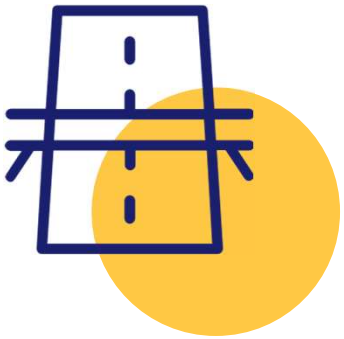
Transport Infrastructure Ireland

Presentation on TII's Biodiversity Standards



4th of March 2026 –Colin Murphy

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TII's Biodiversity Plan

Biodiversity Plan

- ***Vincent O'Malley*** (TII), ***Eimear Fox*** (TII),***Christian Nea*** (TII), ***Sarah-Jane Phelan*** (TII), ***Robbie Watt*** (seconded from WSP).
- ***Biodiversity Plan.***
- Informed by existing national, European and international policy and legislation.
- Setting of objectives, including short, medium and long-term goals/actions.

Biodiversity Plan

- Objectives include commitments to:
  - develop and utilise a biodiversity metric
  - publish biodiversity-related standard and technical documents.

Objectives and actions to achieve TII biodiversity plan were developed with cognisance of existing objectives and actions stipulated in national, sectoral and TII policy and action plan documents. Actions under each objective were assigned to short-, medium- or long-term timescales based on the anticipated programme of development and implementation.

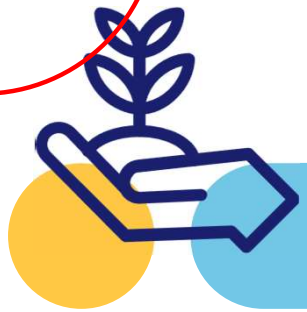
Five overarching objectives and associated actions to deliver on TII biodiversity plan are detailed below.

Image: Grass verges mown for biodiversity, N81 Wicklow

Image: Wildflower meadow on a roundabout at junction 16 of the M7 in Portlaoise - Photo credit Brian Gaynor

OBJECTIVES

1. Increase biodiversity capacity, resources, collaboration and capability
2. Develop and update biodiversity standard and technical documents
3. Support research, monitoring and data sharing
4. Embrace biodiversity accounting methodologies and strive for net gain
5. Focus on the key biodiversity issues



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Objective 2.2

Objective 2 – Develop and Update Biodiversity Standard and Technical Documents

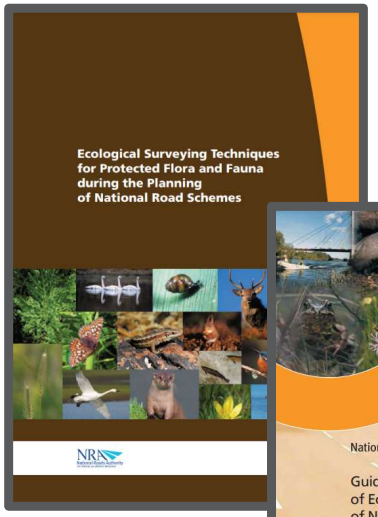
2.2 Develop a new Biodiversity Impact Assessment Standard Document

Biodiversity Standard (or Technical Document)

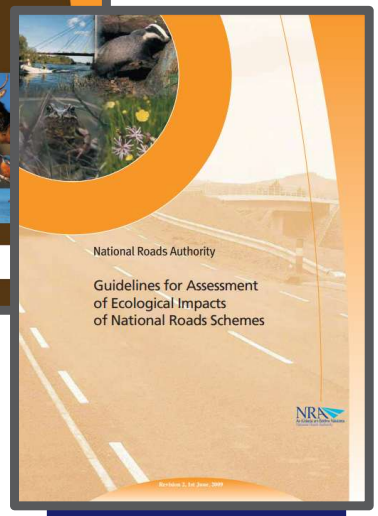
Planning and Evaluation (PE)

Environment (ENV)

- Project Manager: ***Christian Nea*** (TII) ***Colin Murphy*** (TII), ***Biodiversity Impact Assessment.***
- Replacement of NRA ecological guidelines.
- Update to incorporate current best practice (e.g. *Guidelines for Ecological Impact Assessment in the UK and Ireland* (Rev. 1.3, CIEEM, 2024)).
- Publication anticipated Q3 2026

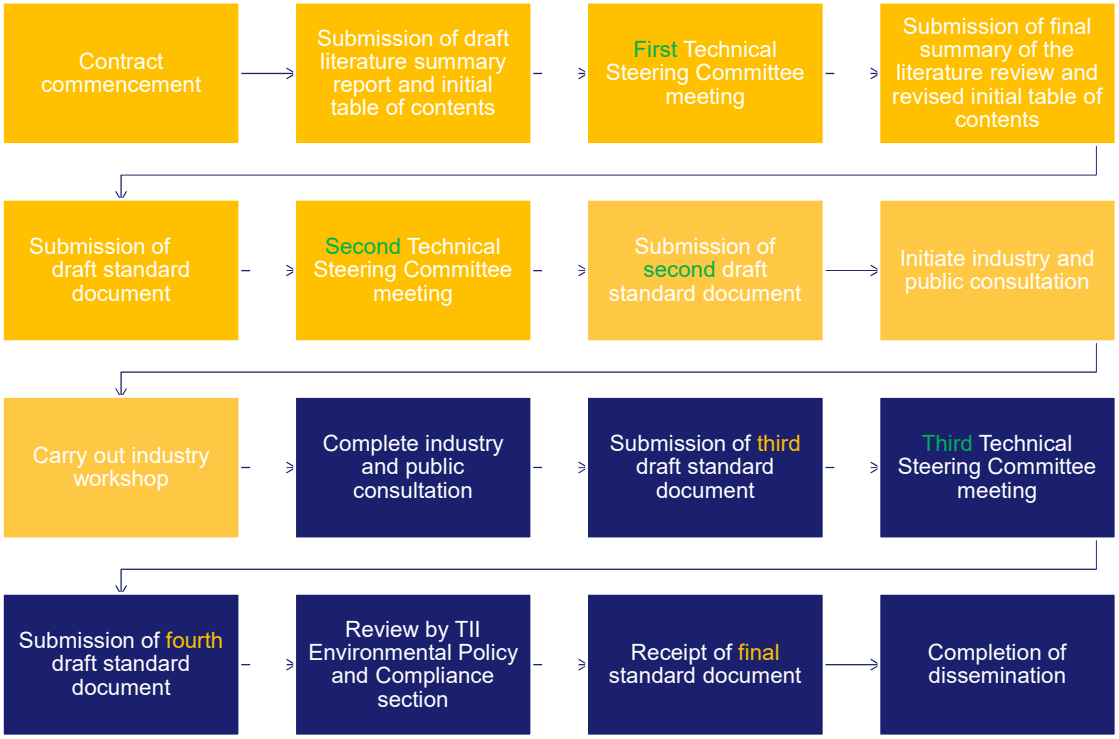


Ecological Surveying Techniques for Protected Flora and Fauna during the Planning of National Road Schemes (NRA, 2008).



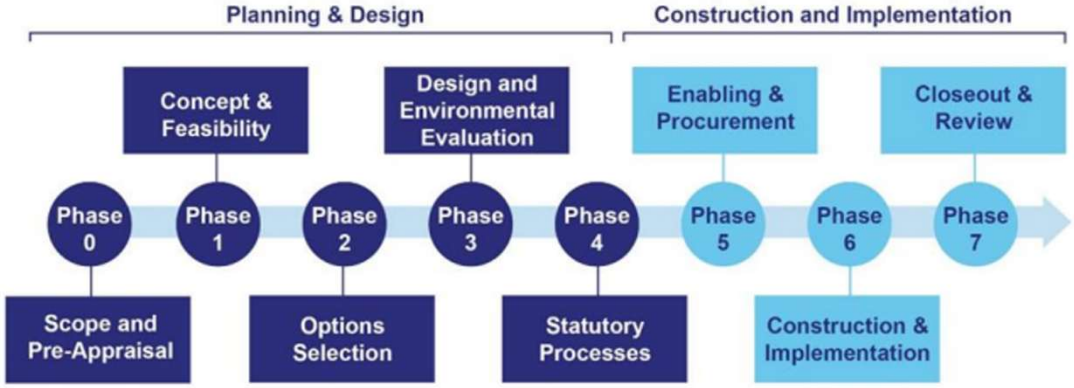
Guidelines for Assessment of Ecological Impacts of National Road Schemes (Rev. 2, NRA, 2009).

Biodiversity
Standard (or Technical Document)
Planning and Evaluation (PE)
Environment (ENV)



Biodiversity
Standard (or Technical Document)
Planning and Evaluation (PE)
Environment (ENV)

- Literature review published September 2025
- Document will provide requirements, guidance, etc., on how biodiversity is considered at each Project Phase.
- Integration with Project Appraisal Guidelines **(PAG),** Project Management Guidelines **(PMG)** and Project Mangers Manual **(PMM).**

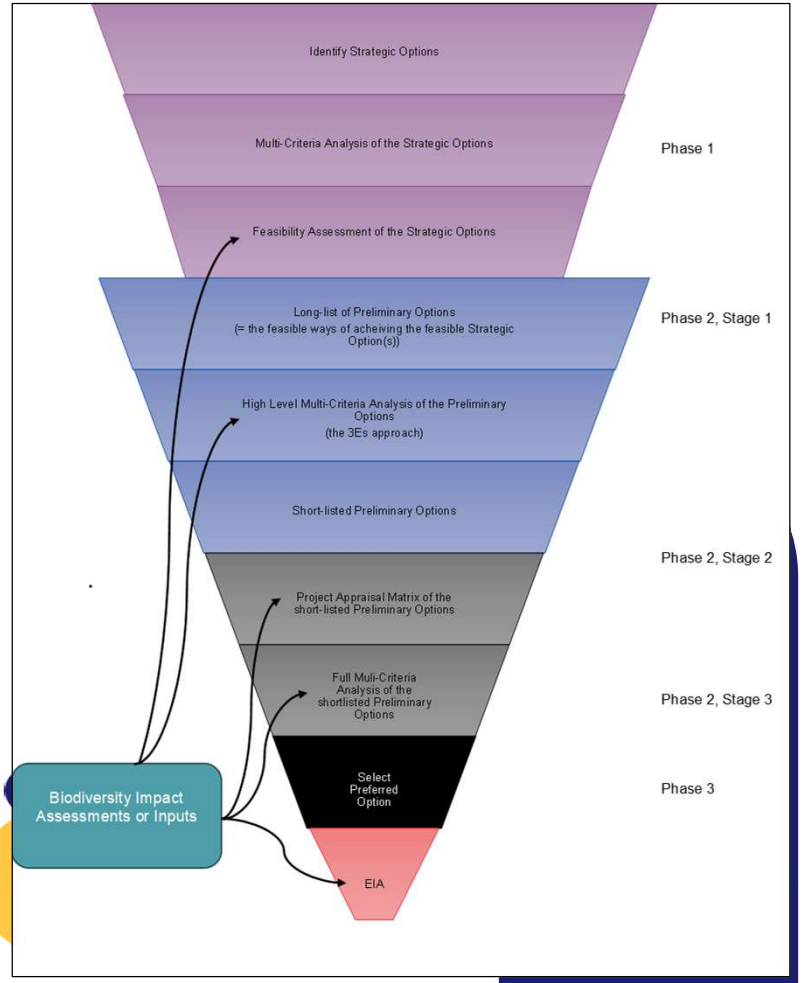


Biodiversity Standard (or Technical Document)

Planning and Evaluation (PE)

Environment (ENV)

- Assessment of effects on biodiversity occurs throughout Phase 2 – Options Selection.
- At Phase 3 – Design and Environmental Evaluation, the effects on biodiversity inform the project design.
- The final design may be subject to a formal assessment as part of an EIA or standalone Biodiversity Impact Assessment (BIA).
- Encourages the application of the mitigation hierarchy (avoid – mitigate – compensate).



Biodiversity
Standard (or Technical Document)
Planning and Evaluation (PE)
Environment (ENV)

- Will ensure all biodiversity is considered, not just protected sites, habitats and species – align with Amended 2014 EIA Directive
- When a formal biodiversity impact assessment (BIA) is required.
- The purpose of the assessment and therefore its method/scope.
- How to determine the features to be included in the BIA.
- When available, the ‘significance test’ for important ecological features (IEFs) may take account of environmental protection objectives (EPOs).

Biodiversity
Standard
Planning and Evaluation (PE)
Environment (ENV)

- Public Consultation finished 23rd January 2026.
- Strong engagement, responses received from consultants, public bodies and professional organisations (CIEEM).
- May publish document technical guidance rather than standard.
- Clarification on EPOs.
- Next Step – Publication industry and public consultation report.

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Objective 4

Objective 4 – Embrace biodiversity accounting methodologies and strive for net gain

4.1 Develop a biodiversity accounting metric to implement on all new projects and track progress on project specific biodiversity enhancements

4.2 Strive to achieve no net loss of biodiversity on all new projects by 2025

4.5 Strive to achieve a net gain for biodiversity on all new projects by 2030

CM1

Biodiversity Metric

Planning and Evaluation (PE)/Research (RE)

Environment (ENV)

- ***Sarah-Jane Phelan*** (TII)
- Metric Launched December 2025
- ***Develop a Biodiversity Accounting Methodology for Use on Linear Infrastructure Projects In Ireland***
- Requirements re: usage, etc., will be contained in the Biodiversity Impact Assessment Document.

Slide 16

CM1 Delete?
Colin Murphy, 2026-02-27T14:10:10.251

What is the TII Biodiversity Metric?

A Tool for Measuring Biodiversity Impact

Options Appraisal Toolkit

This decision-making tool helps assess the habitat types in each potential Route Option through GIS & Excel

Habitat Condition Assessments

Applied during site surveys, each habitat parcel is assessed for its condition. The final score is inputted to the Full Toolkit.

Full Biodiversity Metric Toolkit

Quantifies the baseline biodiversity score for a project (pre-construction) and determines what the post construction biodiversity score is.

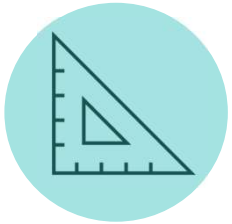
Alignment with TII Project Phases

When and where to use the Metric?

Planning and Design	Phase 0	Scope and Strategic Assessment	
	Phase 1	Concept and Feasibility	
	Phase 2	Options Selection	Options Appraisal Toolkit
	Phase 3	Design and Environmental Evaluation	Habitat Condition Assessments + Biodiversity Metric
	Phase 4	Statutory Processes	
Construct/ Implement	Phase 5	Enabling and Procurement	
	Phase 6	Construction and Implementation	
	Phase 7	Close out and Review	

Biodiversity Unit Calculation

TII Biodiversity Metric



Habitat Area

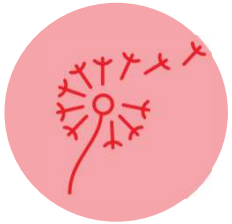
Area in hectares

x

Habitat Condition

1 (poor), 2 (fair), 3 (good)

x



Habitat Distinctiveness

2, 4 6 or 8

x

Strategic Significance

Multipliers of 0.07

=

Biodiversity Unit

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Objective 2.7

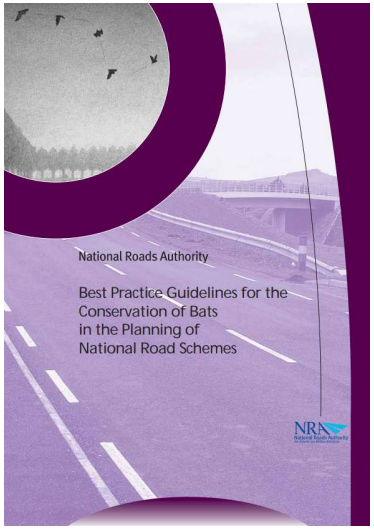
Objective 2 – Develop and Update Biodiversity Standard and Technical Documents

2.7 Development of topic specific Standard and Technical Documents to support the overarching Biodiversity Impact Assessment and Construction and Commissioning documents

Bats
Standard
Planning and Evaluation (PE)
Environment (ENV)

- ***Colin Murphy*** (TII), ***Christian Nea*** (TII).
- Update NRA document entitled '*Best Practice Guidelines for the Conservation of Bats in the Planning of National Road Schemes*
- Align with industry best practice
- Action 4.3g of the Lesser Horseshoe Bat Species Action Plan 2022-2026:

  "Ensure that guidance and advice to road planners and developers is up to date and based on the results from monitoring studies of previous mitigation measures."
- Work on developing task agreement commenced.
- Progression subject to funding.



Biodiversity (Deer)
Standard
Planning and Evaluation (PE), Design (DN) and Construction & Commissioning (CC)
Environment (ENV) and Safety (STY)

- TII Team Leader: ***Christian Nea*** (TII).
- Large cross-disciplinary team involved.
- Work Package 3.3o.
- ***N77 Pilot Deer Management Study.***
- Commenced July, 2021.
- Literature review and ecological studies of 900 Ha study area.
- Mitigation, including advanced signage and vegetation clearance.
- Liaison with landowners *vis-à-vis* deer management.
- Monitoring.

Biodiversity (Deer)
Standard
Planning and Evaluation (PE), Design (DN) and Construction & Commissioning (CC)
Environment (ENV) and Safety (STY)

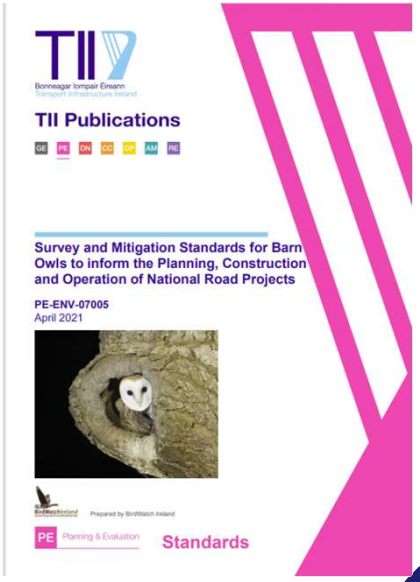
- TII Team Leader: ***Alastair de Beer*** (TII), ***Christian Nea*** (TII).
- ***Deer Standards.***
- Carry out ~ 5 case studies and develop proposed mitigation to a tender-ready state.
- Develop a suite of standard documents: General [GE], Planning and Evaluation [PE], Design [DN], Construction and Commissioning [CC] and Asset Management and Maintenance [AM] in relation to deer assessment and management on the national road network.

Barn Owl Standard

Planning and Evaluation (PE)

Environment (ENV)

- Document published 2021.
- Issues have arisen with the application of mitigation.
- Document temporarily withdrawn as a standard – in place as technical guidance.
- Revisions ongoing to implement hierarchical mitigation strategy.
- Align with BIA Standard/Technical Document.



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