



Bonneagar Iompair Éireann  
Transport Infrastructure Ireland

# TII Publications

GE PE DN CC OP AM RE

---

## Project Appraisal Guidelines Unit 2.0 - Project Appraisal Deliverables

PE-PAG-02010  
February 2024

## 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.

<b>TII Publication Title</b>	<i>Project Appraisal Guidelines Unit 2.0 - Project Appraisal Deliverables</i>
<b>TII Publication Number</b>	<i>PE-PAG-02010</i>

<b>Activity</b>	<i>Planning &amp; Evaluation (PE)</i>		<b>Document Set</b>	<i>Technical</i>
<b>Stream</b>	<i>Project Appraisal Guidelines (PAG)</i>		<b>Publication Date</b>	<i>February 2024</i>
<b>Document Number</b>	<i>02010</i>		<b>Historical Reference</b>	<b>PAG Unit 2.0</b>

## 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](mailto:infoPUBS@tii.ie)

---

## TII Publications



---

<b>Activity:</b>	Planning & Evaluation (PE)
<b>Stream:</b>	Project Appraisal Guidelines (PAG)
<b>TII Publication Title:</b>	Project Appraisal Guidelines Unit 2.0 - Project Appraisal Deliverables
<b>TII Publication Number:</b>	PE-PAG-02010
<b>Publication Date:</b>	February 2024
<b>Set:</b>	Technical

---

## Contents

1. Context.....	1
2. Projects Over €30m Appraisal Deliverables .....	3
3. Projects €5m to €30m - Appraisal Deliverables .....	6
4. Projects €0.5m to €5m - Appraisal Deliverables .....	7

**Updates to TII Publications resulting in changes to  
Project Appraisal Guidelines Unit 2.0 - Project Appraisal Deliverables PE-PAG-02010**

**Date:** March 2021

**Page No:**

**Section No:**

**Amendment Details:**

Update to bring into compliance with the Public Spending Code (December 2019).

**Updates to TII Publications resulting in changes to  
Project Appraisal Guidelines Unit 2.0 - Project Appraisal Deliverables PE-PAG-02010**

**Date:** February 2024

**Page No:**

**Section No:**

**Amendment Details:**

Update to bring into compliance with Transport Appraisal Framework (June 2023), recent changes in TII PMG and PAG Units 2.1, 3.0 and 4.0.

## Contents Table

<b>1. Context</b> .....	<b>1</b>
1.1 Introduction.....	1
1.2 Study Area Definition.....	1
<b>2. Projects Over €30m Appraisal Deliverables</b> .....	<b>3</b>
2.1 Project Deliverables Overview.....	3
2.2 Phase 0-7 Project Deliverables .....	3
2.3 PAG Deliverables in the Appraisal Process.....	5
<b>3. Projects €5m to €30m - Appraisal Deliverables</b> .....	<b>6</b>
<b>4. Projects €0.5m to €5m - Appraisal Deliverables</b> .....	<b>7</b>

---

# 1. Context

## 1.1 Introduction

This unit provides guidance on the Project Appraisal Deliverables that are required throughout the project lifecycle of TII Capital Expenditure Projects and outlines the deliverables required at each TII Project Phase.

TII Projects<sup>1</sup> are generally broken down into four categories in the TII Project Appraisal Guidelines (PAG) based on the size of estimated project budget. Each budget threshold requires a different scale of appraisal, which is proportionate to the size of the project. The four budget categories are as follows:

- Greater than or equal to €200m
- Greater than €30m but less than €200m
- Greater than €5m but less than €30m
- Greater than €0.5m but less than €5m

This unit provides an overview of the appraisal deliverables required for each of the above categories of project. This PAG Unit explains the deliverables required for each appraisal pathway depending on the type, complexity and scale of the project. Yet, it should be noted that each appraisal pathway is flexible and can be adapted to different project uses if required.

For instance, the €5-30m appraisal pathway deliverables have generally been adapted to appraise greenway projects regardless of budget size. Furthermore, the methods and deliverables used in each appraisal pathway are negotiable if there is a strong project justification for changing them. For example, a small realignment of a National Road for safety reasons, which involves a budget greater than €30m, may not require detailed modelling if a strong Business Case can be created without this analysis.

## 1.2 Study Area Definition

There are two types of study area that are used in the project appraisal and design process. These are defined in PAG Unit 2.0, to ensure there is clarity regarding the use of the term 'study area' for each deliverable. The two types of study area are:

- **Appraisal Study Area:** The Appraisal Study Area is used in the Phase 1 process to analyse travel demand, transport conditions, develop the Strategic Options and assess them to identify the Preliminary Options for detailed appraisal. This study area will be based on the project objectives, the start and end points of the transport route for which a solution/intervention is being sought, and the area of influence that could reasonably be expected to be influenced by proposed interventions.
- **Constraints Study Area:** The Constraints Study Area is initially defined in Phase 1 for the purposes of identifying all the physical / artificial / engineering / natural constraints within an area within which it is expected that options will be developed and examined.

---

<sup>1</sup> For the categorisation of projects capital expenditure costs are inclusive of VAT.

The development of the study area is cyclical in nature and its extent is influenced by the findings of the constraints, risks and opportunities study and design development. The Constraints Study Area can evolve as necessary throughout all stages of the project lifecycle<sup>2</sup>.

---

<sup>2</sup> During the constraints study the environmental constraints study area will vary by environmental discipline (or factor).

## 2. Projects Over €30m Appraisal Deliverables

### 2.1 Project Deliverables Overview

The set of deliverables required from the appraisal process is dictated by the requirements of the Transport Appraisal Framework (TAF) (DoT, 2023).

The appraisal process involves deliverables that are required at various project stages, with varying levels of detail, as the scheme progresses. For Projects over €30m, these deliverables are:

- Project/Programme Outline Document (PAG Unit 2.1)
- Feasibility Report (PAG Unit 3.0)
- Options Report (PAG Unit 4.0)
- Preliminary Business Case (PBC - PAG Unit 8.0)
- Detailed Business Case (DBC – PAG Unit 8.0)
- Final Business Case (FBC – PAG Unit 8.0)
- Ex-Post Evaluation (EPER – PAG Unit 9.0)

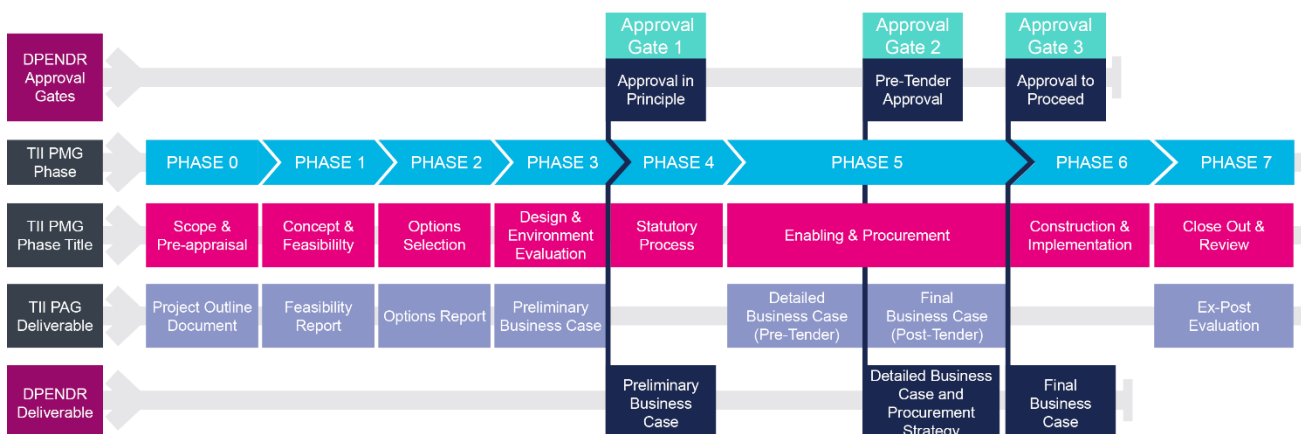


Figure 2.0.1 TII PMG Project Phases & Main DPENDR Decision Gates/Deliverables

## 2.2 Phase 0-7 Project Deliverables

### 2.2.1 Main Project Appraisal Deliverables

A Phase 0 **Project / Programme Outline Document (POD)** is required on all projects with a capital cost in excess of €15m (incl. VAT) in order to comply with the requirements of the TAF. Based on the limited available information at the outset of a project, the POD sets out the rationale for the project, its alignment with government policy, its objectives, explores potential solutions that meet the requirements of NIFTI, a high-level estimate of costs/affordability, key risks, an appraisal plan and governance plan. Full details of the requirements/structure of the POD are provided in PAG Unit 2.1.

The Phase 1 **Feasibility Report (FR)** involves a baseline review of the Appraisal Study Area to identify the key transport issues and opportunities. A study of key constraints is also undertaken to strengthen the investment rationale. The objectives from the Phase 0 POD are refined and strengthened in the FR to remove bias and ensure they meet the SMART requirement. Strategic Options are identified and assessed against the project objectives, key constraints, risks and opportunities. A refined list of feasible Strategic Options is the output of the Phase 1 FR, which are taken forward to Phase 2 for refinement and further consideration. The FR is a combined PAG/PMG deliverable.



The Phase 2 **Options Report (OR)** commences with the development of the Preliminary Options (route corridors / alignments) that emerge from the Strategic Options defined in Phase 1. An initial sifting of the Preliminary Options (i.e. Stage 1 - Preliminary Options Assessment) is undertaken to take a manageable number of options forward for detailed appraisal (i.e. Stage 2 - Project Appraisal Matrix). The detailed appraisal of the Preliminary Options uses transport modelling, analysis tools, environmental impacts and assessment tables to identify the Preferred Option.

The impact of each of Preliminary Option is assessed using Multi-Criteria Analysis techniques such as TAA (Transport and Accessibility Appraisal) and other quantitative methods such as CBA (Cost Benefit Analysis) and CEA (Cost Effectiveness Analysis). This appraisal will result in identification of the Preferred Option to take forward for design in Phase 3 (i.e. Stage 3 - Selection of Preferred Option). The OR is a combined PAG/PMG deliverable.

The **Preliminary Business Case (PBC)** will form an update to the Options Report following detailed consideration of scheme planning and design and costs required for Phase 3 on the Preferred Option. The PBC brings together the Phase 3 information to form a complete statement documenting the rationale behind, and justification for the project. The PBC enables the Sponsoring Agency to bring together all the evidence to support their contention that the scheme should be implemented. It will be the Preliminary Business Case that the Approving Authority will base its decision upon, and it must therefore provide a complete picture of all the arguments in favour of, and the impacts of, the proposed scheme.

The **Detailed Business Case (FBC)** will form an update to the PBC following detailed consideration of scheme planning and design and costs required for Phase 5 on the Preferred Option (taking into consideration any changes that may impact the proposal following the Phase 4 Statutory Processes). Again, the DBC brings together the Phase 5 information to form a complete statement documenting the rationale behind, and justification for the project at Phase 5. It will be the Detailed Business Case that the Approving Authority will base its decision upon to proceed to tender, and it must therefore provide a complete picture of all the arguments in favour of and impacts of the proposed scheme.

The **Final Business Case (FBC)** will form an update to the DBC following the completion of the tendering process at Phase 5. The FBC will include the Main Construction Contract cost following the tendering process. It will be the Final Business Case that the Approving Authority will base its decision upon to proceed to the construction of the project.

The **Ex-Post Evaluation Report (EPER)** is carried out 5 years after the opening of the scheme and its purpose is to determine whether:

- The basis on which the project was undertaken was justified
- The expected benefits and outcomes materialised
- The planned outcomes were the appropriate responses to actual public needs
- The appraisal and management procedures adopted were satisfactory
- If conclusions can be drawn applicable to other projects, to the ongoing use of the asset, or to associated policies

## 2.2.2 Supporting Technical Reports

In addition to the main appraisal deliverables, supporting technical reports may be produced, which are created as appendices in the Options Report initially, and then updated in the PBC and FBC as the project progresses. Two key technical reports are:

- The **Transport Modelling Report (TMR)**, which describes the data, modelling techniques and assumptions that have been used to model and assess the various options/scenarios for the project.

It presents the existing situation and the future scenarios, with and without, the proposed transport intervention. Further details can be found in PAG Unit 5.0 (Transport Modelling Overview), which introduces the detailed PAG transport modelling guidance.

- The **Cost Benefit Analysis (CBA)** Report provides an assessment of the costs and benefits of the scheme in order to determine if the scheme is economically worthwhile. All impacts of the scheme which can be given a monetary value are included in this assessment. In addition to the economic assessment, the report also needs to include a financial appraisal of the proposed transport intervention. Further details can be found in PAG Unit 6.0 (Cost Benefit Analysis Overview), which introduces the detailed PAG CBA guidance.

## 2.3 PAG Deliverables in the Appraisal Process

Table 2.0.1 sets out the appraisal deliverables for Projects as the scheme progresses through the project planning phases. The PAG deliverables are required to be reviewed as the project moves through the project phases and revised or updated as more data and information becomes available.

**Table 2.0.1 Appraisal Deliverables for Projects over €30m by TII PMG Project Phase**

TII Project Management Guidelines - Project Phase	PMG/PAG Deliverables						
	POD	FR	OR	PBC	DBC	FBC	EPE R
Phase 0: Scope and Strategic Assessment	Y						
Phase 1: Concept & Feasibility		Y					
Phase 2: Option Selection			Y				
Phase 3: Design and Environmental Evaluation				Y			
Phase 4: Statutory Processes							
Phase 5: Enabling and Procurement					Y <sup>3</sup>	Y <sup>4</sup>	
Phase 6: Construction and Implementation							
Phase 7: Closeout and Review							Y

For clarity, the TII Project Management Guidelines (PMG) project phases and associated PAG deliverables are set out and aligned with the TAF and deliverables in Figure 2.0.1. TII PAG deliverables align with the TAF Decision Gates.

<sup>3</sup> Detailed Business Case = Phase 5 Pre-Tender Business Case

<sup>4</sup> Final Business Case = Phase 5 Post-Tender Business Case

### 3. Projects €5m to €30m - Appraisal Deliverables

Projects (€5m to €30m) are appraised in line with the requirements in PAG Unit 12.0. The following deliverables are required for this type of project, based on the listed PAG Units:

- Project / Programme Outline Document (PAG Unit 2.1)<sup>5</sup>
- Feasibility Report (PAG Unit 3.0)
- Project Appraisal Report (PAG Unit 12): This is a condensed Business Case which summarises the appraisal deliverables (Feasibility Report, Traffic Modelling Report and CBA) for the proposed scheme.
- Ex-Post Evaluation Report<sup>6</sup> (PAG Unit 9.0)

Table 2.0.2 outlines the PAG deliverables for Projects (€5m to €30m) at each TII PMG project phase. The deliverables used in this appraisal pathway are generally used for greenway and active travel projects.

**Table 2.0.2 Appraisal Deliverables for Projects (€5m to €30m) by Project Phase**

Project Management Guidelines – Project Phase	PAG Deliverable			
	POD	FR	PAR	EPER
Phase 0: Scope and Strategic Assessment	Y			
Phase 1: Concept & Feasibility		Y <sup>7</sup>		
Phase 2: Option Selection			Y	
Phase 3: Design and Environmental Evaluation			Y	
Phase 4: Statutory Processes				
Phase 5: Enabling and Procurement			Y	
Phase 6: Construction and Implementation				
Phase 7: Closeout and Review				Y

<sup>5</sup> Only required for Projects over €15m. PAG Unit 2.2 outlines specific guidance for PODs concerned with active travel or greenway schemes.

<sup>6</sup> Ex-Post Evaluation Report is required for all projects with costs of €10m or more as per the requirements of TAF

<sup>7</sup> A simplified version of the Feasibility Report is produced for projects under €30m

## 4. Projects €0.5m to €5m - Appraisal Deliverables

Projects (€0.5m to €5m) are appraised in line with the requirements in PAG Unit 14.0. The only PAG deliverable is an Appraisal Summary Table (AST) in Phase 3 as shown in Table 2.0.3.

**Table 2.0.3 Appraisal Deliverables for €0.5 to €5m Projects by Project Phase**

Project Phase	PAG Deliverable
	AST
Phase 3: Design and Environmental Evaluation	Y





 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](http://www.tii.ie)

 [info@tii.ie](mailto:info@tii.ie)

 +353 (01) 646 3600

 +353 (01) 646 3601