Government Construction

Cost Benchmarking Principles and Expectations

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INTRODUCTION

This document sets out for the first time the principles of construction related cost benchmarking standards which have been developed by the Joint Data and Benchmarking Task Group, thereby delivering objectives included within the Government Construction Strategy and Infrastructure UK Cost Review Implementation Plan. Moving forward, these principles will be used as the basis for developing consistent departmental approaches to construction related cost benchmarking, some of which are already relatively mature.

This publication therefore supports the new procurement models being trialled as part of the delivery of the Government Construction Strategy and the achievement of the overarching target of a sustainable\(^1\) reduction in construction costs of 15-20% by the end of this Parliament.

This document should also provide a helpful point of reference for the wider public sector – for example Health Trusts and Local Authorities – in determining a standard approach to construction cost benchmarking.

Consistent with the terminology used for the Department Cost Benchmark Data, which is published in parallel with this document, cost benchmarks are described in terms of the following types:

**Type 1 Benchmarks (Spatial Measures)** encompass the most common formats used by clients and industry to benchmark total construction costs, for example: £/m, £/m\(^2\), £/m\(^3\). They are related to *throughput* (quantity) in the sense, for example, of square metres of accommodation delivered by a project.

**Type 2 Benchmarks (Functional Measures)** encompass a range of more department-specific benchmarks, which address *business outcomes* per £ for example: £/Place; Flood Damage Avoided £/Investment £.

**Type 3 Benchmarks** address a range of more department-specific benchmarks but where *business outcomes* are related only indirectly to the benchmark, for example: ratio of product cost (or alternatively development cost) to total construction cost.

**Type 4 Benchmarks** are similar to Type 1 benchmarks but applied at an *elemental throughput* (quantity) level, for example: foundation costs £/m, £/m\(^2\) or £/m\(^3\).

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\(^1\) Without adversely impacting either whole life value or the long term financial health of the construction industry.
**Terminology**: Suppliers offer prices to clients - i.e. their internal costs plus overheads and profit - which on the award of a contract become client costs. Therefore what is in effect the same benchmark is denoted as *cost benchmark* within this document.
PRINCIPLES OF BENCHMARKING STANDARDS

Key Characteristics
To establish a common approach for measuring costs and value across the Government estate which will, in turn, produce an available data set for all central Government functions to compare the relative costs of delivering construction and infrastructure proposals. The emphasis should be on achieving comparability of data that is already being gathered, and embedding the benchmarking approach going forward, rather than imposing an additional burden upon departments. The benefit of the approach (improved value for money, etc.) should be sufficiently self-evident to promote its use.

Achieve a Common Overarching Approach and Taxonomy
- Establish the approach in the form of common minimum requirements’, rather than setting out a detailed process that could be considered an additional burden upon departments.
- Adopt a common cost summary analysis format for the purpose of mandating to clients and industry such as that used by the Building Cost Information Service (BCIS) or similar for infrastructure.
- Identify against the common cost summary where differences will occur between different sectors.
- Establish additional cost data collection requirements e.g. pre-contract and Whole Life Costs (consideration to be given to the RICS New Rules of Measurements additional cost categories).
- Identify standard project descriptions or categories that can be common to any data set to assist in identifying comparable project types used across sectors, including the private sector, for possible benchmarking purposes.
- Within the cost summary data set, identify elements which need further detailed cost information that supports further analysis e.g. Ministry of Justice’s Cost Component Breakdown approach.
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- Identify approaches to data collection to allow benchmarking of procurement approaches, e.g. Design & Build, Frameworks, Cost Led Procurement.
- Establish a method for assessing the effect of legislative, technical changes or Government policies (e.g. BIM) that could be expected to flow through to construction costs may impact on costs, to build a reliable comparator database.
- Identify possible private sector comparators of building types worthy of future consideration to identify any cost differences e.g. living accommodation vs. hotels.
- Government departments to meet on a regular basis to discuss current trends in costs, contractor’s intelligence, new work practices.

Achieve Comparable Metrics

- Adopt Type 1 comparable metrics and cost component breakdowns based upon BCIS (or similar for infrastructure): assumed to be £ per m² (or £ per m), ensuring the constituent cost build up is commonly understood.

Identify Type 2 (sector specific, business outcome per £) metrics, e.g. £ per pupil, £ per teaching area (as a ratio of the whole GIFA), Flood Damage Avoided £ / Investment £ etc.

- Identify Type 4 (element specific) metrics:
  - Break down £ per m² to ‘meaningful’ comparator elements (e.g. kitchens) and appropriate measures (e.g. percentage of build cost) to be used across sectors.
  - Identify common project types across various sectors offering ‘meaningful’ analysis of where elements command a greater or lesser proportion of overall spend relative to others (e.g. professional fees, preliminaries etc) to provide meaningful comparisons.

Achieve a Common Operational Approach

- For data collection establish:
  - Timing of collection (e.g. feasibility, contract award, out turn costs);
  - Requirements to be placed upon client and contractor to report back;
  - Potential leverage mechanisms to ensure data is made available by suppliers (e.g. linked to release of payments, pre-qualification for future schemes, eligibility for future framework projects, etc. – aligned with contract structures for existing and future contracts).
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- For data presentation establish:
  - Comparable format for presenting data back to future clients/contractors, especially use of Type 2 metrics that offer a meaningful comparison (e.g. need to establish whether relevant relationships exist between sector specific measurements, such as £ per prisoner vs. £ per pupil);
  - Level of detail to be set out;
  - Comparable metrics to be included, as far down as is practicable and value adding (e.g. headline elemental, or down to sub-elements).

- For data use:
  - Define potential uses of data, to emphasise value of both gathering and disseminating benchmark information:
    - Sharing of data should ensure a consistent challenge to contractors working across Government;
    - Cumulative effect of the challenge will be to improve value for money when applied consistently and systematically;
    - Specific data use for budgeting process: empirical data sets with which to model capital programmes for both annual process and CSR negotiations.
    - Project specific: data sets to assist in delivery of best VfM outcomes on project by project basis.
    - Periodic publication as part of the transparency agenda and in support of industry innovation.
  - Enable data sharing across Government (i.e. people should actively seek to share data, and to investigate what is available from others before commencing feasibility), while making clear how it should be used (i.e. need to ensure commercial confidentiality, etc.).
  - To enable sharing of data with non-governmental organisations, a legal document such as a Memorandum of Understanding may be required, which would enshrine measures to ensure commercial confidentiality etc.
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- Sharing process to be defined in more detail, for example:
  - Department commences development of a project;
  - Consulti a list of contact names and (ideally) available data sources by work type (e.g. single living accommodation, school, teaching hospital, outpatient unit, etc.) to choose the most relevant data set;
  - Contacts relevant owner of data to request release of current data sets;
  - Data provided in common format;
  - Data used to develop outline project costs;
  - Data used again during procurement and prior to contract award.

- Guidance on methodology for applying benchmark data during the feasibility process when developing cost model, for example:
  - Initial estimation of total cost envelope on top down £/m² basis, triangulated by using relevant Type 2 metrics;
  - More detailed estimation using Type 4 elemental costs, on bottom up basis.

- Guidance on use of data during the procurement process, for example:
  - Communication of cost expectations relating to frameworks and programmes of work (e.g. downward cost glidepath);
  - To inform tender documentation, especially specifications;
  - For confirmation that bidders’ elemental cost plans achieve cost expectations, with reference to quality being achieved, allowing a direct challenge to be made (a challenge that in some cases might also usefully inform the strategic dialogue between Government and significant suppliers).

Future proofing
- Address the use of BIM and any impacts on financial data collection, i.e. elemental or by work package or other.
- Retain flexibility to control for the effects of changes in legislation or other key variables – such as changing business or quality requirements – that may affect some sectors more than others, potentially distorting the data (e.g. reduction of regulatory burden in education sector might produce lower costs that cannot be immediately replicated in health).