

Office of Rail and Road and
Network Rail

Independent Reporter Framework
Phase 2 Enhancements Efficiency
Benchmarking

Final Report | 26 November 2020

This report takes into account the particular instructions and requirements of our client.

It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

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ARUP

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1 Executive summary

Overview

In late 2019 Arup undertook an assignment (Phase 1) to develop a new set of cost ranges for the ORR and Transport Scotland, based on NR project outturn costs. This work was based on a sample of approximately 50 completed Enhancement Projects identified by Network Rail and agreed with the ORR. This exercise resulted in Arup being able to establish revised direct cost unit rates and new indirect cost percentage ranges in addition to the updated set of cost ranges.

In this Phase 2 exercise, NR and the ORR have engaged Arup to develop an additional cost benchmarking range (Phase 2 range) for projects delivered using best practice. It is anticipated that this new range will be used to create aspirational efficiency targets during the early phase of project developments.

Consideration of best practice

The term “best practice” is widely used and is generally accepted in the context of construction projects to include projects that were delivered on time, on budget and that met the quality criteria required. For this exercise we further defined this, considering that projects undertaken by experienced construction clients who have a set of well-defined stage gate processes and have applied these to major capital investment projects to be likely to conform to best practice.

For this phase, Arup worked with their in-house cost database and other sources, selecting over 50 projects ranging from, rail, highways, aviation, energy, M&E and building projects. After a preliminary review, 18 cross-industry best practice projects were selected to develop the “best practice” range for Phase 2.

Key conclusions and results

The analysis carried out to derive the Phase 2 cost data shows that the ranges developed for Network Rail in Phase 1 generally align with other industries’ best practice engineering and construction projects.

The main variance between the Phase 1 and Phase 2 ranges relates to indirect costs and construction preliminaries.

Specific points are:

- ‘Direct as a percentage of AFC’ - Phase 1 and Phase 2 are very similar
- ‘Direct as a percentage of base’ - Phase 1 and Phase 2 are very similar
- ‘Indirect as a percentage of AFC’ and ‘Indirect cost as percentage of base’ in the Phase 2 ‘Best Practice’ data set are lower than the NR ranges derived in the Phase 1 work.
- Prelims ranges – The Phase 2 ‘Best Practice’ data set prelims ranges are lower than the NR ranges derived in the Phase 1 work.

In summary the data suggests that there may be potential for some efficiency around indirect costs and preliminaries.