INTERREG European Territorial Co-operation Cross Border Programme for Northern Ireland, the Border Region of Ireland and Western Scotland for 2014 – 2020 (INTERREG V)

Strategic Environmental Assessment (SEA) Non-Technical Summary

Report by: Helen Davies BSc MSc AIEMA
Checked by: Robert Edwards BSc MSc MIEMA
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Submitted to:
Rosalind Henry
RSM McClure Watters

Prepared by:
ADAS UK Ltd
4205 Park Approach
Thorpe Park
Leeds
LS15 8GB
What is the Environmental Report and why has it been written?

ADAS UK Ltd has been instructed by the Special European Union Programmes Body (SEUPB) to carry out a Strategic Environmental Assessment (SEA) for the INTERREG V Operational Programme for Territorial Co-Operation 2014 – 2020 in Northern Ireland, the Border Region of Ireland and Western Scotland.

The process of Strategic Environmental Assessment (hereafter referred to as SEA) was introduced under European Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment (SEA Directive), and came into force in Northern Ireland through the Environmental Assessment of Plans and Programmes Regulations (Northern Ireland) 2004 (SR 280/2004).

The Environmental Report describes the outcome of the SEA. This involves an evaluation of the likely environmental effects of implementation and non-implementation of the INTERREG V Programme, including an assessment of realistic strategic alternative approaches. The Report also suggests measures to minimise potentially adverse environmental effects of implementing the Programme, along with enhancement measures that could improve the effect on the environment yet further.

The Environmental Report has been written to accompany the Programme and has been issued to the statutory consultation bodies for viewing and comment by other interested organisations and members of the public for a period of eight weeks. This Non-Technical Summary is a simplified version of the Environmental Report.

What is the INTERREG V Programme?

The INTERREG V Programme aims to support strategic cross border cooperation for a more prosperous region and to improve access to services so that the quality of life for those living in the eligible area is enhanced. The programme focuses on developing a dynamic economy by supporting infrastructure and promoting innovative ways of addressing specific cross border problems regarding isolated labour markets, vulnerable groups and
transport bottlenecks. By strengthening cross-border co-operation and supporting strategic plans and projects, the impact of funds throughout the eligible area will be maximised.

The INTERREG Programme was first introduced in 1991. There have been four previous INTERREG Programmes: INTERREG I (1991-1993), INTERREG II (1994-1999), INTERREG III (2000-2006) and INTERREG IV (2007-2013). A sustained approach to cross border development was needed to build on the progress made under the previous programmes.

Following extensive public consultation it has been identified that the INTERREG V Programme will focus on the following areas:

**Thematic Objective 1: Strengthening Research, Technological Development and Innovation.**

*Investment Priority 1: Enhanced Research and Innovation.*

Research, Development & Innovation is already a policy objective for each jurisdiction making up the programme region. However, the INTERREG V Programme presents an opportunity to encourage the creation of new cross-border partnerships.

Two sectors have been chosen for investment by the Programme. Targeting on these sectors was agreed based on the scale of the growth opportunity, the technical capacity and structure of higher education in the three jurisdictions and compatibility with pre-existing policy priorities.

- Life & Health Sciences
- Renewable Energy

*Investment Priority 2: Promoting Business Investment in Research & Innovation.*

The Programme aims to increase the awareness and engagement of the Programme region’s small & medium enterprise (SME) dominated business base with research and innovation.

**Thematic Objective 6: Preserving and Protecting the Environment and Promoting Resource Efficiency.**
**Investment Priority 1: Protecting and Restoring Biodiversity**

This investment priority recognises the potential for cross-border initiatives to preserve and enhance the natural environment, with a particular focus on the marine environment where the three jurisdictions share resources.

**Investment Priority 2: Investing in the Water Sector**

Many of the water bodies located within the region straddle national boundaries. Investment in cross-border initiatives therefore provide the opportunity to deliver water quality improvements and enhance water management expertise across the programme area.

**Thematic Objective 7: Promoting Sustainable Transport and Removing Bottlenecks in key Network Infrastructures.**

This objective aims to develop and improve environmentally friendly and low carbon transport systems, including inland waterways and maritime transport, ports, multi-modal links and airport infrastructure, in order to promote sustainable regional and local mobility.

**Thematic Objective 9: Promoting Social Inclusion, Combatting Poverty and any Discrimination.**

**Investment Priority 1: Investing in Health Infrastructure.**

This investment priority provides greater opportunity for delivery of cross-border health care services which contribute to regional and local development and support the transition from institutional to community based services. Specifically, the programme will seek to fund cross-border healthcare intervention trials, contributing to improved access to healthcare treatments that would not otherwise be available.

**What is the current state of the environment in Northern Ireland, the Border Regions of Ireland and Western Scotland?**

Northern Ireland is a predominantly rural region, with 80% of the landmass in agricultural and forestry use. Almost two fifths of the urban population live within the Belfast Metropolitan Area with another sizeable concentration of population around Derry/Londonderry. The region has distinctive cultural heritage (archaeological and historic features from 9,000 years of human activity) and
retains strong rural dimensions through the importance of agriculture, tourism and their interactions with the landscape.

The Border region of Ireland is made up from the geographical area of Counties Cavan, Donegal, Leitrim, Louth, Monaghan and Sligo. It encompasses an area of 12,156 sq. km. from the Atlantic Ocean on the West Coast to the Irish Sea on the East Coast. One of the key strengths of the region is its attractive rural and coastal landscapes, along with its strong cultural and heritage assets. The population of the Border Region is currently estimated at 515,000 (2013). This is equivalent to 11% of the Republic of Ireland population.

Western Scotland is made up of Dumfries and Galloway; East Ayrshire and North Ayrshire mainland; South Ayrshire; and Lochaber, Skye & Lochalsh, Arran & Cumbrae and Argyll & Bute. The population of this area is just under 610,523, constituting 12% of the overall population of Scotland (2011).

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<thead>
<tr>
<th>Strengths and Opportunities</th>
<th>Weaknesses and Threats</th>
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<tbody>
<tr>
<td><strong>Ecology and Nature Conservation</strong></td>
<td><strong>Continued loss and degradation of semi-natural habitat by agricultural conversion and building and intensification</strong></td>
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<tr>
<td>Large area of land of international and national nature conservation value, e.g. Natura 2000 sites and SSSIs</td>
<td>Nitrogen deposition caused by agricultural ammonia emissions are threatening sensitive habitats</td>
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<tr>
<td>Good representation of peatland, grassland and hedgerows</td>
<td>Significant proportion of habitats and species in unfavourable condition</td>
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<tr>
<td>Good representation of coastal habitats such as inlets, bays and dunes along with endemic marine species</td>
<td>Wetland birds and bee continue to decline</td>
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<tr>
<td>Integration of Natura 2000 site management with Agri-environment schemes and Habitat and Species Action Plans</td>
<td>Intermediate-value habitats less well protected and thus more vulnerable</td>
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<td></td>
<td>Increasing trend of problematic pests, diseases and invasive species</td>
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<td></td>
<td>Coastal habitats at risk from poor water quality, offshore renewable energy connections, oil exploration, sea-level change, flood defence schemes, and tourism-related developments</td>
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<td></td>
<td>Climate affecting biodiversity through changes in species/habitat distributions, migrations, life cycles, food chains/predation, hydrological changes and facilitating invasive species</td>
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<tr>
<th>Socio-Economics</th>
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<tr>
<td>Strong businesses and communities in rural areas</td>
<td>Lack of access to and provision of services, facilities and public transport in rural areas affecting vulnerable groups such as elderly, young and low income</td>
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<tr>
<td>Good provision of telecommunications but opportunity to improve broadband speed</td>
<td>Northern Ireland still suffers from incidents and attacks related to punishment, sectarianism,</td>
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### Strengths and Opportunities

- Opportunity to boost the ‘blue economy’ through offshore renewable energy and maritime industries

### Weaknesses and Threats

- Terrorism and the threat of dissidence, though this has reduced significantly over time
- Extreme weather events have disrupted a wide range of businesses and their operations; impacting on staff, premises, insurance and disrupting supply chains and energy, water and transport infrastructure

### Health and Quality of Life

- Good staffing levels for hospital and community health services
- Less difference in life expectancy between the most and least deprived areas of Northern Ireland compared to the rest of the UK
- The 2012 Scottish Household Survey also revealed that 71% of adults in Scotland have access to a useable local greenspace that is within a six minute walk from their home

### Soil and Land Use

- Significant natural resources including carbon rich peaty soils and grassland to capture and store carbon along with good biomass potential
- Good proportion of land under agri-environment schemes
- Very geologically diverse
- Scotland supports the majority of the UK's peatland soils and the bulk of the UK's internationally important peat bog habitat.

### Water

- Chemical quality of rivers has improved in last decade
- Good quality of marine, drinking and groundwater
- Intact peatlands have good water storage potential

### Water

- Few rivers classed as good ecological quality with no improvement in recent years – unlikely to meet targets of EU Water Framework Directive
- Historically poor manure management and fertiliser use has polluted many lakes and rivers, though improving due to Nitrates Action Programme
- Some concerns regarding quality of bathing and shellfish growing waters in Irish Sea, and absence of Shoreline Management Plans in NI
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<td>• Localised flood events caused by intense and/or prolonged rainfall and local conditions experienced across the Region with increasing frequency</td>
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<tr>
<td>• Predicted reductions in summer rainfall may reduce river flows, affecting water supply and quality</td>
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### Air Quality

- Standards for sulphur dioxide, lead and particulate matter (dust) being met
- Ammonia emissions reduced slightly in past decade
- Air quality is generally better in Scotland than elsewhere in the UK. Trends in pollutants monitored in Scotland reveal a long-term decline in NO\textsubscript{2} concentrations in urban areas
- Burning of coal due to poor availability of natural gas causing exceedance of hydrocarbon (PAH) standards
- Local authorities throughout the programme area have declared Air Quality Management Areas for nitrogen dioxide or particulate matter, mainly due to road transport emissions
- High dependency on cars in rural areas
- Ammonia emissions from agriculture affecting sensitive habitats (eutrophication)
- Increases in temperature as the climate changes will lead to changes in the chemistry associated with ozone formation, potentially causing breathing problems and damage to crops and vegetation

### Climate Change

- Carbon dioxide and total greenhouse gas emissions in Northern Ireland have fallen by 16% and 17.5% respectively since 1990, reductions have also occurred in Scotland and Ireland
- Good natural resource availability for renewable energy production, e.g. offshore wind, tidal and wave
- Good opportunities to develop low carbon technology
- Peatland and grassland act as substantial carbon stores
- Agro-forestry sector addressing GHG emissions through Implementation Partnership
- The region’s grass and wheat yields are projected to increase with warming climate, benefitting agriculture
- Greenhouse gas emissions falling more slowly in NI (17.5% since 1990) compared to rest of UK (29% reduction).
- Greenhouse gas emissions have increased much more than in rest of UK from transport (25%) and land use change (83%) since 1990
- Push for renewable energy may be weakened due to the availability of shale gas and oil
- Agriculture and infrastructure (e.g. transport, water, waste and energy) prone to disruption from increasing intensity/frequency of floods, drought and snow
- Changing climatic conditions may increase threat from pests, diseases and invasive species
- Seas around Northern Ireland and Ireland are warming more quickly than around the rest of the UK
- Intensively farmed landscapes restrict the ability of people and wildlife to adapt to climate change

### Material Assets
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<tr>
<th>Strengths and Opportunities</th>
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<tr>
<td>• Significant natural resources across the programme area including water, carbon rich soils and high quality grassland</td>
<td>• Recycling rates in Northern Ireland are lower than in rest of UK, particularly for electronics, textiles, plastics and food</td>
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<tr>
<td>• Substantial renewable energy potential (including geothermal)</td>
<td>• Continued reliance on landfill</td>
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<tr>
<td>• Substantial mineral resources</td>
<td>• Northern Ireland’s natural resources, infrastructure and waste management likely to be impacted on by climate change</td>
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<tr>
<td>• Levels of waste produced and sent to landfill are falling</td>
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<td>• Recycling targets being met</td>
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**Cultural Heritage**

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<tr>
<td>• Rich heritage of archaeological sites, monuments and buildings providing evidence of human activity for 9,000 years</td>
<td>• Legacy of neglect and mistreatment of Northern Ireland’s built and archaeological heritage undermines its value among society</td>
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<tr>
<td>• Archaeological sites and built heritage generally well preserved due to undeveloped nature of NI</td>
<td>• New build typically preferred to renovation/restoration of existing buildings</td>
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<tr>
<td>• Northern Ireland’s centralised heritage recording system has created a unified, standardised and advanced baseline data set</td>
<td>• Cultural heritage may be at risk from coastal, fluvial and pluvial flooding and erosion related to a changing climate, changing land use, agricultural practices, vandalism/theft, renewable energy, funding, visitors, skills, materials and maintenance</td>
</tr>
<tr>
<td>• The Archaeological Ensemble of the Bend of Boyne (Europe’s largest and most important concentration of prehistoric megalithic art) lies partly within the border region</td>
<td>• Government target to reduce number of buildings and monuments on Built Heritage at Risk Northern Ireland Register will not be met</td>
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**Landscape and Seascape**

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<td>• Giant’s Causeway is a World Heritage Site with ‘outstanding universal value’</td>
<td>• Northern Ireland’s World Heritage Site receives no legal protection (though is protected through regional policy) and may be at risk of inappropriate development</td>
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<td>• Substantial land area designated as Areas of Outstanding Natural Beauty (AONB)</td>
<td>• Landscapes have been degraded by rural development (housing and infrastructure) and agricultural intensification</td>
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<tr>
<td>• Major rural tourism attractions include the Giant’s Causeway, the Mourne Mountains, the Glens of Antrim, and the Antrim (Causeway) coast</td>
<td>• Lack of coordination across rural tourism sector, with opportunities for sharing and promoting landscape assets being missed</td>
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<td>• Western Scotland has 10 National Scenic Areas (NSAs)</td>
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**Green Infrastructure and Ecosystem Services**

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<tr>
<td>• Natural environment contributed £573 million to the Northern Ireland economy in</td>
<td>• Disparity to public access to woodland in Northern Ireland, with most being located far from where people live</td>
</tr>
</tbody>
</table>
Strengths and Opportunities

- 2006, and is likely to have grown further since
- Substantial coastline provides critical natural defences against storms, floods and erosion as well as productive and biologically diverse ecosystems
- Substantial grassland and peatland are excellent carbon stores
- Extensive hedgerow networks provide connectivity across the landscape whilst helping to minimise soil erosion
- Social use of woodland is increasing
- Ecological, carbon and greenhouse gas footprints are lower than the UK

Weaknesses and Threats

- No mechanism for co-operation of landowners or advice on where to direct funding regarding the creation of multi-functional networks of green infrastructure
- Sea level rise and flood defenses may have significant implications for coastal ecosystem services
- Lack of environmental knowledge transfer and integration of environmental skills amongst agriculture and forestry sectors and rural communities
- Environmental management can sometimes be considered a separate rather than integral part of production systems, whilst integration of environmental issues into all sectors and cross-sector support are lacking
- Ecosystem services are not fully recognised by political and community stakeholders
- The economic importance of Northern Ireland’s tourism sector is the lowest of all the UK regions

How has the INTERREG V Programme been assessed?

The INTERREG V Programme has been assessed against a number of SEA objectives designed to cover the broad range of environmental issues facing the programme area. These objectives are used within high level and detailed assessment matrices to ascertain the magnitude of likely effects, the sensitivity or value of the receiving environment (including people and wildlife) and thus significance of impacts of the main activities likely to be funded or stimulated under the INTERREG V Programme.

Assessments of alternatives to the programme have been undertaken, along with an assessment of likely cumulative effects of policies within the INTERREG V Programme itself and accounting for likely in-combination effects with other plans and programmes. Opportunities for improvement and measures to address possible impacts have also been identified.

What are the alternatives?

Five strategic alternatives have been assessed against the SEA objectives. These include:

- Alternative 1: Do Nothing (ie, do not operate a INTERREG V Programme over the period 2014 – 2020);
• Alternative 2: Continue with INTERREG IV Programme, 2007 – 2013;
• Alternative 3: Draft proposals as at July 2013,
• Alternative 4: Other relevant investment priorities not put forward in July 2013 proposals.
• Alternative 5: Proposals as set out in the Consultation Draft dated November 2013 and updated May 2014.

The ‘do nothing’ option is the least favourable alternative as the programme will fund numerous socio-economic and environmental improvements to the border regions that would not be realised without this or an equivalent scheme. Continuing with the INTERREG IV Programme 2007-2013 would have certain benefits, but is not feasible due to changes to EU funding regulations and priorities.

The draft proposals for the INTERREG V Programme set out in the July 2013 Operational Programme are quite different from the 2007-2013 Programme and have additional benefits for the environment. The differences between the two alternatives are mainly the change in focus from tourism and business infrastructure towards research and social infrastructure, whilst there is also greater emphasis on environmental protection in the more recent document.

Adopting the investment priorities suggested in Alternative 4 would not be realistic due to the need to focus spending on a limited number of activities within a maximum of four Thematic Objectives. Nevertheless, the assessment of Alternative 4 has highlighted some additional environmental and sustainability benefits that it is relevant to consider in the development of the programme.

The proposals contained within the May 2014 Consultation Draft provide more clarity and relevance to the likely forthcoming schemes over the period 2014-2020 compared to the priorities put forward in July 2013 (Alternative 3), and are more financially feasible. Additionally there are benefits expected for climate, air quality, water, socio-economics and quality of life due to proposals to promote low carbon transport, protection and restoration of biodiversity and investment in water infrastructure.
What are the likely environmental impacts of the INTERREG V Operational Programme?

The majority of the actions under the programme are predicted to have beneficial or strongly beneficial effects against the SEA objectives, particularly against health and socio-economic objectives.

Uncertain but potentially adverse effects on ecology and landscape are predicted under Investment Priorities 1 and 7 although these are not expected to be significant.

In-combination effects have been assessed and determined to be not significant.

What are the key recommendations for enhancing the beneficial effects of the INTERREG V Programme?

Potential enhancement measures are discussed in full in the Environmental Report, some of the key measures are summarised as follows. Such measures may be regarded as best practice but SEUPB is under no obligation to consider or endorse these.

- Initiatives related to reducing health inequalities should extend to promoting engagement in outdoor recreational activities (e.g. walking, cycling, green gyms) and making use of the improved natural environment to benefit the physical and mental health of local people.

- Promoting environmentally responsible behaviour in marine environments.

- For programme activities close to waterbodies or rivers, particularly those taking place in areas straddling the international border, restoration of riparian and wetland habitat could be considered in order to help meet EU and national targets on water quality and resources (e.g. through the Water Framework Directive), climate change and biodiversity.
• Climate change related research could be included as one of the criteria for selection of research & innovation projects under Priority 1a.

• Initiatives delivered through Thematic Objective 6 should emphasise the importance of climate change adaptation for preserving habitats and quality of life and managing risk of natural disasters.

• Water management schemes and restoration of ecosystems such as former peat or wetlands (Priorities 6a and 6b) may need to consider impacts on cultural heritage.

• Encourage the development of a mechanism (by the National Monuments Service in the RoI and the DOE in NI) which would allow information on archaeological and built heritage assets on both sides of the border to be made available through the websites of these organisations (this would encourage a standardised, joined up approach to heritage recording and management on both sides of the border).

• Use of measures under Priorities 6a and 6b to conserve and enhance vulnerable and sensitive landscapes.

• Improving quality of life and reducing health inequalities can be achieved in part through encouraging access to the natural environment. This will include bringing nature into more built up areas through urban greening measures and promotion of walking, cycling, green gyms and conservation work but also encouraging recreational use of more rural landscapes. Priority 6a could therefore seek not only to protect the natural environment, but also to increase public access to and enjoyment of it (ensuring that sensitive areas and species are avoided).
What will happen next?

The Environmental Report has been submitted to the statutory authorities and made available to other interested parties to facilitate determination of the likely effect of the INTERREG V Programme, as currently drafted, on the environment.

Copies of the Environmental Report (a fee will apply to cover the cost of reproduction and postage) and Non-Technical Summary (free of charge) can be obtained from:

ADAS UK Ltd.
4205 Park Approach
Thorpe Park
Leeds
LS15 8GB

These documents are also available on the SEUPB website, http://www.seupb.eu/Home.aspx

The public consultation period runs for 8 weeks, between 3rd June and 29th July 2014.