



Background: Best Practice for Procurement of Engineering Services

Why procurement is important

Supporting New Brunswick's infrastructure represents a significant investment of tax dollars. Upfront procurement decisions have a significant impact on not only the cost and quality of the design and construction phase, but on operations and maintenance of infrastructure assets over their entire design life.

The Recommended Best Practice

The Best Practice by InfraGuide recommends a competitive Qualifications-Based Selection (QBS) model. InfraGuide is a collaboration of the Federation of Canadian Municipalities; the National Research Council; and Infrastructure Canada. QBS encourages the selection of the most qualified team who will work with the owner to jointly develop the required scope of services and the appropriate schedule and fees. QBS is similar to hiring people – identify the candidate who will provide the most value to the organization and negotiate terms of employment.

Benefit to *New Brunswickers*

Better value to taxpayers

QBS encourages innovation and provides better value to taxpayers on their infrastructure investments. It provides accountability by ensuring that fees will directly correspond to the level of service and the value of deliverables to be provided. QBS also results in more realistic and predictable budgets and schedules for capital expenditures. If the owner and the preferred team cannot come to terms on scope and fees (e.g. project budget), the client is free to proceed to the next-preferred team.

Significant life-cycle savings

QBS maximizes the value of the engineer's contribution to a project while reducing the project's life cycle costs. Design engineering typically accounts for only about 2% of the life cycle cost of infrastructure, but dramatically impacts the cost and quality of the remaining 98%. A recent American Public Works Association study shows that using QBS for engineering reduces construction cost overruns from an average of 10% to less than 3% - equivalent to a savings of up to \$700K on a \$10M capital project. (These savings are often greater than the original design fees!)

QBS emphasizes quality, fosters innovation, and generates real savings in construction, operations and maintenance, saving taxpayer dollars while optimizing public safety and welfare.

A transparent and competitive process

QBS is a competitive process – the cost of engineering services is a factor in the procurement, but it is finalized after the most suitable firm for the project has been selected.

What's wrong with the lowest price?

If public infrastructure development is based on the lowest possible fee, there are potential long-term consequences to both the economy (higher costs to the taxpayer) and public safety. Selecting the lowest fee creates pressure to expend the least amount of resources necessary to meet the bare minimum requirements of the project – losing an opportunity to optimize the design, reduce lifecycle costs and enhance safety. It also discourages innovation and effectively penalizes proponents that anticipate potential complexities or who wish to propose value-added solutions all to save taxpayers money. The results of this will be felt in the years to come.

Who supports QBS?

National Guide to Sustainable Municipal Infrastructure

InfraGuide is a collaboration of the Federation of Canadian Municipalities; the National Research Council; and Infrastructure Canada.

Progressive Canadian Municipalities

Some Canadian municipalities, such as Calgary and London use QBS for selecting engineering firms for public works projects.

US Federal and State Governments

Since 1972, US federal law has required the use of QBS for procurement of professional engineering and architectural services on projects that receive federal funding. Similar laws have since been adopted in 44 US states.

The Canadian Standards Association

The Canadian Standards Association, under its *Infrastructure Solutions Program*, has developed training tools for the implementation of QBS and will be available for all levels of government shortly.

Standing Committee on Government Operations

In 2009, a report of the House of Commons Standing Committee on Government Operations recommended that QBS should be investigated and considered for Federal Government procurement of professional services.

Leading Industry and Professional Associations

Engineers Canada
Royal Architectural Institute of Canada
International Federation of Consulting Engineers (FIDIC)
American Public Works Association

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