Project Appraisal Guidelines for National Roads Unit 2.0 - Project Appraisal Deliverables

PE-PAG-02010
October 2016
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Updates to TII Publications resulting in changes to
Project Appraisal Guidelines for National Roads Unit 2.0 - Project Appraisal Deliverables PE-PAG-02010

Date: December 2017

Amendment Details:
The following minor amendment has been made to the October 2016 version of this standard:

a) Table numbering has been aligned with PAG Unit number i.e. Table 1.1 updated to Table 2.1 for PAG Unit 2.0, Table 1.
b) Table 2.2 (previously Table 1.2) has been updated for clarification.
1. Context

This unit provides guidance on the Project Appraisal Deliverables that are required throughout the life of National Road Capital Expenditure Projects and outlines the deliverables required at each Project Phase for the various types of national road projects.

National Road Capital Expenditure Projects\(^1\) are classified into three main categories, each requiring a different and proportionate level of appraisal. The three categories are as follows:

- Major Projects - cost > €20m;
- Minor Projects - cost between €5m and €20m; and
- Minor Projects – cost between €0.5m and €5m.

\(^1\) For the categorisation of projects capital expenditure costs are inclusive of VAT.
2. Major Projects - Appraisal Deliverables

The set of deliverables required from the appraisal process is dictated by the requirements of the Department of Transport, Tourism and Sport (DTTAS).

The appraisal process includes a number of defined deliverables that are required at various project stages, and to varying levels of detail, as the scheme progresses. For Major Projects, these deliverables are:

- Project Appraisal Plan (PAP);
- Project Brief (PB);
- Traffic Modelling Report (TMR);
- Cost Benefit Analysis (CBA);
- Preliminary Business Case (PBC);
- Project Appraisal Balance Sheet (PABS);
- Detailed Business Case (DBC); and
- Post Project Review (PPR).

The Project Appraisal Plan (PAP) provides a summary of the approach that will be adopted to appraising the project. It outlines what analysis tools will be used (e.g. transport model, cost benefit analysis model) to appraise the project, what the proposed study area for the relevant transport model will be, what assumptions will be adopted in terms of traffic growth, what future years will be modelled and any non-standard assumptions in terms of transport modelling or cost benefit analysis.

The Project Brief (PB) identifies the need for the scheme and sets out the project objectives. It considers the existing and likely future problems; and reports on the options that have been considered. It also provides a history of the development of the project.

The Transport Modelling Report (TMR) describes what techniques have been used to model the various scenarios, both existing and in the future, and what the forecasted impact of the scheme is.

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 of the impacts of the scheme which can be given a monetary value are included in this assessment.

The Project Appraisal Balance Sheet (PABS) reports on all of the impacts of the scheme under the Government's key appraisal criteria

- Economy;
- Environment;
- Safety;
- Accessibility & Social Inclusion;
- Integration; and
- Physical Activity (where appropriate).

It is a summary of the Multi-Criteria Analysis (MCA) process. It contains a mixture of quantitative indicators and qualitative statements and provides a concise summary of all of the aspects and impacts of the scheme.
The Preliminary Business Case (PBC) is a report that summarises the preliminary appraisal process undertaken during Phase 1: Concept & Feasibility Studies and Phase 2: Option Selection. The preliminary appraisal process will establish whether a sufficient case exists for considering a proposal in more depth and will also consider a range of options proposed to solve the identified problem. The PBC brings together the PB, TMR, CBA and PABS to form a complete statement documenting the rationale behind, and justification for the preferred option(s).

The Detailed Business Case (DBC) will form an update to the PBC following detailed consideration of scheme planning and design and costs required for Phase 3 on the preferred option. Again, the DBC brings together the PB, TMR, CBA and PABS to form a complete statement documenting the rationale behind, and justification for the project at Phase 3: Design and Environmental Evaluation. It is the document that enables the Sponsoring Agency to bring together all of the evidence to support their contention that the scheme should be implemented. It will be the Business Case that the Sanctioning Authority will base its decision upon and it must therefore provide a complete picture of all of the arguments in favour of and impacts of, the proposed scheme.

The Post Project Review (PPR) 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 identified at Phase 2: Option Selection;
- The planned outcomes were the appropriate responses to actual public needs identified at Phase 2: Option Selection;
- The appraisal and management procedures adopted were satisfactory; and
- If conclusions can be drawn applicable to other projects, to the ongoing use of the asset, or to associated policies.

Table 2.1 sets out the appraisal deliverables for Major Projects as the scheme progresses through the various project planning phases. The project planning phases, which are defined in detail in the National Road Project Management Guidelines (PMG), are as follows:

- Phase 0 – Scope and Pre-Appraisal;
- Phase 1 – Concept & Feasibility;
- Phase 2 – Option Selection;
- Phase 3 – Design and Environmental Evaluation;
- Phase 4 – Statutory Processes;
- Phase 5 – Enabling and Procurement;
- Phase 6 – Construction and Implementation; and
- Phase 7 – Closeout and Review.

The Project Appraisal Guidelines (PAG) deliverables are required to be reviewed as the project moves through the various project phases, and revised and updated as more data and information becomes available.

For clarity the TII National Road project planning phases are presented in Table 2.2 alongside the corresponding DTTAS Common Appraisal Framework project stages.
Table 2.1: Appraisal Deliverables for Major Projects by Project Phase

<table>
<thead>
<tr>
<th>National Roads Project Management Guidelines - Project Phase</th>
<th>PAG Deliverable</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>PAP</td>
</tr>
<tr>
<td>Phase 0: Scope and Pre-Appraisal / Phase 1: Concept &amp; Feasibility</td>
<td>Y</td>
</tr>
<tr>
<td>Phase 2: Option Selection</td>
<td>Y</td>
</tr>
<tr>
<td>Phase 3: Design and Environmental Evaluation</td>
<td>Y</td>
</tr>
<tr>
<td>Phase 4: Statutory Processes</td>
<td></td>
</tr>
<tr>
<td>Phase 5: Enabling and Procurement</td>
<td>Y</td>
</tr>
<tr>
<td>Phase 6: Construction and Implementation</td>
<td></td>
</tr>
<tr>
<td>Phase 7: Closeout and Review</td>
<td></td>
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</tbody>
</table>

2 Certain projects will require some cost benefit analysis at Phase 1. The requirement for this to be agreed with DTTAS.
3 Generally not applicable but if the scope of a project is significantly changed then the Business Case may need to be updated.
Table 2.2: Major Project Phases and Corresponding CAF Stages

<table>
<thead>
<tr>
<th>Phase</th>
<th>Project Phase Description</th>
<th>National Roads Project Management Guidelines</th>
<th>Appraisal Deliverables</th>
<th>Common Appraisal Framework Stages</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 / 1</td>
<td>Scope and Pre-Appraisal / Concept &amp; Feasibility</td>
<td>Project Appraisal Plan &amp; Project Brief</td>
<td>Project Proposal</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Option Selection</td>
<td>Preliminary Business Case</td>
<td>Preliminary Appraisal</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Design and Environmental Evaluation</td>
<td>Draft Detailed Business Case</td>
<td>Detailed Appraisal</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Final Detailed Business Case</td>
<td>Approval in Principle</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Statutory Processes</td>
<td>Updated Detailed Business Case (if necessary)</td>
<td>Final Planning &amp; Design</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Invite Tenders</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Enabling and Procurement</td>
<td>Updated Detailed Business Case</td>
<td>Place Contract</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Construction and Implementation</td>
<td>-</td>
<td>Implementation, Monitoring &amp; Evaluation</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Closeout and Review</td>
<td>Post Project Review</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3. Minor Projects (€5m to €20m) - Appraisal Deliverables

For Minor Projects (€5m to €20m) appraised in line with PAG Unit 12.0, the following deliverables are required:

- Project Appraisal Plan (PAP);
- Project Brief (PB);
- Project Appraisal Report (PAR); and
- Post Project Review\(^4\) (PPR).

Table 2.3 outlines the PAG deliverables for Minor Projects (€5m to €20m) at each project phase.

<table>
<thead>
<tr>
<th>National Roads Project Management Guidelines – Project Phase</th>
<th>PAG Deliverable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 0/1: Scope and Pre-Appraisal / Concept &amp; Feasibility</td>
<td>PAP</td>
</tr>
<tr>
<td>Phase 2: Option Selection</td>
<td></td>
</tr>
<tr>
<td>Phase 3: Design and Environmental Evaluation</td>
<td></td>
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<tr>
<td>Phase 4: Statutory Processes</td>
<td></td>
</tr>
<tr>
<td>Phase 5/6: Enabling and Procurement / Construction and Implementation</td>
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<tr>
<td>Phase 7: Closeout and Review</td>
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The **Project Appraisal Report (PAR)** is effectively a condensed form of the Business Case document required for Major Projects which summarises the appraisal deliverables (PB, TMR, CBA and PABS) for the proposed scheme. Details of what needs to be provided and addressed in the PAR are discussed in detail in PAG Unit 12.0: Minor Projects (€5m to €20m).

\(^4\) A Post Project Review is only required on a selection (5%) of all projects under €20m as per the requirements of the Public Spending Code

\(^5\) Generally not applicable but if the scope of a project is significantly changed then the Business Case may need to be updated.
4. Minor Projects (€0.5m to €5m) - Appraisal Deliverables

For Minor Projects (€0.5m to €5m) appraised in line with PAG Unit 14.0, the only PAG deliverable required is a Project Appraisal Balance Sheet (PABS). Table 2.4 shows when the PABS is required.

**Table 2.4: Appraisal Deliverables for Minor Projects by Project Phase**

<table>
<thead>
<tr>
<th>Project Stage</th>
<th>PAG Deliverable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 3: Design and Environmental Evaluation</td>
<td>PABS Y</td>
</tr>
</tbody>
</table>

Details of what needs to be provided and addressed in the PABS are discussed in detail in PAG Unit 14.0: Minor Projects (€0.5m to €5m).