# The Most Common Mistakes in PSC Deliverables

Capital Programme Office
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This note outlines the most common mistakes identified by the Capital Programme Office (CPO) at Public Spending Code (PSC) review stage supporting the NTA role of approving authority. (These mistakes were eventually amended). This note is intended to support Sponsoring Agencies, and project teams in the preparation of their PSC deliverables prior to submission to the NTA for approvals. While the use of templates – such as Preliminary Business Case – should help mitigate the risk of excluding important elements in the analysis, it is important to be aware of potential pitfalls. This list may change from time to time depending on the CPO observations of future PSC reviews.

### 1. Not including Value Added Tax (VAT) in financial appraisal.

Because VAT is excluded from the economic appraisal, it is sometimes excluded from the financial appraisal in error. Given that it is important to assess affordability from the point of view of the Sponsoring Agency and VAT is usually paid by the Sponsoring Agency, VAT should always be included in the *financial* appraisal. (p. 25, Public Spending Code: Carrying out a financial analysis) This leads to an incorrect Net Present Value (NPV) of the project and an underestimation of the total project cost. Thus, it is recommended that the project team should be familiar with detailed guidance for financial analysis of the Public Spending Code and use an appropriate template such as financial analysis templates for proposals which can be found on the Public Spending Code webpage.

### 2. Not including VAT, contingency, risk and inflation in total project costs.

At the submission stage, the project team is likely to report capital cost only rather than total costs including all cost elements such as VAT, contingency, risk and inflation. This can cause misunderstanding about the total costs of the project to the review team and confusion about the review and approval process. Thus, the project team should ensure that all cost elements are included in a table in the final version of the business case. It is also recommended to use templates provided as part of the Cost Management Guidelines to avoid mistakes.

### 3. Fail to provide reasonable explanations of why rates of inflation and contingency are applied.

The NTA provide a contingency calculator and inflation bulletin for deriving contingency and inflation rates applied to the business case and the Sponsoring Agencies (SAs) are advised to use these guidelines. In particular, when the SAs do not adopt the inflation rate from the inflation bulletin, the NTA advise them to provide a reasonable explanation of why the SAs apply the other values. However, in some business cases, how the contingency rate is calculated or why the specific inflation value other than the inflation bulletin was not clearly suggested. Thus, the project team should ensure to include the source of inflation and contingency rates applied (e.g., NTA Inflation Bulletin, NTA Contingency Calculator). In particular, in case the project team applies the inflation and contingency rates whose sources are not NTA published guideline, the project team should ensure to provide the reasonable explanations and grounds.

### 4. Not using demand forecast at the opening year to calculate Benefit-Cost Ratio (BCR).

In the Transport Infrastructure Ireland's (TII) TEAM active travel appraisal tool, demand from the scheme's opening year is used to calculate the BCR as well as evaluate the scheme's impact. However, some projects included demand from the end of the appraisal period. This can cause overestimation of BCR of the scheme. Therefore, the project team should ensure that the demand at the scheme's opening year is applied to calculate BCR.

### 5. Using complex methodologies for demand forecast of active travel schemes.

Similarly, some active travel schemes often used overly complex methodologies to forecast demand that do not represent a coherent analysis of the uplift over and above the base case. This adds only complexity to the demand forecast rather than contributes to improving the demand forecast process. Relatively simple coherent approaches (e.g., Royal Canal Greenway Phase 4) can be used to forecast base case demand and the uplift due to the project using case study evidence.

**6. Objectives are not SMART (Specific, Measurable, Attributable, Realistic and Timely) at the Preliminary Business Case stage.**

The Public Spending Code and Transport Appraisal Framework advise that objectives should be structured in a manner that reflects SMART attributes. The Transport Appraisal Framework (TAF) also describes that it is vital that objectives are framed in a SMART manner as this informs other key aspects of the appraisal process including option development. However, in some business cases, objectives are high-level and lack of specification. High-level and less specified objectives can be a reason for insufficiently quantified and specified key performance indicators. TAF Module 4 provides detailed guidance and useful tools with examples to develop SMART objectives (please refer to 4.4 Objective Setting of TAF Module 4).

**7. Not attaching the executive summary / submitting the document with a draft watermark.**

The CPO informed the project managers at the internal presentation that a separate Executive Summary document should be provided which will be included in the main Board papers where the deliverable exceeds 10 pages. Also, the CPO asks to submit the final version of the documents without a draft watermark after the quality assurance process by the project team and preparers. However, one or two projects per month do not submit the executive summary with the business case and remove a draft watermark from the document for submission. This results in a delay in the review process and reporting preparation to the Capital Programme Committee and the Board. The project team should ensure that a draft watermark is removed from the final PSC deliverable to be submitted and the executive summary is included in submission email to the CPO.

**8. Not considering the impact of operating cost.**

Schemes often focus on the capital cost of the project and do not consider the operating cost implications over and above the base case. This can understate the overall cost implications of the project in both the economic and financial cases. The TAF clearly mentions that operating costs is one of typical costs which might occur in a transport investment (please refer to 7.1 General Principles of the Appraisal Process of TAF Module 7). Thus, the project team should check all requirements about costs in the TAF. The Public Spending Code also provides a template for financial analysis which includes operating expenses and maintenance costs. To consider their impacts, it is recommended to use the templates.

**9. Incorrect treatment of the shadow price of public funds**

Schemes sometimes do not accurately apply the shadow price of public funds in the economic appraisal. The shadow price of public funds should be applied to the net public financial cost of a project. However, some schemes have applied the shadow price of public funds to the non-labour costs and applied the shadow price of labour to labour costs separately. This is incorrect, both the shadow price of public funds and the shadow price of labour should be applied to publicly funded labour costs. Module 8 of the TAF provides clear guidance and cost multiplier on the shadow price of public funds (please refer to 8.3 Shadow Price of Public Funds of TAF Module 8). The project team should ensure that the use of the shadow price of public funds corresponds to this guidance.