



UNIVERSITY OF
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Department of Engineering

CONSTRUCTION ENGINEERING MASTERS DISSERTATION ABSTRACT

Construction Cost Differential Between Infrastructure Projects

This research paper investigates the potential reasons behind the frequently reported cost differential between UK infrastructure construction costs and costs in other geographic areas. The paper aims to investigate some of the potential causes of the difference, reported recently by Sir Roy McNulty in the Rail Value for Money study in 2011. Following on from this work Infrastructure UK was established by the UK Government and embarked on various initiatives, seeking to improve the way that infrastructure projects were delivered, whilst remaining relatively silent about the potential causes of the differential.

Given the lack of detailed research into the potential causes and given the process of improvement that IUK has commenced on, the paper aims to investigate potential causes behind the cost differential to examine whether these initiatives being embarked upon by IUK do indeed address all of the potential causes

The paper addresses this question through a series of interviews from leading figures in construction, where views from academics, governments, institutions and construction companies have been sought. In parallel a small case study will be conducted to seek any detailed explanations in implementation for differences in costs between two comparable projects in UK and France.

From the initial research it is clear that many of the initiatives are addressing reducing process waste from the infrastructure procurement process. These initiatives also appear to be being used as tools to achieve cultural and behavioural change within the sector as well as reducing process waste in its own right.

There is little sign that other areas are being addressed such as the role of the institutions, size and scale of UK contractors and the education of Engineers and Architects in the UK. Following this initial research the impact of these 3 groups on infrastructure construction costs could be further investigated to examine whether or not the peculiarities present in the UK contribute to the reported inefficiency costs.

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