotlandeuropa.com

Project Launch

01 February 2012

Project Completed 31 December 2018

Further Information

Aberdeen City Council Stuart Bews

StBews@aberdeencity.gov.uk

The development of the hydrogen infrastructure enabled by the projects includes:

- Production of hydrogen from a 1MW electrolyser (supplied by Hydrogenics)
- The establishment of Scotland's first commercial-scale hydrogen production and bus refuelling station (which will include hydrogen production through electrolysis)
- Deployment of a fleet of 10 hydrogen buses, operated by First Group and Stagecoach.
- The development of a hydrogen safe maintenance facility, within an operational fleet maintenance depot

A key benefit of hydrogen buses lies in their sole emission's being water vapour. The buses are critical in reducing carbon emissions and air pollution, as well as being quieter and smoother to run. As of April 2017, the ten operational buses have accumulated total operational mileage of 966,658Km, and have carried 981,782 passengers.

With over £19m of investment secured for the Aberdeen area during the lifetime of the Aberdeen Hydrogen Bus Project, the City is now seen as a true leading European Region in the deployment of Hydrogen Fuel Cell technology. This recognition is leading to the emergence of new supply chain opportunities, with many companies' now showing interest in the technology as part of their diversification strategy for the future.

BENEFIT DERIVED FROM EU COLLABORATIVE ENGAGEMENT

Without EU collaboration this project would not have been possible. The technology the project demonstrated was developed outside of Scotland, however Aberdeen's reputation as an energy City was a key factor in the region's being seen as the ideal demonstration location for the technologies.

Without European funding, it is very unlikely that the funding package would have been pulled together to enable this to be rolled out in Aberdeen and convince these partners - with enormous expertise in their respective sectors - to work with Aberdeen City Council. The European dimension has enabled the demonstration of future technology in the City, with our population able to witness this on the roads of Aberdeen.

Our collaboration with some of the leading private sector bodies in this field has in turn created an opportunity for the private sector in Aberdeen to engage with these leaders and to help identify opportunities for the future within the supply chain.

The project's achievements have being communicated very widely and as such, Aberdeen has experienced global interest and hosted a number of delegates who are interested in discovering more about this project and the technologies being demonstrated.

LESSONS LEARNED

Many lessons have been learned during this project and both successes and challenges have been recorded to ensure that we share our experience. The development of such a varied and large partnership has been highly rewarding, and absolutely necessary for a project of this scale to ensure that all stakeholders are actively engaged and participating. Of course, with a number of funding bodies involved the legal and financial requirements are significant. Robust financial procedures from the outset have been critical to ensuring that we have been able to recover the funding offered.

On the technology side there are dozens of lessons learned, and Aberdeen City Council would be delighted to discuss these aspects with any interested party.





Recruitment and Retention of Health Care Providers and Public Service Sector Workers in Remote Rural Areas (Recruit & Retain)

Northern Periphery Programme 2007-2013

PARTNERS

NHS Western Isles Scotland (UK) University of Aberdeen, Scotland (UK) Northern Ontario School of Medicine (Canada) Agency for Health and Prevention (Greenland) FSA Akureyri Hospital (Iceland) Cooperation and Working Together (CAWT)(Ireland and Northern Ireland) Finnmark Hospital Trust (Norway) County Council of Västerbotten (Sweden)

OVERVIEW

Recruit and Retain was a Northern Periphery Programme Strategic Project with core activities in health care but an expanded remit for the wider public service sector. Eight partners from eight countries established a comprehensive evidence base to inform development of solutions (29 products and services) designed to encourage Project Launch 01 June 2011

Project Completed 30 June 2014

Further Information NHS Western Isles Diane Gilbert deannegilbert@nhs.net

Website www.recruitandretain.eu

recruitment and enhance retention of professional public service sector workers in remote rural areas. The Recruit and Retain Business Model describes seven steps to facilitate implementation of the solutions by organisations responsible for providing sustainable public sector workforces in remote rural areas.

BENEFIT DERIVED FROM EU COLLABORATIVE ENGAGEMENT

A core benefit from the project has been the replicability of and access to the services developed through the project. Many of the individual products and services were developed by a specific partner, however during the development phase all partners had the opportunity to follow developments and input as appropriate. Once developed, other partners were at liberty to make use of the developing or developed product or service in their own organisation. This is shown below.

HOW THE PROJECT AFFECTED CHANGE

The project has had impact on recruitment and retention strategy in the NHS in Scotland; influencing, for example, the development of the Scottish Rural Medical Collaborative and NHS Highland's "Being Here" project.

Furthermore, the project has also directly led to a follow-up project funded by the 2014-2020 Northern Periphery and Arctic Programme. This follow-up project is called "Recruit and Retain: Making it Work" and will run until 2019. It involves a wider collaborative of Scottish partners - NHS Highland, NHS Education for Scotland, North of Scotland Planning Group, NHS Orkney and NHS Shetland, with NHS Western Isles as observers. The aim of "Making it Work" is to forward work developed in "Recruit and Retain"; tailoring the business model to local and regional public sector needs, with each region's implementation's being evaluated as a case study community within the participating areas. As part of this, a flexible policy framework is being developed - customizable by other jurisdictions interested in replicating the "Making it Work" successes.

LESSONS LEARNED

A core output from the project was a business model describing seven required steps in order to make maximum use of the solutions.

- Above all, a primary lesson has been the development of a proactive recruitment and relocation strategy, which involves working with staff to understand when further staff are required, how they can be attracted to work with you, why they are required and what is necessary to retain them.
- People who work in rural environments are more likely to have a rural background. They may be less interested in shopping and willing to live away from families and friends. They may be flexible and adaptable; aware of the challenges of remote rural working and living. A core lesson is not to employ people because they can't get a job anywhere else.
- You can never have too much information about rural living. Honest and reliable information about life and work in remote rural areas is key. The use of media such as brochures, booklets, videos let people know what is on offer; thereby getting the information to them.
- Community engagement is crucial. Communities have an obligation to ensure that the people they require to provide essential public services are comfortable and welcome. The community should be actively involved in job definition, the recruitment process and the ongoing well-being of newcomers and their families.
- Supporting staff and their families demonstrates your desire to care for staff. Staff need to be appreciated and understand when they are doing a good job. They need to know you will encourage the good ones to stay, if not they may leave. Buddying and mentoring helps the settling in process.
- The best staff hanker for knowledge and new ways of doing things, and avoiding intellectual and educational starvation may be difficult in remote rural areas. Much that is available may meet urban rather than rural appetites, and courses should be relevant to your local needs. Engage with your local universities, and ensure students and trainees are able to make use of your expertise and knowledge. Online learning is great for remote rural areas but requires time and resources make sure both are available and encourage your staff to use them.
- Without money none of this will happen remote rural public services are more expensive to provide than urban ones the always have been and they always will

be – the laws of economy of scale apply here – ignore them at your peril. Investing in your recruiting system will pay dividends but the returns will be greater if you invest in retention as well. All of the Recruit and Retain Solutions are open source and free to use – but they may cost to implement and you will have to find the money to do it – there are no magic bullets – allocate resources and invest in your staff.



www.recruitandretain.eu



"The approach of creating and then using an evidence base to design, develop and pilot 29 specific products and services in eight different countries, has allowed development of a practical model relevant to all involved in recruiting and retaining public sector staff in remote rural areas.

Working in remote rural areas is not for everyone and there are people who are more suited to working in the urban environment, but for some the opportunities and challenges of delivering high quality services to people living in isolated areas is their dream; these people must be identified, valued and supported - the Recruit and Retain Business Model shows the way"

David Heaney, Rossal Research and Consultancy
Novel biocontrol agents for insect pests from neuroendocrinology (nEUROSTRESSPEP)

Horizon 2020 Programme

PARTNERS

University of Glasgow (Coordinator), Scotland (UK) University of Leuven (KU Leuven) (Belgium) University of Ghent (Belgium) Volcani Institute, Agricultural Research Organisation (ARO), (Israel) Stockholm University (Sweden) University of Leeds, England (UK) University of Cologne (Germany) Scottish Government Agriculture, Food and Rural Communities Directorate, Scotland (UK) Science and Advice for Scottish Agriculture (SASA), Scotland (UK) Forest Research, Forestry Commission, England (UK) University of Cape Town (South Africa) Bruker Daltonics GmbH (Germany) The Pirbright Institute, England (UK) Oxitec Ltd, England (UK) KTN Ltd (UK)

Project Launch 01 June 2015

Project Completed 31 May 2019

Further Information

University of Glasgow Professor Shireen Davies Shireen.Davies@glasgow.ac.uk

Website neurostresspep.eu

OVERVIEW

The nEUROSTRESSPEP project aims to deliver novel, selective and effective biopesticides for insect pests, to positively impact agri-food security and safety, with significantly reduced environmental impact. We use dual approaches based on neuroendocrinology and genetics to develop novel biocontrol measures for insect pests that will not engender insect resistance; and will contribute to sustainable agriculture, horticulture and forestry. We are developing peptide (small protein) analogues that specifically target selected insects rather than other organisms, and Genetic Pest Management (GPM) tools based on new insect synthetic biology, which will be applied to a wide range of insect pest species.

The project has just successfully passed the first periodic review by the EC marking the halfway point and we have successfully achieved wide-ranging activities in insect genetics/genomics. Amongst many achievements, we have mounted the first comprehensive, searchable online database for insect neuropeptides; provided data for invasive alien insect pests as well as for beneficial species; and demonstrated that several peptide analogues reduce insect fitness in laboratory trials - interfering with development, reproduction and/or environmental stress tolerance. Moreover, with our 'omics, synthetic

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biology and functional biology approaches, we have significantly increased the possibility of new species-specific insect biocontrol which will be further tested under field-specific conditions.

Expected impacts would see significant economic gains/avoided losses for European agriculture and forestry; Increased product quality and lower environmental impact (e.g. lower level of chemicals, less new pests); Scientific support to the development of relevant EU policies; Development of science-based tools for developing strategies for improving the productivity and resilience of agriculture and forestry in the context of changing environmental conditions; Impact on a range of agricultural and forestry production and risk management practices; Improving innovation capacity and the integration of new knowledge; strengthening the competitiveness and growth of companies by developing innovations meeting the needs of European and global markets.

BENEFIT DERIVED FROM EU COLLABORATIVE ENGAGEMENT

- Enabling research (technology, collaborations, planned future bids)
- Can set big questions and undertake large scale efforts to address these
- Coordinated research at European and international level towards innovation
- Getting ahead of main competitors in, e.g. US and China
- Increased industry and end user interactions

HOW THE PROJECT AFFECTED CHANGE

The experience gained and expertise developed in supporting the development and implementation of this project has allowed University of Glasgow's Research Support Office (EU & International Team) to boost its capacity for dealing with other EU/ International opportunities and projects. In particular, valuable working relationships have been established with Innovate UK, the Knowledge Transfer Network and the US Department of Agriculture.

Moreover, the project makes a substantial financial contribution to the running costs of our Project Management Team, facilitating the creation and retention of valuable expertise in this area which, in turn, strengthens the university's position in bidding to coordinate future collaborative projects of this magnitude. As a result, The University of Glasgow has significantly increased its capacity for research, innovation and funding in AgriFood area especially with respect to crop protection.

Follow-on activities have included the coordination of follow on bid for H2020 RIA, which was unsuccessful, but established the right contacts for future bids. Furthermore, the network that formed as a result of the project has allowed us to enhance engagement with consortium partners (e.g. KTN Ltd for other follow on activities) and highlighted pathways that could lead to commercialisation and spin-outs.

LESSONS LEARNED

- A successful project has an absolute requirement for a really effective project coordination team.
- Innovation requires in-depth research and discovery-based activities by those with the appropriate expertise, together with other activities (e.g. market analysis).

- The very real importance of the 'multi actor approach' and stakeholder knowledge for effective development of research-based solutions.
- The positive impact of an active and engaged project External Expert Advisory Board, which includes industry participation
- Improved communication and networking to wider audience including European Commission and Key Opinion Leaders.
- Policy outcomes from H2020 RIA projects.





"Project is unique, innovative and groundbreaking....next generation sustainable pest control agents' EC 1st periodic review"

Supporting Higher Education to Integrate Learning Analytics (SHEILA)

Erasmus+ Programme

PARTNERS

The University of Edinburgh (UK) Universidad Carlos III de Madrid (Spain) Open University of the Netherlands (Netherlands) Tallinn University (Estonia) Erasmus Student Network aisbl (ESN) (International) European Association for Quality Assurance in Higher Education (International) Brussels Educational Services (International)

OVERVIEW

The SHEILA project aims to assist European universities to become more mature users and custodians of digital data about their students, particularly in the use of learning analytics. To achieve this goal, a policy framework will be developed based on data collected from direct engagement with stakeholders at various levels.

To date, the project has reached out to more than 50 higher education institutions in over 20 countries in Europe through survey and interview activities. It has also completed a consultation with learning analytics experts about essential elements in a learning analytics policy through a group concept mapping activity, and has started its ground-level consultation with students and teaching staff through campus surveys and focus groups in four higher education institutions.

Preliminary findings show that about half of the European countries have higher education institutions that are either observing the development of learning analytics or have engaged with it practically. The development of learning analytics is in its infancy and most institutions are still at an exploratory stage without a defined strategy or monitoring framework. However, these early adopters are likely to scale up the culture for learning analytics and encourage dialogues around learning analytics both among researchers and practitioners in the European area.

BENEFIT DERIVED FROM EU COLLABORATIVE ENGAGEMENT

The EU collaborative engagement allows the team to reach out to a wider audience (higher education institutions) and to develop an international community to support the use of learning analytics. Moreover, the collaboration allows a comparison of cultural differences in the development of learning analytics across countries, which has provided useful insights

Networking Scotland in Europe www.scotlandeuropa.com Project Launch 01 January 2015

Project Completed 30 June 2018

Further Information Univerity of Edinburgh Yi-Shan Tsai yi-shan.tsai@ed.ac.uk

Website sheilaproject.eu into the understanding of challenges confronting higher education institutions and ways to address them through policy.

The SHEILA project has attracted more than 50 institutions across the world to join the project as associate partners, which demonstrates the international interest in adopting the SHEILA policy framework for the use of learning analytics in higher education.

HOW THE PROJECT AFFECTED CHANGE

The SHEILA project has made a significant input into the development of an institutional learning analytics policy at the University of Edinburgh (http://www.ed.ac.uk/academic-services/projects/learning-analytics-policy). It has also led to a series of training workshops at the university to scale up the awareness and uptake of learning analytics among teaching staff.

LESSONS LEARNED

The results of our engagement with various stakeholders show that senior managers, teaching staff, and students are attracted to different dimensions of learning analytics, and their concerns about learning analytics also vary. Although ethics and privacy issues are of the primary concern to all, it is important for us to incorporate different opinions from all stakeholders into the development of a policy, so as to scale up the adoption of learning analytics throughout institutions and maximise its benefits on personalised learning.





"The SHEILA Project builds a policy development framework that supports the use of learning analytics among higher education institutions."

Yi-Shan Tsai, University of Edinburgh

Creating a leadership for maritime industries - New industries in Europe (CLIPPER)

Interreg Europe Programme

PARTNERS

Pays de la Loire Region (France) Conference of Peripheral and Maritime Regions (CPMR) Asturias Energy Foundation (FAEN) (Spain) Fife Council, Scotland (UK) Ligurian Cluster for Marine Technologies (Italy) Machine Technology Center Turku Ltd (Finland) R&D centre Kiel University of Applied Sciences GmbH (Germany) Public Institution RERA S.D. for Coordination and Development of Split Dalmatia County (Croatia)

OVERVIEW

The CLIPPER project stems from the conviction that support to maritime industries is crucial in order to tackle 'Blue Growth' challenges, as well as energy transition imperatives. The global

economic recession has not spared the maritime sector, which also suffers from the evergrowing competition from emerging countries. Regions have a crucial part to play to maintain SMEs' competitiveness in their traditional activities (shipyards in particular) while becoming leaders on blossoming markets such as Marine Renewable Energies (MRE).

Working closely together, the project's partner regions explore and implement new ways of supporting SMEs to improve their quality upgrading, manufacturing performance and leadership in new markets such as MREs.

The partners will develop action plans for each of their territories and design political recommendations to impulse them locally, in line with the analysis of relevant national and European contexts.

BENEFIT DERIVED FROM EU COLLABORATIVE ENGAGEMENT

EU collaboration has enabled learning from similar geographic regions, highlighting how other regions support SME competitiveness as companies in maritime industries move from traditional to newer opportunities, especially in offshore renewable energies.

Project Launch

01 January 2017

Project Completed 30 June 2021

Further Information

Fife Council Iain Shirlaw iain.shirlaw@fife.gov.uk

Website

www.interregeurope.eu/clipper



"Even at the early stages, seeing different ways the diversification has been supported in other areas has been beneficial in simulating how we can improve what we do in Fife."

Iain Shirlaw, Economic Adviser, Fife Council

Building a local digital innovation culture (LIKE!)

North Sea Programme

PARTNERS

Gronigen (Lead Beneficiary – NL) University of Groningen (NL) Province of Drenthe (NL) Rotterdam (NL) Aalborg (Den) Angus Council (UK), Suffolk County Council (UK) University of Vechta (GER) Stadt Vechta (GER), Roeselare (BE) Project Launch 01 October 2016

Project Completed 01 October 2019

Further Information Angus Council Mark Armstrong armstrongm@angus.gov.uk

OVERVIEW

LIKE! involves ten partners from five North Sea Region-countries; working together on innovative solutions for public service delivery with the use of data. The project will co-create smarter services through nine transnational pilots, and will work collaboratively with local government, citizens, universities and SMEs. The aim of this co-

operation is to develop new skills, to share knowledge and engage with citizens, business and academic institutions to deliver services which meet the needs of the communities they serve. The digital service delivery will make innovative use of data currently available, whilst also developing new technology to best-suit providers and users of services.

Current activities within LIKE! include:

- Co-creating public service delivery in the Netherlands, where a number of public services have come together with the LIKE! project. The focus is on how data can help improve customer contacts, and on how the use of social media and other channels can improve communication between citizens and public organisations.
- The development of a transnational virtual Open Data Innovation Lab. To do this, a task force from Angus, Rotterdam, Groningen, Aalborg, Drenthe and the University of Groningen has started a virtual open data lab concentrating on four themes, namely; energy; nature and tourism; the elderly and accessibility of care in rural areas; and regional sustainable development.
- "Preparations for Smart Seniors", whereby Rotterdam and Grethe will host events to explore how digitalisation can help make life easier for elderly citizens. The results of this will be shared with all LIKE! partners.

Networking Scotland in Europe www.scotlandeuropa.com Website northsearegion.eu/like

BENEFIT DERIVED FROM EU COLLABORATIVE ENGAGEMENT

Throughout Europe, public bodies are tasked with doing more for less. This collaborative programme allows for the sharing of knowledge and best practice with a range of public organisations, academia, businesses and citizens. Coming together around these common challenges allows for innovative practices to be trialled across a range of services. Europe is an ageing society, and it is vital to look at new, developing technology which can be utilised to improve and innovate service delivery. Similarly, how we communicate and use data across all sectors of our society are common to all nations which look to improve and innovate. At an early stage, partners are already learning from each other, and we are all at different stages of progress and success.

LESSONS LEARNED

This project is still at an early stage, but LIKE! and other European transnational projects allow the taking away any fear of failure! Innovation inevitably means that a number of trials will be needed before finding the correct and best fit solutions. In the current economic climate, organisations of all types are nervous and limited in funding innovation. Under this programme we have the 'luxury' to fail.



Implementing Transnational Telemedicine Solutions (ITTS)

Northern Periphery Programme 2007-2013

PARTNERS

University of Aberdeen (Scotland) Norwegian Centre for Integrated Care and Telemedicine (Norway) Oulu Arc Subregion (Finland) National University of Ireland Galway (Ireland) County Council of Västerbotten (Sweden) Centre for Connected Health & Social Care (Northern Ireland)

Project Launch

01 September 2011

Project Completed 31 March 2014

Further Information Rossal Research and Consultancy David Heaney <u>dhcrh@hotmail.co.uk</u>

OVERVIEW

The aim of ITTS was to implement transnational telemedicine solutions across the Northern Periphery region. ITTS has supported the development of 25 new services in 48 sites in the participating countries. In total

3890 patients have used these services as a direct result of the project, expanding access to timely and local health care. The estimate for potential use of these services is over 27,500 patients with the involvement of 550 staff in all demonstrator projects. We estimated that 6.03 tonnes of carbon emissions were saved as a direct result of travel time saved by the introduction of these services.

"I think this was an ambitious and very relevant project in using telemedicine to improve healthcare delivery in rural and remote situations. It was impressive to see how you were able to co-ordinate activity and advice among so many centres and in so many countries and even overcome language difficulties. I regard your achievement as a major advance in remote health care delivery and technology and I look forward to studying your final report in August".

Professor Nelson Norman. President, Institute of Remote Healthcare, TRANSNATIONAL, conference delegate

BENEFIT DERIVED FROM EU COLLABORATIVE ENGAGEMENT

Projects were implemented across all the countries involved in the project. All projects involved at least two countries (one export, one import) but many involved multi-partners. All six countries were actively involved in all projects, so that learning took place, hopefully leading to future implementation. Time and resource within the project was the main barrier to wider implementation. Results were disseminated to non participating countries within the NPP area (e.g. Greenland and Iceland) and beyond, to other regions of Europe.

Networking Scotland in Europe www.scotlandeuropa.com

Website

www.transnational-telemedicine.eu

"ITTS clearly exhibited the benefit of a collaborative approach by partners across Europe, learning with, and from each other in developing solutions for common challenges".

John Matheson. Director: Health Finance, eHealth and Pharmaceuticals, Scottish Government, Scotland, conference delegate

HOW THE PROJECT AFFECTED CHANGE

"The ITTS project opened up new horizons for us and gave us the courage to extend the use of video-conferencing to acute psychiatry. Through the creation of live links we are now able to offer consultant advice to GPs, A&E doctors and staff in the more remote areas of our catchment. This has led to increased confidence in assessment and convenience for patients who no longer have to travel long distances for an expert opinion. We believe that the use of this technology will develop into everyday practice and that psychiatry will be at the forefront of delivery of person centred approaches in acute as well as long term care."

Dr Grace Fergusson, Locum Consultant, NHS Highland, SCOTLAND (clinical partner on project3).

LESSONS LEARNED

- Deciding to focus on implementation of services from the outset this was directed by the emphasis on products and services by the NPP during the application process, and meant the project instituted real change in service delivery in the region.
- Deciding which projects to include as demonstrators this was underpinned by transnational knowledge exchange between partners; it took time and effort to gather information, to negotiate between partners to shape each demonstrator project and make it relevant to service delivery in the local, and transnational context.
- Deciding to incorporate key perspectives ensuring citizens had input into the project meant that the projects selected were scrutinised in a "common-sense" fashion.
- Deciding whether implementation should proceed by using a business case approach to drive change meant that plans for implementation were coherent and transparent, and subject to scrutiny. It also meant that financial, organisational, and clinical barriers to change were considered before implementation.
- Presenting findings in an innovative style at the final conference, with each demonstrator being presented as a showcase, with information, video, other visuals, and quotes from patients and staff and included representatives of each demonstrator project were available to explain details to interested delegates.

"This innovative project, although challenging to execute has had a colossal impact on healthcare delivery across the 6 countries in which it has been operating. It has shown that new ideas in healthcare do not necessarily arise only in large urban university cities and that ideas originating in rural communities may also be applicable in urban centres".

Professor Alexander Munro, Centre for Health Science, Inverness, SCOTLAND, conference delegate





"We think we have made a difference to people living in the Northern Periphery and believe we have unleashed the potential for future developments, as technology advances, and as clinicians, patients and service planners get used to telemedicine being part of everyday practice."

"Knowledge exchange between partner countries not only enabled the success of ITTS, it also meant that it has been a real pleasure and privilege working with people across the Northern Periphery"

Dr. David Heaney, ITTS project director

Scottish European Growth Co-Investment Programme (SEGCP)

European Investment Fund

PARTNERS

Scottish Investment (Scottish Enterprise) The European Investment Fund (EIF)

OVERVIEW

Through this programme, Scottish Enterprise can invest a maximum of £5 million into any one company. However, we cannot invest more than the European Investment Fund or more than 50% of the fund manager's investment.

Securing the type of investment available through this initiative can bring a number of benefits, including:

- Access to larger investment amounts with the ability to secure follow-on investment as your business grows
- Access to networks including customers, supply chain and industry expertise
- Access to additional management or board skills

To be eligible for the Scottish European Growth Co-Investment Programme your company must secure an investment commitment from a European Investment Fund accredited fund manager.

A company must also:

- Be a commercially-viable business, with growth and international ambition
- Have an established operating base in Scotland
- Meet the European Union definition of a SME This means having fewer than 250 employees, an annual turnover of no more than €50 million, and/or annual balance sheet Net Asset Value below €43 million

The investment can be used:

- As growth capital
- As acquisition finance
- To partially fund a management buy-out or a management buy-in
- To fund an exit of existing shareholders In each case 75% or more of the total funding round would be used for growth (i.e. a capital increase and not refinancing)

The investment **cannot** be used to directly fund activity in the following sectors:

Networking Scotland in Europe www.scotlandeuropa.com Project Launch 16 June 2017

Project Completed 15 June 2020

Further Information

Scottish Enterprise (SIB) Tracy Longhurst tracy.longhurst@scotent.co.uk

Website goo.gl/hzddfq

- Distilled alcohol (such as whisky)
- Real estate/property development
- Banking and insurance
- Gambling
- Bookmakers
- Tobacco
- Adult entertainment
- Sub-prime financing
- Religious or political movements
- Movements which have an adverse impact on animal or human rights

The fund managers will confirm your eligibility as part of your company appraisal.

BENEFIT DERIVED FROM EU COLLABORATIVE ENGAGEMENT

The programme has been developed on the back of a long-standing relationship between Scottish Enterprise and the European investment Fund. This is a new way of working for the EIF, as it works increasingly-closely with National Promotional Institutions (NPIs - of which SE is one). In order to facilitate this closer working, the EIF formed the EIF-NPI Equity Platform, which is a group to share knowledge and experience of activities to support the risk capital market. In addition to the financial commitment by the EIF, the development of this project has brought the benefits of shared experience and expertise from both the EIF and other organisations from across Europe.



"The foundations of Scotland' s economy remain strong, however we will continue to do all we can to invest further in our economy and stimulate growth. The Scottish Growth Scheme will be a halfbillion pound boost to support businesses and jobs at a time when the UK Government stance on Brexit continues to present a huge threat to jobs and prosperity in Scotland. This new multi-million pound programme, the first under the Scottish Growth Scheme, is specifically designed for companies seeking large equity investment to support their growth plans. The new programme will open up a new pool of potential investors from across Europe. We want our businesses to be able to expand and create more job opportunities and the new programme will provide considerable investment."

Finance Secretary Derek Mackay





Slow Adventure in Northern Territories (SAINT)

Northern Periphery and Arctic Interreg Programme

PARTNERS

University of the Highlands and Islands, Scotland (Lead Partner) (UK) Derry City and Strabane District Council, Northern Ireland Wild Norway (Norway) Mid Sweden University (Sweden) Northern and Western Regional Assembly, Ireland Leitrim County Council (Ireland) Naturpolis Ltd, (Finland) Metsähallitus, Natural Heritage Services, Finland University of Iceland (Iceland) Icelandic Tourism Research Centre (Iceland) The Nord-Trøndelag University College (HiNT) (Norway)

OVERVIEW

The SAINT project seeks to extend the marketing reach of businesses in the slow adventure tourism sector, in order to

encourage more tourists to come to these peripheral areas to enjoy and experience the outdoors and engage with remote, wild and nature-rich places.

Although the project is still running the main achievement has been in the Scottish case study, where a clustering model was used to bring together a range of tourism businesses to create new tourism products.

These clusters are the result of months of working with local businesses to test the effectiveness of collaboration that enables these micro-businesses to diversify their existing products and combine their expertise and offerings to broaden and enhance their promotional potential.

The interest at the 2017 VisitScotland EXPO show, where the 'slow adventure' cluster's stand won a couple of awards, was considerable, especially from international tour operators. As a result of this clear appetite for slow adventure, the partners are looking to create a spin-off company to sell these products.

BENEFIT DERIVED FROM EU COLLABORATIVE ENGAGEMENT

The project has demonstrated added value by enabling the project lead partner in Scotland to work closely with micro-businesses on ventures that have led to the sale of commercial

Networking Scotland in Europe www.scotlandeuropa.com

Project Launch

13 April 2015

Project Completed 12 April 2018

Further Information

University of the Highlands & Islands Sara Bellshaw

sara.bellshaw.whc@uhi.ac.uk

Website saintproject.eu slowadventure.scot products, which in turn will help to sustain and grow the tourism sector, and consequent employment, in a rural and marginalised area.

LESSONS LEARNED

Effective collaboration with multiple businesses can be a lengthy process, given the busy nature of tourism SMEs for much of the year and issues inherent in dealing with many partners, but rewards favour those who persevere.



EU US eHealth Work Project (EU US

eHealth Programme)

Horizon 2020 Programme

PARTNERS

Omni Micro Systems - Omni Med Solutions GmbH (Germany) European Health Telematics Association (EHTEL), Brussels (Belgium) University of Applied Sciences Osnabrück (Germany) Technology University of Tampere (Finland) Steinbeis Innovation GGmbH (Germany) Health Information and Management Systems Society Foundation (USA)

OVERVIEW

Electronic systems in healthcare (eHealth) help increase the quality, safety and efficiency of healthcare delivery. eHealth enables healthcare workers and providers to maximize their care delivery, and ultimately results in better outcomes for patients, consumers and society. Healthcare systems require a robust supply of both highly proficient eHealth/IT professionals as well as an overall workforce that has a sufficient level of IT skills to make the optimum use of eHealth.

Project Launch 01 September 2016

Project Completed 28 February 2018

Further Information Edinburgh Napier University Siobhan O'Connor S.OConnor@napier.ac.uk

Website www.ehealthwork.eu

However, there is a global shortage, especially in the European Union, of eHealth workers across the full spectrum of job roles, spanning clinical, social care, informatics, and administration. There is also a dearth of structured eHealth education and training opportunities.

The goal of this project is to address this workforce shortage by:

- Mapping needs, gaps, and outcome models
- Providing resources to assess and improve skills
- Increasing educational and training opportunities
- Promoting knowledge and development in the field of eHealth

BENEFIT DERIVED FROM EU COLLABORATIVE ENGAGEMENT

Firstly, an EU-wide approach to mapping the eHealth skills and competencies of the health workforce which has never been undertaken before, and such an undertaking will generate novel research and a better understanding of the training gaps which exist, thereby helping to inform health education policy at EU and Member State levels.

Additional benefits include furthering of knowledge of the health informatics education field through international partnerships (which can be used to improve education in Scotland), as

well as the building of strategic international networks, which can be used to source additional funding to generate research and improve education in Scotland and the wider UK.

HOW THE PROJECT AFFECTED CHANGE

Working with the consortium is leading us to look at other EU funding opportunities, including an application to the ERASMUS+ programme's Strategic Partnership scheme, to build a European-wide infrastructure for eHealth education and training. We are also reviewing further Horizon 2020 funding calls to take the results of the survey and develop, evaluate and share inter-professional eHealth curricula and training resources for health and social care professionals.

LESSONS LEARNED

We are currently analyzing the results of the survey which will be published in early 2018. However, it is clear there is a significant gap in eHealth education at university level across the entire European region, with most countries' having limited-to-no education at undergraduate level (although a few have postgraduate training options). There is also limited eHealth training within health systems across EU Member States, although some adhoc programmes do exist. There is a lack of consistency in the depth and breadth of topics taught and whether learning outcomes and eHealth skills/competencies are achieved.





"Working on a European project provides a unique insight into the common challenges our regions face and how we can learn to address these through collaborative research with international colleagues!"

S i o bhan O'Connor, Edinburgh Napier University

Hydrogen Transport Economy (HyTrEc)

North Sea Programme

PARTNERS

Aberdeen City Council (Lead Partner) (Scotland) SP Technical Research Institute (Sweden) Hydrogen Sweden (Sweden) Green Network (Denmark) Europaisches Institut fur Innovation (Germany) Gateshead College (UK) Waterstofnet (Belgium)

OVERVIEW

HyTrEc achieved a lot through the project life, especially the establishment of a Joint Strategy Framework for the North Sea Region and recommendations by the HyTrEc project partnership to support the deployment of hydrogen fuelled transport.

During the project lifespan, HyTrEc developed a range of tools, materials and platforms to share the project findings, engage with

a variety of stakeholders at different levels through various technical events such as the Fuel Cells, Batteries and Hydrogen Group Exhibit at Hanover Messe (Europe's largest exhibition for fuel cells) and All Energy, the UK's premier event for renewable energy as well as more public events. The project website was a key communication tool, where all project materials are published: www.hytrec.eu.

HyTrEc successfully engaged and exchanged with a variety of projects and organisation all with the same aim of supporting the deployment of hydrogen fuelled transport. This was done through the industry stakeholder group, an extensive project stakeholder list (over 300 stakeholders), a LinkedIn group (with over 100 members from 18 countries) and networking at various events throughout Europe.

The project made great steps towards communicating with politicians and influencing political opinion to the value and importance of the hydrogen sector. At a local level, each project had great political support which was visible all the way through the project for example the Danish partner Green Network started the project with little hydrogen vehicle activity and ended the project with a refuelling station and several fuel cell vehicles being used by the municipality.

At a regional level, again political support was evident especially during partner visits/conferences such as the launch of the 2 hydrogen hybrid vans at the North Sea Commission Annual Conference in Aberdeen 2014; or the launch of the Aberdeen Strategy Framework for Hydrogen at All Energy 2013 by Ed Davey, the UK Energy& Climate Change Minister at the time.

Project Launch 02 June 2013

Project Completed 30 June 2015

Further Information Aberdeen City Council Emma Watt ewatt@aberdeencity.gov.uk

Website www.hytrec.eu

At an EU level HyTrEc was able to engage and inform politicians with influence on the European agenda most notably through the launch of the joint hydrogen strategy framework for the North Sea Region, at the final conference in Aberdeen

BENEFIT DERIVED FROM EU COLLABORATIVE ENGAGEMENT

HyTrEc deployed a high level of transnational working to allow NSR exchange of information and practices to guide the final outputs of the project. 6 monthly conferences where all partners attended, to participate in the working meetings and update other partners on progress within their local projects - these transnational exchanges allowed partners to compare progress, share information and experiences. An online discussion forum via LinkedIn, further enabled a wide cross section of people to take part in discussions. There were over 100 participants from 18 countries from as far afield as Japan, South Africa and India.

One of the main outputs of the project was the development of a Joint Hydrogen Strategy Framework for the North Sea Region. In order to develop the strategy framework, the HyTrEc partnership and Industry stakeholders focused on identifying the key barriers or challenges to be overcome. Exercises were influenced by the experience that the project partners have in the hydrogen sector or from the introduction of other alternative fuels, renewable energy and low carbon sectors. Other activities were also taken into account, such as demonstration activities carried out by some partners, as well as the development of the HyTrEc education programmes and a journey by hydrogen car around the North Sea Region.

The development and deployment of the demonstration infrastructure and vehicles has contributed a high level of learning to the partnership and beyond. The progress and issues of the vehicles and refuelling station have been discussed at each partner meeting and when possible the partners have been on study tours to experience and learn from the demonstrations at first hand. The experiences and lessons learned have been documented in a lessons learned log and have informed the NSR strategy framework for hydrogen which will be used to aid further deployments.

LESSONS LEARNED

Over the project life-cycle, HyTrEc collated a 22 page document on some of the key lessons learned. Some Difficulties pertained to locating trained local technicians who weren't able to repair vehicles and so identified a need to provide in-house training so that staff are trained to undertake the required work and get any damaged vehicles back on the road quickly.

Initially drivers were opting for diesel mode only as they lacked confidence to use the hydrogen. Two rounds of driver training were required to overcome this anxiety and empower drivers to use the H2 mode. All data had been recorded to a USB, which was required to be downloaded and sent away. An easier option in future would be for wireless dongle type approach with live time analysis.



Hydrogen Transport Economy for the North Sea Region

Circular Ocean

Northern Periphery and Arctic Programme

PARTNERS

Environmental Research Institute, North Highland College UHI (Scotland) - Lead Partner Centre for Sustainable Design, University for the Creative Arts (England) Macroom E (Rep. of Ireland) Arctic Technology Centre (Greenland) Norwegian University of Science and Technology (Norway)

Also a range of associate partners: Nofir AS (Norway), Marine Scotland (Scotland), Environmental Protection Agency (Rep. of Ireland), Local Enterprise Office South Cork (Rep. of Ireland).

OVERVIEW

The €1.5 million Circular Ocean project seeks to inspire enterprises and entrepreneurs to realise the hidden opportunities of discarded fishing nets and ropes in the Northern Periphery & Arctic (NPA) region.

Project Launch 01 October 2015

Project Completed 30 September 2018

Further Information University of the Highlands & Islands Neil James neil.james@uhi.ac.uk

Website www.circularocean.eu

Led by the Environmental Research Institute (ERI) of the North Highland College UHI, Circular Ocean has been funded to tackle the increasing problem of marine pollution by encouraging the 'upcycling' and 'repurposing' of plastic litter, i.e. to turn waste plastic from the sea into a useful resource and support the move to a more circular economy.

As increasing levels of marine litter are particularly pertinent to the NPA region, the Circular Ocean project acts as a catalyst to motivate and empower remote communities to develop sustainable and green business solutions that will enhance income generation and retention within local regions.

Through transnational collaboration and eco-innovation Circular Ocean is developing and testing new sustainable solutions to incentivise the collection and reprocessing of discarded fishing nets in the move towards a more circular economy.

The project has been running for just under 2 years and is not completed but it has already delivered tangible economic benefits across NPA - e.g. the project has linked a local plastic manufacturer with a designer and the local artisan sector have been connected to other businesses and development agencies in the area, resulting in cross-sector collaborations and addressing the challenges and opportunities of the more remote areas in the North.

The project will pilot testing new uses for old fishing nets in two areas: 1. Using fishing nets to reinforce concrete, and within building materials i.e. bricks tiles, and roof insulation. 2. Using fishing nets as a material to remove pollutants from water. The focus of both pilots will be on creating environmentally sustainable products. Another potential use of marine plastic that is being investigated through the project is as a feedstock for 3D printing.

BENEFIT DERIVED FROM EU COLLABORATIVE ENGAGEMENT

The Circular Ocean project features a cohesive and strong collaboration of committed partners from diverse regions representing remote and rural communities. Adopting a triple helix partnership involving public, private and academic partners ensures that the results of the project have a real impact in the partner countries through encouraging greater dissemination of good practice, and widening the scope for successful enterprises and supply chains mechanisms to proliferate across the region.

Circular Ocean is a very current project with real potential to harness the wealth of the ocean, view fishing nets as a raw material, and through novel project activities unlock hidden economic opportunities in this specific sector. Through transnational collaboration and eco-innovation, Circular Ocean's position in the wider context of national and EU initiatives is of real need and of strategic importance enhancing the eco-innovation capacity of northern regions, as well as providing real time solutions for businesses and communities of the Northern Periphery and Arctic areas which have vast coastlines and important fishing industries.

In October 2016 the Circular Ocean project was recognised as worthy of the European Commission RegioStars Public Choice award – a prestigious award highlighting some of the best examples of European collaboration, resulting in tangible benefits for the regions involved and also shared across the wider European community.

HOW THE PROJECT AFFECTED CHANGE

The project is on-going and it has enabled capacity building at ERI and connected it with stakeholders other than those the University usually engages with - such as harbour masters, fishermen, fishing net manufactures, business support groups, and entrepreneurs. This is vital to ensure that the research can be better applied and address the real need on the ground across the Northern Periphery area. The work through the project has gained a lot of momentum and the consortium is already discussing the follow-on activities and further collaboration.

LESSONS LEARNED

The project has developed a better understanding of the issues of marine litter across different parts of the Northern Periphery. The sector turned out to be quite fragmented and not well regulated. Through transnational collaboration, the project is developing solutions to address this fragmentation and creating the market, testing and sharing approaches across the regions and connecting people in remote communities with the opportunities in their local areas.







"Virtually all plastic ever produced is still with us today, with more entering the seas each year to the detriment of fish, birds, turtles and marine mammals. If we utilise this so-called waste material for a new purpose we reduce the amount of new plastic created, reduce marine pollution, and encourage new green enterprises. Our aim in Circular Ocean is to facilitate this in the northern Europe and Arctic region."

Neil James, University of Highlands & Islands

Compact Ultrafast Laser Sources Based on Novel Quantum Dot Structures (FAST-DOT)

Framework 7 Programme

PARTNERS

University of Dundee (UK) – Coordinator Innolume GmbH (Germany) University of Sheffield (UK) Tampere University of Technology (Finland) Swiss Federal Institute of Technology Zurich (Switzerland) Royal Institute of Technology Stockholm Sweden (Sweden) Institute of Photonic Sciences (Spain) The Foundation for Research and Technology - Hellas (Greece) Alcatel Thales III-V Lab (France) Vilnius University (Lithuania) M Squared Lasers Limited (UK) Philips (Germany) Technical University of Darmstadt (Germany) **TOPTICA** Photonics AG (Germany) TimeBandwidth Zurich (Switzerland) Politecnico di Torino (Italy) University of Athens (Greece) Molecular Machines and Industries GmbH (Germany)

Project Launch 01 June 2008 Project Completed 31 August 2012 Further Information M Squared Lasers Ltd

nils.hempler@m2lasers.com

Dr Nils Hempler

OVERVIEW

FAST-DOT was a €14.75M project (EU contribution €10.1M) coordinated by the University of Dundee, with a project consortium consisting of 18 of Europe's leading photonics research groups and companies from 12 different countries. The aim of the project was to take advantage of the unique properties of nano-materials based on semiconductor growth to develop a new class of miniature lasers designed specifically for biomedical and imaging applications such as multi-photon imaging and cell surgery. FAST-DOT delivered significant advances and world record performances in defining the unique properties of semiconductor nano-materials based on quantum dots to realise a new class of semiconductor lasers components. For M Squared Lasers the project provided a technical foothold in a strategically relevant area, yielding key developments in the area of modelocked semiconductor disk lasers. The project was instrumental in paving the way for the acquisition of Solus Technologies Limited in 2012, whilst subsequent collaborations in the area have touched upon each of the company's strategic thematic areas, namely: biophotonics, quantum technologies and chemical sensing. The commercial impact of participation has been remarkable in both tangible and intangible ways, fuelling both direct revenues but also providing a launch pad for many further interactions with future customers and collaborators.

BENEFIT DERIVED FROM EU COLLABORATIVE ENGAGEMENT

The project gave a welcome introduction to EU collaborative engagement which was ultimately instrumental in shaping M Squared's philosophy on open innovation and has steered the company towards a wide variety of fruitful interactions in both the commercial and research domains. The benefits of collaborative working were made clear and the company has participated in a further 20 EU-funded programmes of various kinds. The strength of the institutions we worked with and the research that emerged from the programme, showed clearly the potential positive outcomes that can be gained from such activities.

HOW THE PROJECT AFFECTED CHANGE

The project had a notable effect on the company from the outset. At the start of the project M Squared was a small start-up with limited reach and by the project close, the project had helped to accelerate exceptional growth in revenues and headcount, along with a significant investment round at that time. The project allowed the company to de-risk a speculative development programme in a new and strategically relevant area. In providing security for this work in an early stage company, the project not only established this technology as a core capability within the company but also led to a variety of subsequent collaborative projects in each of the company's strategic priority areas, delivering results for biophotonics, quantum technology and chemical sensing applications. In terms of corporate developments, the acquisition of Solus Technologies Limited was a key success story at the end of the project whilst, the more recent establishment of M Squared Life, a business unit specialising in life sciences such as microscopy gives another exploitation route for the project outcomes.

LESSONS LEARNED

The project provided a steep learning curve in the delivery and management of large-scale EU funded projects. The complexity of technical delivery across a broad consortium and the high level of project management required to facilitate worthwhile collaboration, whilst delivering the necessary stakeholder outputs, illustrates the challenges experienced in EU projects. A key outcome of the project was a long-term strategic relationship with Kite Innovation Limited; an EU proposal and project management consultancy. A close working relationship was developed through the project which has led to numerous new opportunities and projects. The virtue of participation in EU-funded programmes was clear from the outset and whilst challenging, the benefits of participation certainly outweighed any short term costs.





"M Squared Lasers' participation in FAST-DOT really paved the way for a long and fruitful relationship with EU funding across FP7 and now H2020. For an early stage company this work was instrumental in shaping the company's approach to open innovation, which has been continued far beyond the project end."

Dr Nils Hempler, M Squared Lasers Ltd

Marine Energy Research Innovation and Knowledge Accelerator (MERIKA)

Framework 7 Programme

PARTNERS

UHI was the sole beneficiary, with project activity undertaken at three Academic Partner locations "research where the resource is". The Academic Partners involved were; Environmental Research Institute (ERI) UHI, Thurso Lews Castle College (LCC) UHI, Stornoway Scottish Association for Marine Science (SAMS) UHI, Oban

An important component of MERIKA has been a bi-lateral researcher exchange programme with seven leading EU research institutions (mobility partners), that have variously developed research skills, fostered research co-operation and knowledge exchange, raised awareness and disseminated the marine renewable energy activities of UHI. These EU research institution partners were:

Technical University Hamburg (Germany) National University Galway (Ireland) Wave Energy Centre (Portugal) Wageningen University and Research (The Netherlands) Norwegian University of Science and Technology (Norway) Helmholtz-Zentrum Geesthacht (Germany) University of Nordland (Norway)

Project Launch

01 February 2014

Project Completed 31 July 2017

Further Information

University of Highlands & Islands Damian Collins damian.collins@uhi.ac.uk

Website

https://www.uhi.ac.uk/en/merika

OVERVIEW

The aim of MERIKA has been to enable UHI, located in the North of Scotland, to realise its ambition to become a European marine renewable energy Research and Innovation Hub.

MERIKA has delivered a combination of capacity improvements and capability enhancements, a resource and research exchange programme with leading European research institutions, supported by a programme of networking, knowledge exchange and industry engagement activities. The component parts of this are: People and skills; Infrastructure and equipment; Researcher exchanges; Networking and knowledge exchange; and Innovation.

MERIKA has raised the profile of UHI across the mainstream European Research Area and positioned the university as a credible institution within the marine renewable energy community; provided a springboard for participation in new research collaborations and led to the development of a more coherent Innovation model at UHI, with enhancements to the

IP and commercialisation policy and infrastructure framework; and inspired the creation of an Energy Innovation Support Office.

BENEFIT DERIVED FROM EU COLLABORATIVE ENGAGEMENT

In a broad strategic sense, EU Structural funds have prepared the way for the realisation of MERIKA, with investment in facilities, capacity, staff and research students. Without earlier investments through the Highlands and Islands Special Transition Programme 2000-06, and Highlands and Islands Convergence Programme 2007-13, UHI would not have had the building blocks in place to pursue marine renewable energy as a research strategy opportunity, through the FP7 REGPOT initiative.

In a narrower project sense, EU collaborative engagement has seen UHI expand and deepen is relationships with EU research institutions, industry players and a range of other institutional stakeholders. UHI is much more engaged in addressing the challenges of an emerging industry sector; imparting information, expertise, knowledge and opinions, as well as influencing solutions and pathways on the marine renewable energy development roadmap. As a result, there is a healthy pipeline of research and industry collaborations, supporting the retention and integration of the MERIKA scientist cohort into post-MERIKA research positions at UHI.

HOW THE PROJECT AFFECTED CHANGE

The project has been an enabler for follow-on activities, allowing the university to leverage in research capacity and networks/links to engage in more research collaborations. The multi-disciplinary nature of the MERIKA research cohort has enabled UHI scientists to engage across a range of marine renewable energy challenges, and provide a holistic perspective to complex development challenges.

The project has enabled UHI to establish new infrastructure within the organisation. It has realised the Centre for Society and the Sea at SAMS, and the creation of a wave radar station at LCC.

It has also affected change in the organisation in terms of our Innovations structures. The project has led the development of a more harmonised Innovation model at UHI, with enhancements to the IP and commercialisation policy and infrastructure framework. MERIKA has also led to the creation of an Energy Innovation Support Office (EISO) to co-ordinate industry engagement and wider collaboration activities across UHI.

LESSONS LEARNED

Alignment with regional development is important in helping to realise project goals. The marine energy focus of MERIKA aligns with the economic priorities established for the H&I's by the local regional development agency – Highlands and Islands Enterprise (HIE). It allows for "joined up" focused sector activity, facilitates access to the stakeholder community, and ensures there is critical mass/scale in terms of resources and skills.

A successful project must have strategic support from the organisation and strong project management structures. The MERIKA goals align with the UHI research strategy, which ensures SMT "buy in" from across UHI and the Academic Partners – important in the distributed university model that is UHI. Similarly, a clear project management structure

based on a plan of tasks, deliverables, milestones, responsibilities and outputs ensures the project stays focused on its objectives over its 3.5yr lifecycle.

Capacity investment in resources and infrastructure attracts quality researchers. UHI was able to recruit 18 scientists from a range of science backgrounds and nationalities to work in the Highlands and Islands, with some of the early career scientists commenting on the unique opportunity afforded to then by the MERIKA mobility and networking initiatives to build up research links for further collaboration. In turn, this has realised research and industry collaborations that have supported the retention and integration of the majority of this science cohort.

Investment in a multi-disciplinary research cohort has been a positive outcome of MERIKA. It has positioned UHI more broadly across the sector, and allowed UHI scientists to engage in a range of marine renewable energy challenges. It has also introduced the potential to contribute fuller holistic perspectives to complex, multi-faceted development challenges.





"MERIKA (Marine Energy Research Innovation and Knowledge Accelerator) is a strategic programme through which the University of the Highlands and Islands will realise its ambition of becoming a European Marine Energy and Innovation Hub. For us, it sums up all that' s best about EU engagement. Our expertise in marine energy received significant investment from previous structural funds programmes, allowing us to build up our capacity in terms of physical infrastructure, kit and - most importantly - people with the necessary high level skills. However, we needed a bridge to nurture links with marine energy experts in universities across Europe. MERIKA, funded by the FP7 Regions of Potential Programme, provided that bridge and gave us the impetus we needed to participate in future excellence programmes"

Professor Clive Mulholland, Principal and Vice-Chancellor, University of the Highlands and Islands

Enhancing policies through interregional cooperation: New industrial value chains for growth (S34Gowth)

Interreg Europe Programme

PARTNERS

The Council of Tampere Region (Finland) The Baltic Institute of Finland (Finland) Basque Government (Spain) Catalan Agency for Business Competitiveness (ACCIO) - Government of Catalonia (Spain) Flemish Government, Department Economy, Science and Innovation (EWI) (Belgium) AFIL - Intelligent Factory Lombardy Cluster (Italy) National Innovation Agency (Portugal) Scottish Enterprise (Scotland) Region Sane (Sweden) Brain port Development (The Netherlands) Province of Zooid-Holland (The Netherlands)

OVERVIEW

Within the Vanguard Initiative 'New Growth through Smart 'Specialisation', the S34Growth partners have been pioneering a new

approach to European industry-led interregional cooperation since late 2013.

As regions desire to leverage their own strengths in combination with innovation capacity in other regions interregionally, the existing policy structures and financing frames need to be improved to suit these interregional ambitions.

The main objective of the S34Growth project has been to develop and improve existing regional policy instruments to facilitate this interregional collaboration which in turn will support the renewal of Europe's industry and competitiveness. The focus is on improving the policy framework in order to be able to test and mainstream a methodology for industry-led interregional cooperation following the smart specialisation strategy (S3) principle that can be easily replicated at any domain anywhere in Europe.

BENEFIT DERIVED FROM EU COLLABORATIVE ENGAGEMENT

The project has provided SE with the opportunity to gain a more in-depth perspective of the approaches partner regions have taken to progressing their respective S3 agendas and the adoption of Industry 4.0. This has subsequently highlighted to SE areas where our approach is complementary and has the potential for larger inter-regional collaborative work as well a areas where partners have taken a different approach and Scotland can learn from this.

Networking Scotland in Europe www.scotlandeuropa.com

Project Launch 01 April 2016

Project Completed 31 March 2020

Further Information

Scottish Enterprise James Coggs James.coggs@scotent.co.uk

Website

www.interregeurope.eu/S34 Growth/ Hosting a study visit in Glasgow in March 2017 also provided an opportunity for Scotland to showcase areas of expertise, particularly in the renewable energy sector and financial instruments.

Whilst still ongoing, the project has undoubtedly brought the 10 partner regions closer together, building up a level of trust between the partners and helping to encourage further introductions and interactions between various agencies. This will hopefully lead to enhanced joint working in the future once the project has completed.

HOW THE PROJECT AFFECTED CHANGE

The project has already led to further discussions with various partners on the potential for joint inter-regional projects, options for the utilisation of Article 70 and also further sharing of knowledge around topics such as joint calls, societal challenges and public/private procurement.

LESSONS LEARNED

The majority of the partners have shown a strong ability to engage with industry during the implementation of heir S3 strategies, predominantly through the utilisation of their cluster organisations. This is something that Scotland has historically been weaker on than other partner regions and is a key area of learning during the various regional learning journeys.





"The S34Growth project has allowed Scottish Enterprise to build closer, deeper relationships with a range of partner regions in Europe, providing not only the opportunity to showcase Scotland's areas of expertise to new audiences but also the chance to witness firsthand the various approaches different regions are adopting to pursue their smart specialisation agendas. This has helped to identify potential new approaches to smart specialisation as well as highlighting areas of alignment in policy and approach, both of which will hopefully help to further shape and enhance Scotland's approach to innovation going forward."

J

ames Coggs, Research & Evaluation, Scottish Enterprise

Energy Efficiency for EU Historic Districts' Sustainability (EFFESUS)

7th Framework Programme

PARTNERS

Led by Spanish research establishment Tecnalia Research & Innovation, the project consortium consisted of 23 partners from 13 European countries, including large commercial companies and small and medium-sized businesses (SME), universities and other research institutes and public bodies. The German applied-research organisation Fraunhofer-Gesellschaft acted as scientific and technical coordinator. Historic Environment Scotland was one of three Scottish partners in the project; the other two were SMEs.

OVERVIEW

EFFESUS focused on conducting research on the energy efficiency and sustainability of European historic urban districts, and investigated measures and tools to make significant improvements, whilst protecting heritage values. Historic urban

districts are an integral, important part of European cultural identity and heritage. Improving their energy efficiency sensibly helps to protect this heritage for future generations.

EFFESUS has developed new technologies, produced a software tool to inform decisions on improvement measures, provided training and awareness activities, and demonstrated its project results in real case studies in seven historic urban districts across Europe. One case study was located in Glasgow, trialling successfully a novel insulation product developed by a Scotland project partner.

BENEFIT DERIVED FROM EU COLLABORATIVE ENGAGEMENT

Firstly, working together collaboratively with European partners allowed the development of an advanced urban assessment tool for historic districts, which would not have been produced at a national level.

Secondly, the joint development of energy-related retrofit measures for historic buildings helped to introduce the new products commercially in more than one country. And, lastly, dissemination activities were carried out at the European scale, allowing engagement with policymaker at both national and international levels.

Project Launch 01 September 2012

Project Completed 31 August 2016

Further Information

Historic Environment Scotland Carsten Hermann carsten.hermann@hes.scot

Website www.effesus.eu

HOW THE PROJECT AFFECTED CHANGE

EFFESUS aligned well with the research priorities of Historic Environment Scotland, especially with regard to improving the energy performance of historic buildings. The specific focus of the project allowed us for the first time to investigate this field of research from an urban perspective. The project has not only contributed to our activities in this field of research, but has also led to our participation in a new international project, commencing in 2017, for the International Energy Agency to help disseminate our research findings and those of our partners at European and international level.

LESSONS LEARNED

In EFFESUS, we've learned that active engagement with our European partners throughout the duration of the project is the best way to ensure that the project's technological developments and research outputs become widely applicable to a British, and indeed Scottish, context culturally, economically and technically.





"Participating in the development of an analytical software tool to assess the energy performance improvements of historic urban districts was a fascinating experience, which helped substantially to expand our field of expertise. Equally, our input was much appreciated by our European project partners, as we were able to contribute a well-balanced

approach to urban conservation."

Carsten Hermann, Historic Environment Scotland

Tools for Assessment and Planning of Aquaculture Sustainability (TAPAS)

Horizon 2020 Programme

PARTNERS

The University of Stirling (UK, Scotland), the Coordinator	01
Norsk Institutt For Vannforskning (Norway)	
DHI (Denmark)	_
Water Insight BV (Netherlands)	Pr
STICHTING DIENST LANDBOUWKUNDIG ONDERZOEK (Netherlands)	28
Plymouth Marine Laboratory (UK)	
Universidad de Murcia (Spain)	с.
Universite de Nantes (France)	FU
Hellenic Centre for Marine Research (Greece)	Ur
Szent Istvan University (Hungary)	Ai
Aquabiotech Limited (Malta)	aiı
Marine Institute (Ireland)	
Kozep Es Kelet Europai Akvakulturakozpontok Egyesulet (Hungary)	
Aquaculture Stewardship Council (UK)	W
Fundacion Imdea Agua (Spain)	ta

Project Launch 01 March 2016

Project Completed 28 February 2020

Further Information University of Stirling Ainars Blaudums ainars.blaudums@stir.ac.uk

Website tapas-h2020.eu

OVERVIEW

Aquaculture is one of five sectors in the EU's Blue Growth Strategy, aimed at harnessing untapped potential for food production and jobs whilst focusing on environmental sustainability. TAPAS addresses this challenge by supporting member states to establish a coherent and efficient regulatory framework aimed at sustainable growth by evaluating existing regulatory and licensing frameworks across the EU, taking account of the range of production environments and specificities and emerging approaches.

TAPAS partners evaluate the capabilities and verification level of existing ecosystem planning tools and are working to develop new approaches for evaluation of carrying capacities, environmental impact and future risk. The innovative methodologies and components emerging from TAPAS will be integrated in an Aquaculture Sustainability Toolbox complemented by a decision support system to support the development and implementation of coastal and marine spatial planning enabling less costly, more transparent and more efficient licensing.

TAPAS partners collaborate with key industry regulators and certifiers through case studies to ensure the acceptability and utility of project approach and outcomes. Training, dissemination and outreach activities are specifically target improvement of the image of European aquaculture and uptake of outputs by regulators, while promoting an integrated sustainable strategy for development.

BENEFIT DERIVED FROM EU COLLABORATIVE ENGAGEMENT

To maintain in existing and future aquaculture systems, appropriate environmental characteristics, good water quality, well-understood social interactions and use of inland and coastal resources are essential. Consequently, suitable zoning, selection of sites and application of carrying capacity are among the most important issues for future success of European aquaculture, and also predicate the need for sustainability, resilience and best practice guidelines, as provided by the Ecosystem Approach to Aquaculture.

Working with partners from all around Europe allows the consortium to evaluate best practices, to develop necessary tools, approaches and frameworks to support EU Member States in establishing a coherent and efficient regulatory framework and delivering a technology and decision framework for sustainable growth.





"Ensuring efficient use of existing tools and development of advanced new tools, to support sustainable growth of aquaculture within all EU Member States."

Ainars Blaudums, University of Stirling

North Sea Solutions for Innovation in Corrosion for Energy (NeSSIE)

European Maritime & Fisheries Programme

PARTNERS

The University of Edinburgh (UK) Scottish Enterprise (UK) The Swedish Research Institute/Svenskt Marintekniskt Forum (Sweden) Sirris, het collectief centrum van de technologische industrie (Belgium Cluster de Energía del País Vasco (Basque Energy Cluster) (Spain) Fundacion Asturiana de la Energia (Spain) Società Consortile per Azioni (Italy) Lombardy Energy Cleantech Cluster (Italy)

OVERVIEW

NeSSIE will establish strategic public-private cross-sectoral partnerships in the North Sea basin, to deliver new business and investment opportunities in one of the key challenges facing the development of blue technologies in Europe:

corrosion (defined as the gradual destruction of materials by chemical reaction with their environment).

The reliability of offshore industry and marine renewable energy installations is a key engineering challenge in the offshore sectors. The application of corrosion solutions and new materials is crucial to ensuring European leadership in the offshore energy sector, and the medium to long term viability of installations. Metal corrosion impacts upon the structural integrity, maintenance costs and environmental impact of structures in the marine offshore energy applications' markets.

Building on an initial roadmapping exercise for current corrosion solutions and new materials in existing sectors (offshore oil and gas, subsea engineering and subsea construction and fabrication), NeSSIE will develop a roadmap and investment plans for the establishment of public-private partnerships to apply this knowledge in offshore renewables. This will lead to the delivery of three bankable, investment-ready demonstration projects in the North Sea for corrosion solutions and new materials for use in the wave, tidal and offshore wind energy sectors.

Offshore energy is at the core of NeSSIE partners' smart specialisation strategies (S3). The project brings together partners with a strong track record of cooperation in the Advanced Manufacturing for Energy Pilot Action (ADMA Energy Pilot) of the Vanguard Initiative (VI) for New Growth through Smart Specialisation. Making the EU the global leader in components

Networking Scotland in Europe www.scotlandeuropa.com Website

www.nessieproject.com

mark.georgeson@scotent.co.uk

Project Launch 01 May 2017

01 May 2017

Project Completed 30 April 2019

Further Information

Scottish Enterprise

Mark Georgson
for marine renewables and offshore energy applications lies at the heart of the VI Energy Pilot. NeSSIE's ambition is to develop North Sea demonstration cases in the key challenge area of corrosion to realise this goal.

NeSSIE will develop greater strategic cooperation in the North Sea basin. The North Sea is the premier location to test corrosion management techniques and technologies, based on its traditional oil and gas development and geographic suitably for offshore renewables. The harsh operating environments will enable NeSSIE to explore technologies which can be upscaled to other sea basins.

NeSSIE's three demonstration cases will build a wider North Sea value chain. They will test potential solutions for the benefit of both the ocean renewables sector, and the established marine industries of the North Sea and this will engage a wide company base; will establish transnational consortia from the VI Energy Pilot regions; and will take forward demonstration projects for the wider benefit of the North Sea basin.

BENEFIT DERIVED FROM EU COLLABORATIVE ENGAGEMENT

EU collaboration is the reason that the Nessie project was developed. The project has resulted from work between the partners on the Vanguard Initiatives Energy Pilot led by Scotland and the Basque region. This project would not have come about had that original collaborative work not been in place to look at the specific opportunities around subsea for the supply chains in the involved regions. Corrosion was one the specific areas identified for further work. The call for funding that is supporting Nessie would also not have been developed if DG Mare were not working closely with the Energy Pilot to consider how they supported the transfer of technologies from traditional industries in the marine environment into new markets.

HOW THE PROJECT AFFECTED CHANGE

The project is in its early days but is having an impact on the way we work with supply chain companies and our partners. We are working much more closely to develop genuinely market focused solutions to address issues in offshore renewables. If the project objectives are met the follow on demonstration projects will have an excellent chance of being delivered and developing solutions that will be adopted in emerging growth markets. What is also clear is that the project partners will develop closer relationships and companies will form international relationships for these and other future projects.

LESSONS LEARNED

From the initial start up phase it is clear that communication is critical on the project and ensuring that work undertaken is complimentary to similar initiates in the offshore energy space. The collaboration must extend beyond this project to have maximum impact.





"I understand the project name was chosen to symbolise something that has managed to exist in harsh environments for a very long time. We appreciate the humour but more importantly we appreciate the real challenge that corrosion presents to anyone working offshore. Scotland has a world class supply chain in Subsea that has been deployed in energy projects all around the world for the last 40 years. This project is a great example of Scotland building on our strengths and providing an opportunity for our industries to come together to develop future opportunities. We are delighted to support this European project that also gives us the opportunity to develop

Paul Wheelhouse, Minister for Economy, Jobs and Fair Work

"Projects like NeSSIE are a great way for our subsea supply chain to collaborate with European partners to diversify and deliver market ready solutions in emerging markets such as renewables. This project presents a unique opportunity for Scotland' s world leading subsea companies. It' s great to see Scotland leading on this project and capitalising on its tremendous expertise and track record in Energy in the North Sea." pr

Maggie McGinley, Director for Energy at Scottish Enterprise

North Atlantic Climate (NACLIM)

EU Programme

PARTNERS

Universität Hamburg (Germany) Max Planck Gesellschaft zur Foerderung der Wissenschaften (Germany) Universite Pierre et Marie Curie (France) Universitetet i Bergen (Norway) Uni Research AS (Norway) Helmholtz Zentrum fur Ozeanforschung Kiel (Germany) Danmarks Meteorologiske Institut (Denmark) Havstovan (Faroe Islands) Ilmatieteen Laitos (Finland) Hafrannsoknastofnunin (Iceland) Stichting Koninklijk Nederlands Instituut voor Zeeonderzoek (Netherlands) Scottish Association for Marine Science Scotland, (UK) Natural Environment Research Council (UK) Stiftelsen Nansen Senter for Fjernmaaling (Norway) Vlaamse Instelling voor Technologisch Onderzoek (Belgium) Geographic Information Management (Belgium) Danmarks Tekniske Universitet (Denmark) Scottish Ministers acting through Marine Scotland (UK) Centre National de la Recherche Scientifique (France)

OVERVIEW

The North Atlantic is a critical region in a global climate context, with oceanic changes' in the region impacting on European weather and climate in particular. The North Atlantic Climate

Project Launch 01 October 2012

Project Completed 31 January 2017

Further Information

Scottish Association for Maritime Science (SAMS) Stuart Cunningham stuart.cunningham@sams.ac.uk

Website naclim.eu



(NACLIM) project investigated the predictability of oceanic changes, by bringing together observational scientists and climate modellers from across Europe. Knowledge of the current state of the ocean, and how it will change in years to come, is of paramount importance for society and key economic sectors which have to base their planning and decisions on robust climate information. NACLIM directly examined the effect of increasing temperatures on urban populations which are particularly vulnerable to heat waves. NACLIM worked with three end-user cities to predict the local impact of future climate and measures that urban planners can take to mitigate these effects.

BENEFIT DERIVED FROM EU COLLABORATIVE ENGAGEMENT

A large EU project such as NACLIM enables scientists to continue cutting-edge internationally collaborative research. This is vital for investigating large-scale environmental questions related to ocean circulation and climate, which require knowledge, expertise and resources across several countries. Involvement in a project such as NACLIM also enables interaction and collaboration with scientists across many areas of expertise. This inter-

disciplinary research has the potential to generate truly innovative science, as well as providing direct links from physical sciences to societal impacts.

The final review for NACLIM emphasises its 'exceeding success in defining and advancing a wide range of observing and modelling efforts related to ocean and atmosphere processes within the North Atlantic'. In addition, NACLIM's work on ocean ecosystems and the effects of increasing temperatures on urban populations led to direct societal impacts. The review also praises the project for bringing 'together experts from very diverse disciplines and many countries, which is unlikely to have happened without an ambitious undertaking such as NACLIM'. The project left a legacy of an impressive range of dissemination activities and a list of scientific publications resulting from or relating to the project which is described as 'truly outstanding'.

HOW THE PROJECT AFFECTED CHANGE

Participation in NACLIM enabled the Scottish Association for Marine Science (SAMS) to continue to be involved in innovative high-impact internationally-recognised research. This has a direct benefit for the institute as a whole, the local area, and the future generation trained at SAMS as part of the BSc Marine Science and PhD programmes. Additionally, NACLIM enabled individual scientists to form and consolidate collaborations within Scotland, the UK and Europe. As a result of NACLIM and previous related research, SAMS is currently participating in two EU Horizon 2020 programmes: ATLAS and Blue Action; in addition to a trans-Atlantic collaborative project OSNAP, in part funded by the UK National Environmental Research Council.

LESSONS LEARNED

Participation in NACLIM consolidated our view that investigation and monitoring of global ocean circulation and climate requires internationally co-operative research. The pooling of knowledge and funding, as well as the formation of large collaborative networks is crucial, not only to maintain SAMS's reputation as world-leaders, but also to enable ground-breaking research to continue. This is essential in a period of environmental uncertainty and increasing societal and economic impacts.



"NACLIM was an extremely successful project that brought together experts from very diverse disciplines across Europe to investigate ocean circulation in the North Atlantic, its effects on European Climate and associated impacts for city populations. NACLIM produced an impressive range of dissemination activities and leaves a legacy of a truly outstanding publication record. Additionally, projects such as NACLIM re-enforce SAMS' s ability to be an authoritative international voice on marine climate."

Stuart Cunningham, Scottish Association for Maritime Science (SAMS)

City Logo

Urbact Programme

PARTNERS

City of Utrecht (The Netherlands) Lead partner Municipality of Zaragoza (Spain) City of Warsaw (Poland) City of Vilnius (Lithuania) City of Oslo (Norway) City of Oslo (Norway) City of Aarhus (Denmark) City of Coimbra (Portugal) City of Genoa (Italy) City of Alba Iulia (Romania) City of Dundee (UK)

Project Launch 01 February 2013

Project Completed 30 April 2015

Further Information Dundee City Council Diane Milne Diane.milne@dundeecity.gov.uk

OVERVIEW

CityLogo focused on developing innovative and integrated place brand management for cities, bringing together a number of cities with varying levels of experience in place/destination branding.

Website urbact.eu/citylogo

The project consisted of:

- A series of study visits to cities with experience in place-branding Barcelona, Zurich
- 4 Thematic Workshops in Oslo, Utrecht, Dundee and Zaragoza
- The development of an Urbact Local Support Group in each area
- Development of a local action plan for each area, peer reviewed by partners

Partners had varying levels of experience of engaging in brand-led approaches and worked together to deliver 21st century appropriate models for delivery. URBACT projects are supported by a lead expert who undertakes a baseline study, supports the development of the programme,

As a result of participating in the project, Dundee realised that their city branding was quite far advanced, but with falling budgets, devising new digital models of branding and marketing were key. The project allowed us to learn from best practice, identify new ways of working, to engage local stakeholders to develop a local action plan and to implement the plan beyond the lifetime of the project.

Dundee hosted one of the thematic workshops which allowed us to showcase our city and our aims and ambitions whilst also generating income for the city through hotel nights etc.

BENEFIT DERIVED FROM EU COLLABORATIVE ENGAGEMENT

EU collaboration: Dundee has been delivering a brand-led approach to city marketing for many years but participating in the project allowed us to learn from best practice elsewhere;

identify new potential models of delivery; engaging local stakeholders to develop an action plan.

Expert support: support from an expert in the field of city branding and marketing to analyse existing activity and support the development of our local action plan.

URBACT National Capacity Building Programme: During URBACT II a series of workshops were held in each participating member country where every partner in a project from that country attended 3 training events which focused on key method of addressing urban issues.

LESSONS LEARNED

- Dundee's existing brand marketing was of a high quality
- Support to identify key audience segments and how to interact with them digitally
- Key information to support the brief for the redevelopment of Dundee's website Dundee.com
- Establishment of a key stakeholder group focused on delivery previously the brand stakeholder group consisted of high level officers from partner agencies who were less involved in the hands-on delivery of activity
- The benefits of crowd-sourcing the city's "story" making the most of local audiences to sell the city's assets narrative/story being key to a city's brand





Integrated Environmental Solutions Ltd

Framework 7 & Horizon 2020 Programmes



EINSTEIN

For a full list of all projects and partners please see <u>www.iesve.com/research</u>.

OVERVIEW

VERYSchool

FASUDIR FORTISSIMO iUrban REEMAIN

The main outcomes for IES (Integrated Environmental Solutions Ltd) have been new features in our proprietary software and new software for new markets. 80% of projects have resulted in product outcome for IES.

BENEFIT DERIVED FROM EU COLLABORATIVE ENGAGEMENT

As a result of EU project collaboration, we have evolved our software from being software for design of buildings only, to being software that can design communities (districts or cities), manage individual buildings with respect to energy efficiency, examine groups of buildings and their interaction with the grid and examine renovation potential and provide reliable and accurate what-if scenarios to building owners.

This has allowed us to grow our business considerably. We have employed 65 additional staff due to EU projects (almost half the company total of 147) and have seen considerable revenue increase although there will be more revenue increase to be observed in the future as many of these projects are still prototypes in commercial development. EU collaboration has been essential to our product development and company growth.

LESSONS LEARNED

Participation in EU projects has shown that you must make applying for EU projects a part of your business model. You have to accept that you will only win 1 in 5 or 1 in 10 proposals submitted. A mix of partnering on proposals and leading proposals is key, therefore networking at EU events is essential (however as there is no funding for SMEs to do this, we cannot attend as many events as we would wish). It is advisable only partner with companies who have complimentary interests to yours.

