



An Roinn Iompair,
Turasóireachta agus Spóirt
Department of Transport,
Tourism and Sport

Screening Report for Appropriate Assessment:

Climate Change Adaptation Plan for the
Transport Sector 2019

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1. Objectives

The purpose of this document is to screen the need for an Appropriate Assessment (AA) of the statutory *Climate Change Adaptation Plan for the Transport Sector*, prepared by the Department of Transport, Tourism and Sport (DTTAS).

2. Background

Ireland's first statutory *National Adaptation Framework*ⁱ (NAF), prepared under Section 5 of the *Climate Action and Low Carbon Development Act, 2015*ⁱⁱ (The *Climate Act*), was approved by Government on 19 December 2017 and was subsequently published and laid before both Houses of the Oireachtas, in line with the *Climate Act*, on 19 January 2018. The *NAF* and its successors set out the context to ensure local authorities, regions and key sectors can assess the key risks and vulnerabilities of climate change, implement climate resilience actions and ensure climate adaptation considerations are mainstreamed into all local, regional and national policy making. The *NAF* does not identify specific locations or propose adaptation measures or projects in individual sectors. Respecting the principle of subsidiarity, detailed adaptation measures will be developed across sectors and local government, in accordance with the *NAF*. The *NAF* identifies twelve key sectors under the remit of seven Government Ministers where sectoral adaptation Plans are to be prepared. This includes a Plan covering the transport sector, to be prepared by the Minister for Transport, Tourism and Sport.

In order to support Government Departments in developing Sectoral Plans the Department of Communications, Climate Action and Environment also developed *Sectoral Planning Guidelines for Climate Change Adaptation*ⁱⁱⁱ. The guidelines aim to ensure that a coherent and consistent approach to adaptation planning is adopted at national level. Under the *NAF*, Government Departments are required to develop their Plans in line with this guidance.

This is the first sectoral Adaptation Plan for transport to be developed under the provisions of the *Climate Act*, the *National Adaptation Framework* and in line with the planning process set out in the *Sectoral Planning Guidelines for Climate Change Adaptation*. The Plan sets out the priority climate concerns for the transport sector, presents the links between climate impacts and risks to infrastructure, outlines the next steps required to close our knowledge gaps and complete a robust assessment of sectoral adaptive capacity.

3. Planning and Legislative Context

The European Council *Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora* (also referred to as *The Habitats Directive*)^{iv} provides legal protection for the habitats and species of European importance. Articles 3 to 9 of the *Directive* set out the legislation to protect these through the establishment and conservation of a Europe wide network of sites: the Natura 2000 site network. European sites comprise Special Areas of Conservation (SAC) designated under the *Habitats Directive* and Special Protection Areas (SPA) designated under the *Conservation of Wild Birds Directive (79/409/EEC)*. Articles 6(3) and 6(4) of the *Habitats Directive* set out the decision-making tests for plans and projects with potential to affect SACs and SPAsⁱ.

The *Habitats Directive* has been transposed into Irish law by the *Planning and Development Act, 2000*^v (as amended) for Development Plans and projects that fall under this category of legalisation and by and the *European Communities (Birds and Natural Habitats) Regulations 2011*^{vi} (as amended) for other types of plans and projects that a Public Authority intends to adopt or develop.

Therefore, in accordance with Article 6(3) of the *Habitats Directive* and Regulation 42(1) of the *European Communities (Birds and Natural Habitats) Regulations, 2011* (as amended), Minister for Transport, Tourism and Sport is required to screen for the need for Appropriate Assessment to assess in view of best scientific knowledge and the conservation objectives of the site(s), if the statutory *Climate Change Adaptation Plan for the Transport Sector*, individually or in combination with other plans or projects is likely to have a significant effect on a European site(s).

Following the screening, if it cannot be excluded on the basis of objective scientific information that a plan or project, individually or in combination with other plans or projects, will have a significant effect on a European site, then the competent public authority is obliged to undertake what is known as an “appropriate assessment” (second step). AA is a focused and detailed impact assessment of the implications of the plan or project, alone and in combination with other plans and projects, on the integrity of a European site or sites, in view of its conservation objectives and the conservation status of the site. An AA must be completed before a decision is taken to approve, undertake or adopt a plan or project.

4. Methodology

The following guidance was employed for the Screening exercise:

- i. *Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities* (DELHG, 2010)^{vii};
- ii. *Integrated Biodiversity Impact Assessment – Streamlining AA, SEA and EIA Processes: Practitioner’s Manual* (EPA, 2013)^{viii}; and
- iii. *Managing Natura 2000 sites, The Provisions of Article 6 of the Habitats Directive 92/43/EEC* (EC, 2018)^{ix}.

The screening methodology to establish for the need for AA involves the following steps:

- i. Description of the plan;
- ii. Establish if the Plan falls within the scope of Article 6(3);
- iii. Where the Plan falls within the scope of Article 6(3), identify all European sites within a possible zone of influence, and compilation of information on their qualifying interests and conservation objectives;
- iv. Assessment of likely effects – direct, indirect and cumulative – undertaken on the basis of available information as a desk study or field survey or primary research as necessary; and
- v. Screening statement with conclusions.

5. Description of the Plan

This statutory *Climate Change Adaptation Plan for the Transport Sector* is the first such plan to be drafted under the new provisions set out in the *Climate Action and Low Carbon Development Act, 2015* and the *National Adaptation Framework*. It aims to identify the potential impacts of climate change on transport infrastructure, progress assessment of the associated risks and set out an action plan to establish a clear pathway to develop resilience.

The Plan is structured as follows:

- Chapter 1 summarises the national and international climate policy context in which the plan has been prepared and outlines the sectoral adaptation planning process in line with the *Sectoral Planning Guidelines for Climate Change Adaptation* (2018).

- Chapter 2 describes the key features of the transport system, including its current and future objectives and cross-sectoral interdependencies and linkages.
- Chapter 3 and Chapter 4 set out priority climate impacts and risks and present the methodology to develop priority impact assessments for the transport sector, identifying current gaps in data and sectoral knowledge.
- Chapter 5 and Chapter 6 establish sectoral goals and objectives, outlining 21 adaptation actions and the process for their implementation over the plan's lifetime.

A qualitative climate impact screening and vulnerability assessment was undertaken in consultation with the transport stakeholders in the sectoral adaptation team, with support from Climate Ireland. Projected changes in climate were applied to a series of sectoral impact chains to illustrate how impacts are expected to increase or decrease in line with a medium-low emission scenario (RCP 4.5 equivalent) to mid-century (2050). Projected changes were based upon the *EPA Report No. 223: A Summary of the State of Knowledge on Climate Change Impacts for Ireland^x* and *EPA Report No. 159: Ensemble of regional climate model projections for Ireland^{xi}* amongst others.

Climate risk prioritisation was applied to the impact chains to calculate future adaptation priorities; risk levels were determined based on the likelihood of the climatic impact occurring and the degree of vulnerability within the sector to that event (Likelihood of Climate Impact x Level of Sectoral Vulnerability = Climate Risk).

The key climate risks identified for the transport sector were:

- High Climate Risk: Projected increase in precipitation extremes, flooding, high winds, increased storm intensity and projected rises in sea level;
- Moderate Climate Risk: Projected increase in coastal erosion and temperature extremes; and
- Low Climate Risk: Projected changes to humidity levels or environmental factors (e.g. change in bud burst dates, bird migration patterns) were deemed to be of low climate risk in the transport sector and so were not considered further in the plan.

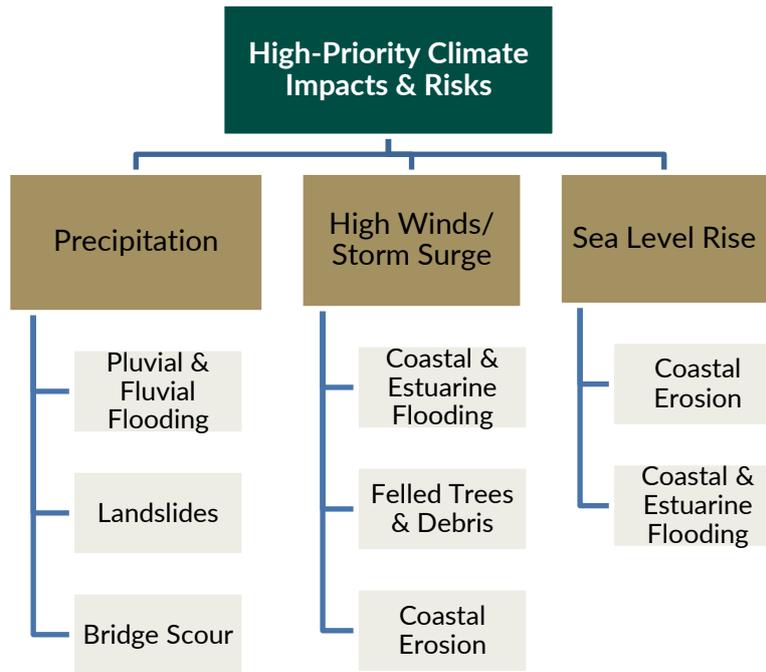


Figure 1: Summary of projected high-priority climate impacts and associated risks for the transport sector to mid-century.

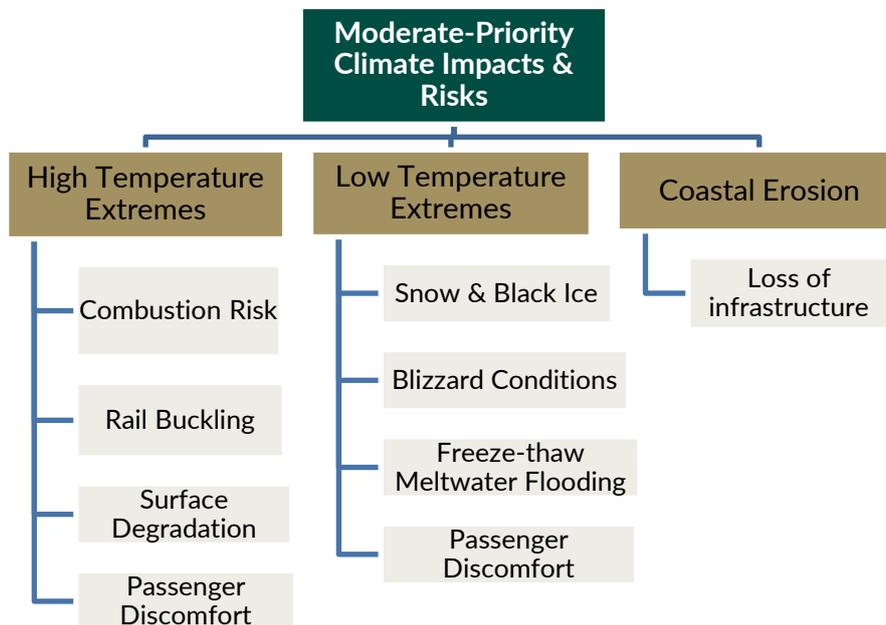


Figure 2: Summary of projected moderate-priority climate impacts and associated risks for the transport sector to mid-century.

A priority impact assessment was carried out to determine the thresholds beyond which Ireland's future transport system, or key transport subsector within that system, could no longer support business-as-usual operation and subsequently fulfil its future economic, social and environmental objectives.

To better understand existing transport system thresholds, DTTAS undertook a project with support from Met Éireann, the Irish Centre for High-End Computing (ICHEC) and Transport Infrastructure Ireland (TII) to produce a suite of maps illustrating projected regional distribution of changes overlaid with transport network maps; highlighting areas of indicative risk. Existing transport infrastructure has been mapped only; it will be possible to include future planned infrastructure under *Project Ireland 2040* as routes are determined. In addition, the maps could also benefit from future expansion to include co-located infrastructural assets in the communications and energy (gas and electricity) networks.

The priority impact assessment also draws upon the findings of a quantitative data collection exercise conducted by DTTAS and transport stakeholders over 2018 and 2019. The findings show that it is not currently possible to quantify the impacts (including financial implications) of climate change and weather extremes; in the absence of this data, a full priority impact assessment, and identification of operational and systemic thresholds, cannot yet be completed.

The plan proposes 21 actions to close the identified data gaps; in line with three key implementation objectives.

These objectives are:

- Improve understanding of the impacts of climate change on transport infrastructure, including cross-sectoral cascading impacts, and close knowledge gaps;
- Assist transport stakeholders in identifying and prioritising climate risks to existing and planned infrastructural assets and enabling them to implement adaptation measures accordingly; and
- Ensure that resilience to weather extremes and longer-term adaptation needs are considered in investment programmes for planned future transport infrastructure.

These strategic level actions are set out for implementation by the relevant authority as detailed in the Table below.

Action	Proposal	Lead	Stakeholders	Timeline	Cross-sectoral Linkages
1	Extend Adaptation Planning Team to include representation from transport system users i.e. freight sector; tourism sector; active travel etc. in line with NSOs in <i>Project Ireland 2040</i> to encourage stakeholder engagement with climate adaptation needs and resilience building	DTTAS	Sectoral Adaptation Team; DCCAIE; OPW; Met Éireann	2020	Comms. Networks (DCCAIE) Energy Networks (DCCAIE) Flood Management (OPW) Climate Services (Met Éireann)
2	Co-ordinate with the Climate Action Regional Offices (CAROs) to ensure that national and regional policies align and to ensure that infrastructure managed by LAs is considered within the Sectoral Adaptation Team	DTTAS; CAROs	LAs	Ongoing	Local Government
3	Establish cross-sectoral Critical Infrastructure Working Group to complement the work of the Sectoral Adaptation Team	DTTAS; DCCAIE; CAROs	Sectoral Adaptation Teams	2019	Energy Networks Sector (DCCAIE) Comms. Networks Sector (DCCAIE) Local Government
4	Disseminate Progress Report on the Implementation of Transport Adaptation Measures to representatives or advocates for accessibility, the health sector, cultural and natural heritage (biodiversity) sector as appropriate	DTTAS	DoH; DCHG	Annual	Health (DoH) Biodiversity (DCHG) Cultural Heritage (DCHG)

Action	Proposal	Lead	Stakeholders	Timeline	Cross-sectoral Linkages
5	Commission a study to develop appropriate monitoring indicators to evaluate the efficacy of adaptation measures	DTTAS	Sectoral Adaptation Team	2020	All Sectors Climate Services (Met Éireann)
6	Commence a review of the effectiveness of current quantitative data collection procedures for the impacts of extreme weather events and longer-term climate change with a view to developing a cross-sectoral reporting mechanism	DTTAS; DCCAIE	Sectoral Adaptation Teams; CAROs	2020	Energy Networks Sector (DCCAIE) Comms. Networks Sector (DCCAIE) Local Government
7	Continue collaboration with the EPA, Climate Ireland and Met Éireann to ensure sectoral understanding of up to date climate information, including a watching brief of longer term climate modelling outputs to 2100	Met Éireann; EPA; Climate Ireland	DTTAS	Ongoing	Climate Services (Met Éireann)
8	Commission a study to identify common criteria to define critical assets within the transport; communications and energy sectors	DTTAS; DCCAIE	Sectoral Adaptation Teams; Met Éireann; EPA; 3 rd level institutions	2020	Comms. Networks Sector (DCCAIE) Energy Networks Sector (DCCAIE)

Action	Proposal	Lead	Stakeholders	Timeline	Cross-sectoral Linkages
9	Commission concise comparative study between output of the EPA CIViC project and other resources such as CFRAMS and IPCSS maps; and the mapping exercise developed for this plan	DTTAS	DCCAIE; DHPLG; EPA; UCC; OPW; Met Éireann	2020	Comms. Networks Sector (DCCAIE) Energy Networks Sector (DCCAIE) Water Services & Infrastructure Sector (DHPLG) Flood Management (OPW)
10	Perform a midterm review of the statutory critical infrastructure adaptation plans with potential input from relevant actors such as local authorities and CCMA	DTTAS; DCCAIE	CAROs; CCMA; Sectoral Adaptation Team	2022	Energy Networks Sector (DCCAIE) Comms. Networks Sector (DCCAIE)
11	Disseminate geospatial distribution impact maps to transport stakeholders	DTTAS	Sectoral Adaptation Team	2020	Climate Services (Met Éireann)
12	Develop online repository host transport adaptation resources on the departmental website www.dttas.gov.ie to encourage stakeholders to review network vulnerabilities and conduct risk assessments	DTTAS	Sectoral Adaptation Team Met Éireann; Climate Ireland	2020	Climate Services (Met Éireann)

Action	Proposal	Lead	Stakeholders	Timeline	Cross-sectoral Linkages
13	Support transport stakeholders to avail of adaptation funding opportunities by providing information on potential EU funding sources	DTTAS	Sectoral Adaptation Team; DCCAIE; DPER	2020	LIFE Programme (DCCAIE) Connecting Europe Facility (CEF)
14	Following from Action 7, develop guidance for sectoral stakeholders to inform identification of critical transport assets, taking account of cross-sectoral interdependencies	DTTAS	DCCAIE	2021	Comms. Networks Sector (DCCAIE) Energy Networks Sector (DCCAIE) Climate Services (Met Éireann)
15	Under the NAF, consider the need to put in place arrangements at a national level to define critical infrastructure from a climate resilience perspective for the standardisation and prioritisation of resources	TBD	All Sectors National Adaptation Steering Committee (DCCAIE)	TBD	All Sectors
16	Continue engagement with disaster risk management for transport through active participation with the Office for Emergency Planning and the National Directorate for Fire and Emergency Management to ensure operational continuity and service delivery during acute weather events	DTTAS	All Sectors	Ongoing	Emergency Planning (All Sectors)

Action	Proposal	Lead	Stakeholders	Timeline	Cross-sectoral Linkages
17	Strengthen sectoral adaptation responses by ensuring that climate resilience is considered in appraisal guidance, including in the update to the <i>Common Appraisal Framework</i> , for all future transport infrastructure projects over appropriate timescales	DTTAS	Transport infrastructure agencies and public transport service providers, including NTA; CIÉ; TII; Dublin Bus; Bus Éireann; Go-Ahead Ireland	Ongoing	DPER DFIN
18	Consider adaptation needs in contracts; performance delivery agreements; and service level agreements between DTTAS, transport infrastructure agencies, public transport service agencies and constituent operators as relevant	DTTAS	Transport infrastructure agencies and public transport service providers, including NTA; CIÉ; TII; Dublin Bus; Bus Éireann; Go-Ahead Ireland	Ongoing	DPER DFIN
19	Consider the inclusion of adaptation needs as a criterion in projects relating to future transport energy (recharging and refuelling) infrastructure networks, under any relevant further calls of the <i>Climate Action Fund</i>	DCCAIE	DTTAS	Ongoing	Energy Networks Sector (DCCAIE)
20	Ensure that adaptation needs are considered in EU-funded projects relating to future transport and energy infrastructure networks where DTTAS has a role in project validation	DTTAS	DCCAIE, Energy Sector	Ongoing	Energy Networks Sector (DCCAIE)

Action	Proposal	Lead	Stakeholders	Timeline	Cross-sectoral Linkages
21	Support implementation of remote working initiatives, including expansion of effective broadband connectivity, to facilitate remote working when travel is inhibited during extreme weather events	DCCAE	Comms. Sector	c. 2021-2027	Comms. Networks Sector (DCCAE) Transport (DTTAS)

6. Scope of Article 6(3)

The term 'plan' has a broad meaning and applicability across the various Environmental directives and in Case Law. Directive 2001/42/EC on the assessment of certain plans and programmes on the environment (known as the SEA Directive) defines plans and programmes as:

“Plans and programmes, including those co-financed by the European Community, as well as any modifications to them:

- which are subject to preparation and/or adoption by an authority at national, regional or local level or which are prepared by an authority for adoption, through a legislative procedure by Parliament or Government; and*
- which are required by legislative, regulatory or administrative provisions”;*

In the context of this definition, the *Climate Change Adaptation Plan for the Transport Sector* is can be defined as a 'plan', the purpose of which is to aims to identify the potential impacts of climate change on transport infrastructure, progress assessment of the associated risks and set out an action plan to establish a clear pathway to ensure a climate resilient transport system. The actions are by nature high-level policy or 'soft' adaptation measures and do not set out site-specific projects.

Guidance on the application of Article 6(3) of the *Habitats Directive* makes a distinction between land use/ spatial plans, sectoral plans and plans which are in the nature of policy statements. Section 3.4.2 of the European Commission (2018) document on managing Natura 2000 sites, *The Provisions of Article 6 of the 'Habitats' Directive 92/43/EEC*^{ix} states that it does not seem appropriate to treat policy documents, which show the general political will or intention of a ministry or lower authority, as 'plans' for the purpose of Article 6(3). The section further notes that this is particularly relevant if any initiatives deriving from such policy statements must pass through the intermediary of a land-use or sectoral plan.

The plan may play a role in influencing future planning, as key outputs include ensuring that climate change adaptation is mainstreamed into general transport policy and strategic objectives, including appraisal guidance. The actions proposed in this plan are also designed to enable transport stakeholders to consider adaptation and climate resilience needs through their operational and business planning. However, individual measures may need to be considered, as appropriate, under the SEA, EIA and AA processes.

7. Conclusion

In accordance with *Regulation 42(7) of the European Communities (Birds and Natural Habitats) Regulations, 2011* (as amended), the Minister for Department of Transport, Tourism and Sport, has made a determination that an Appropriate Assessment is not required. This determination is based on the assessment that the Plan is not directly connected with or necessary to the management of any European Site and it can be excluded on the basis of objective scientific information that the Plan, individually or in combination with together plans or projects will have a significant effect on a European Site.

This determination was reached based on nature of the Plan which is that of a policy statement showing the general intention of the Department for application by the transport sector. As such it does not fall under the definition of a Plan for the purpose of Article 6(3) and Screening for AA is not a requirement. The Plan does not set out any location-specific recommendations and therefore there is no link between the content of the plan and any likely significant effects on European Sites.

References

ⁱ <https://www.dccae.gov.ie/documents/National%20Adaptation%20Framework.pdf>

ⁱⁱ <http://www.irishstatutebook.ie/eli/2015/act/46/enacted/en/html>

ⁱⁱⁱ <https://dccae.gov.ie/en-ie/climate-action/publications/Documents/13/SPG%20Climate%20Change%20Adaptation.pdf>

^{iv} European Council, 2003. *Council Directive 92/43/EEC of 21 May 1992 on the Conservation of Natural Habitats and of Wild Fauna and Flora* (as amended). EC, Brussels, Belgium.

^v <http://www.irishstatutebook.ie/eli/2018/act/16/enacted/en/html>

^{vi} <http://www.irishstatutebook.ie/eli/2011/si/477/made/en/print>

^{vii} Department of Environment, Heritage and Local Government (2010). *Appropriate Assessment of Plan and Projects in Ireland: Guidance for Planning Authorities*. DEHLG, Dublin.

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<https://www.epa.ie/pubs/reports/research/biodiversity/Integrated%20Biodiversity%20Impact%20Assessment%20-%20Streamlining%20AA,%20SEA%20and%20EIA%20Processes%20-%20Practitioner's%20Manual.pdf>

^{ix} European Commission, 2000. *Managing Natura 2000 sites: The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC*. Office for Official Publications of the European Communities, Luxembourg.

^x Desmond, M., O'Brien, P., & McGovern, F., 2017. *Report No. 223: A Summary of the State of Knowledge on Climate Change Impacts for Ireland*. EPA (Environmental Protection Agency), Johnstown Castle, Ireland.

^{xi} Nolan, P., 2015. *Report No. 159: Ensemble of regional climate model projections for Ireland*. EPA, Johnstown Castle, Ireland.



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