Cost benchmarking of railway projects in Europe – can it help to reduce costs?

This paper highlights the methodology of construction cost benchmarking of railway projects in the EU and its preliminary results. Benchmarking helps project managers learn from others, improve particular project areas, and reduce project costs. For railway projects, benchmarking is essential for the comparison of unit costs for major cost drivers (e.g. tunnels, bridges, etc.).

This methodology was applied to the case study described in this paper, the first high-speed railway project in Denmark, “The New Line Copenhagen-Ringsted”. The aim was to avoid cost overruns and even reduce final budget outcomes by looking for the best practices in the construction and implementation of other high-speed lines in Europe and learning from their experience.

The paper presents benchmarking from nine railway projects that are comparable with the Copenhagen-Ringsted project. The results of this comparison provide a certain overview of the range of costs in various budget disciplines. The Copenhagen-Ringsted project is shown to be right in the middle of the range in terms of total costs per kilometre, and its values in the discipline comparisons do not significantly differ from the values of the less expensive projects. Deeper analysis of project unit costs is still continuing, but the preliminary results show that the cost values for projects located in the same geographical zone are similar. For example, this can be explained by their use of the same construction companies. However, unit prices in southern Europe are lower than in northern Europe.

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