



Bonneagar Iompair Éireann
Transport Infrastructure Ireland

TII Publications



Project Appraisal Guidelines Unit 9.0 – Ex-Post Evaluation

PE-PAG-02034
December 2023

About TII

Transport Infrastructure Ireland (TII) is responsible for managing and improving the country's national road and light rail networks.

About TII Publications

TII maintains an online suite of technical publications, which is managed through the TII Publications website. The contents of TII Publications is clearly split into 'Standards' and 'Technical' documentation. All documentation for implementation on TII schemes is collectively referred to as TII Publications (Standards), and all other documentation within the system is collectively referred to as TII Publications (Technical).

Document Attributes

Each document within TII Publications has a range of attributes associated with it, which allows for efficient access and retrieval of the document from the website. These attributes are also contained on the inside cover of each current document, for reference.

TII Publication Title	<i>Project Appraisal Guidelines Unit 9.0 – Ex-Post Evaluation</i>
TII Publication Number	<i>PE-PAG-02034</i>

Activity	<i>Planning & Evaluation (PE)</i>	Document Set	<i>Technical</i>
Stream	<i>Project Appraisal Guidelines (PAG)</i>	Publication Date	<i>December 2023</i>
Document Number	<i>02034</i>	Historical Reference	PAG Unit 9.0

TII Publications Website

This document is part of the TII publications system all of which is available free of charge at <http://www.tiipublications.ie>. For more information on the TII Publications system or to access further TII Publications documentation, please refer to the TII Publications website.

TII Authorisation and Contact Details

This document has been authorised by the Director of Professional Services, Transport Infrastructure Ireland. For any further guidance on the TII Publications system, please contact the following:

Contact: Standards and Research Section, Transport Infrastructure Ireland
 Postal Address: Parkgate Business Centre, Parkgate Street, Dublin 8, D08 DK10
 Telephone: +353 1 646 3600
 Email: infoPUBS@tii.ie

TII Publications



Activity:	Planning & Evaluation (PE)
Stream:	Project Appraisal Guidelines (PAG)
TII Publication Title:	Project Appraisal Guidelines Unit 9.0 – Ex-Post Evaluation
TII Publication Number:	PE-PAG-02034
Publication Date:	December 2023
Set:	Technical

Contents Table

1. Introduction	1
2. Project Management	2
3. Project Conception	3
4. Project Planning	4
5. Project Planning	5
6. Project Operational Performance	6
7. Lessons Learned	7
8. Focus of the Review	8
9. Handover, Review & Closeout Cost Benefit Analysis	9
10. Contents and Structure of the Ex-Post Evaluation Report	10

**Updates to TII Publications resulting in changes to
Project Appraisal Guidelines Unit 9.0 – Ex-Post Evaluation PE-PAG-02034**

Date: October 2021

Page No:

Section No:

Amendment Details:

Updated PAG unit to comply with Public Spending Code (December 2019).

Date: December 2023

Page No:

Section No:

Amendment Details:

Updated PAG unit to comply with Transport Appraisal Framework (June 2023).

Contents Table

1.	Introduction	1
2.	Project Management	2
	2.1 Overview.....	2
3.	Project Conception	3
4.	Project Planning.....	4
	4.1 Demand Analysis and Projections	4
	4.2 Option Selection	4
	4.3 Project Appraisal.....	4
	4.4 Planning and Design.....	4
	4.5 Procurement & Statutory Process.....	4
	4.6 Consultation.....	4
5.	Project Planning.....	5
	5.1 Project Management.....	5
	5.2 Project Scope, Value and Risk Management	5
	5.3 Form of Contract.....	5
6.	Project Operational Performance	6
	6.1 Operational Performance.....	6
7.	Lessons Learned.....	7
8.	Focus of the Review.....	8
9.	Handover, Review & Closeout Cost Benefit Analysis.....	9
10.	Contents and Structure of the Ex-Post Evaluation Report.....	10

1. Introduction

At the completion of any project, it is a requirement of the central investment guidance from the Department of Public Expenditure, NDP Delivery and Reform (DPENDR) and the TII Project Management Guidelines (PMG) that a Project Completion Report be prepared. The Project Completion Report verifies that all aspects of the project have been completed, confirms project budget information and discusses the issues that arose in project development, particularly those that have implications for future road planning and implementation.

- In addition, the Department of Transport (DoT) requires an Ex-Post Evaluation be carried out for all projects with values equal to or in excess of €10 million. The aim of the Ex-Post Evaluation, as set out in the DoT Transport Appraisal Framework (TAF), is to determine whether:
 - The expected benefits and outcomes materialised including operational performance
 - The planned outcomes were the appropriate responses to actual public needs
 - Conclusions can be drawn applicable to other projects, to the ongoing use of the asset, or to associated policies

The Ex-Post Evaluation thus incorporates elements of the Project Completion Report but extends beyond that report to consider the full range of issues identified above, in particular the operational performance of the project. TII's related PAG output for an Ex-Post Evaluation is the Ex-Post Evaluation Report

2. Project Management

2.1 Overview

The responsibility for the Ex-Post Evaluation rests with the Sponsoring Agency. The Ex-Post Evaluation should be carried out by either an employee of the Design Office or a consultant appointed by the Sponsoring Agency. The person(s) undertaking the Ex-Post Evaluation should not have been directly involved in the oversight of the project planning or implementation, or in the appraisal of the project.

The DoT Transport Appraisal Framework (TAF) states that an Ex-Post Evaluation should only be undertaken following the completion of a project or programme and ideally, within 5 years of the completion date.

It is envisaged that, except in special circumstances, the Ex-Post Evaluation for TII projects should be undertaken 5 years¹ after project opening. This timing ensures that the project outturn costs should be known and that experience of the operation of the project and its impacts is available to inform the analysis.

The Ex-Post Evaluation should evaluate the following five stages of the project:

1. Project Conception
2. Project Planning
3. Project Implementation
4. Project Operational Performance
5. Lessons Learned.

TAF indicates that the Ex-Post Evaluation Report should be submitted to the Approving Authority for review. For projects valued at €50m or over the Ex-Post Evaluation should also be sent to the Department of Public Expenditure, NDP Delivery and Reform (DPENDR) for review.

¹ For capital projects benefits will not be seen until after the project is completed. The Ex-Post Evaluation should be conducted once sufficient time has elapsed for the benefits and outcomes to materialise. Depending on the project, this could vary from three to five years after completion of the project.

3. Project Conception

This part of the review should provide an account of the background to the project, how the project arose and reference relevant transport programmes or policies. It should then consider the Phase 0 Project Outline Document² and Phase 1 Feasibility Report³ and review their comprehensiveness and relevance. In particular, it should assess whether the need for the project was soundly established and whether the objectives were clearly specified.

² Previously referred to as the Phase 0 Strategic Assessment Report

³ Previously referred to as the Phase 1 Project Brief

4. Project Planning

This stage of the Ex-Post Evaluation Report should address the following aspects of project planning.

4.1 Demand Analysis and Projections

- Transport modelling approach was appropriate to the nature of the project
- Projected growth rates were benchmarked against recent trends
- Projected growth rates were compatible with TII guidelines or other planning documents
- The sensitivity of growth projections to relevant factors was considered

4.2 Option Selection

- The options considered were sufficiently different to offer real choices
- The project appraisal processes were fully complied with at the Option Selection stage
- Appropriate weighting was given to the different impacts of the project in making choices

4.3 Project Appraisal

- Relevant appraisal techniques (TAA, MCA etc.) / software were used (TUBA, COBALT, TEAM, REM or other TII accepted techniques)
- Appropriate application rules and parameter values as per DPENDR, DoT and TII guidelines were used
- Sensitivity testing was undertaken

4.4 Planning and Design

- Design capacity decisions had a sound basis
- The preliminary design proved to be a sound basis for project implementation
- Ad-hoc alterations to the design were necessary during the implementation phase and whether these reflected on the quality of the preliminary design process

4.5 Procurement & Statutory Process

- EU and national rules were adhered to
- Compliance with procurement, EIS/EIAR and other statutory requirements

4.6 Consultation

- Consultation processes were of required standard/quality

5. Project Planning

With regard to the project implementation section of the Ex-Post Evaluation Report, the following should be address.

5.1 Project Management

- Project management was in line with the existing TII guidance
- Monitoring reports were timely and of good quality
- The project remained within budget
- The project met target costs
- The project met the target schedule
- The project design requirements were fully met

5.2 Project Scope, Value and Risk Management

- Active management of scope changes was undertaken
- Risk management was actively pursued throughout the planning and implementation phases
- Opportunities for value management were identified and actively pursued

5.3 Form of Contract

- Contract obligations were met
- Any contractual claims made

6. Project Operational Performance

This section of the Ex-Post Evaluation Report should consider.

6.1 Operational Performance

- The project objectives were met
- Post opening trip volumes are in line with those predicted and used in the project appraisal
- Any departure of trip volumes from those predicted has implications for the predicted economic return to the project
- There are any problems with the operation of the scheme
- There are any safety problems emerging
- There are any further actions necessary to secure the anticipated benefits of the project

7. Lessons Learned

TAF requires the Ex-Post Evaluation Report to clearly identify conclusions or evidence, which could be used for wider applicability to future projects, to support ease of circulating across the transport sector and in the wider public sector to inform future decision making.

To effectively reflect on and capture lessons learned it is recommended to convene a workshop with various stakeholders involved in the project planning and delivery, including project managers, technical experts, contractors, external stakeholders and TII representatives.

8. Focus of the Review

With regard to each of the project phases, the Ex-Post Evaluation should concentrate on:

- Confirming that all phases of project planning and implementation complied with relevant DoT and TII guidelines
- Confirming that necessary approvals were obtained from TII at appropriate project planning decision points
- Assessing whether the project has delivered and is likely to continue to deliver on its objectives:
 - If the outcomes, operational performance and benefits as identified in the business case and the Benefits Realisation Plan were achieved
 - If the benefits management process assisted in the deliverance of the realised benefits effectively and was proportionate to the scale and complexity of the scheme
- If there are any medium/long-term impacts arising from the scheme
- Assessing whether the project appraisal plan was appropriate:
 - The accuracy and appropriateness of the assumptions and appraisal models used to evaluate the scheme
 - If the appropriate KPIs and metrics were identified
- Identifying any problems with project planning and implementation and analysing how they arose, including consideration of risk management effectiveness
- Drawing lessons from the project planning and implementation for future management of projects

9. Handover, Review & Closeout Cost Benefit Analysis

The undertaking of a Phase 7 Closeout and Review Cost Benefit Analysis (CBA) may be required as part of an Ex-Post Evaluation for a project costing €30m or over. The final account / closeout CBA should concentrate on establishing whether the basis on which the costs and benefits attributed towards the scheme at planning stage was correct.

An Appraisal Team within the Design Office or an independent consultant acting on behalf of the sponsoring agent will be responsible for undertaking the Closeout and Review CBA.

Prior to undertaking the review, final outturn scheme costs must be established. After 5 years the majority of the scheme costs should be known to allow a CBA to be undertaken. If a substantial proportion of the costs are still outstanding, then the undertaking of a CBA can be postponed with the consent of TII. Costs to be used for the appraisal of Public Private Partnership schemes should be agreed with TII.

The Phase 7 Closeout and Review CBA will require information relating to scheme costs, outturn traffic flows, journey times and collision data. The requirement to collect collision data should be confirmed with TII as it is common practice to use collision recorded over an extended period (3 to 5 years) to reduce the impact of one-off events on overall trends. Further details on CBA are provided in *PAG Unit 6.1: Guidance on Conducting CBA*.

10. Contents and Structure of the Ex-Post Evaluation Report

The Ex-Post Evaluation Report should be arranged in the following chapters which are based around the five stages of the project:

- Project Conception
 - Executive summary
- Project Planning
 - Background to the project
 - Traffic analysis and forecasting
 - Project appraisal procedures
 - Option selection
 - Preliminary design
 - Procurement and statutory processes
- Project Implementation
 - Project implementation
- Project Operational Performance
 - Project operational performance
 - Overview of issues arising
 - Conclusions and recommendations
- Lessons Learned

TII has developed an Ex-Post Evaluation Report template that is available for download from the “Downloads” section of the TII Publications website under section PE-PAG-02034_Unit 9.



 Ionad Ghnó Gheata na Páirce,
Stráid Gheata na Páirce,
Baile Átha Cliath 8, D08 DK10, Éire

 Parkgate Business Centre,
Parkgate Street,
Dublin 8, D08 DK10, Ireland

 www.tii.ie

 info@tii.ie

 +353 (01) 646 3600

 +353 (01) 646 3601