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PROJECT PERFORMANCE REVIEWS: HOW OWNERS CAN EXPAND THE "VALUE-FOR-MONEY" CONCEPT

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Recent developments in public and private procurement policies require that project owners move away from the traditional capital expenditure model (the lowest bid) as the only method of project execution. Revay's Vancouver office has recently been involved in a variety of assignments for both public and private owners in the development and execution of more responsive project implementation models. This paper indicates how the Value-for-Money Audit concept can be expanded into an independent, ongoing instrument to identify, manage and control the many factors that now determine and affect project performance.

David Hunter

INTRODUCTION

We all want value for our money and having the objective of implementing capital expenditures in such a way as to optimize value is certainly nothing new. However, the traditional method of obtaining such value by simply awarding everything to the "lowest compliant bidder" is no longer adequate. More sophisticated investors and a more demanding public, or at least the organizations that regulate or represent them, require more accountability and expanded definitions of both "money" and "value". These requirements relate to assessing a project's quantitative cost, (including operational, maintenance and dismantling costs) as well as its qualitative costs, such as sustainability, ecological and social consequences. Regulatory requirements and political considerations necessitate, or soon will, that public sector project sponsors, and private sector ones who depend on the public's trust, formulate a credible strategy to convince their investors and/or the public not only that all such costs are accounted for but also that they are expended in the most economic, efficient and effective manner, thereby producing optimum value-for-money.

Government agencies and private organizations worldwide are now initiating formal mechanisms within their capital works implementation processes to attain this requirement. These measures take a number of forms, such as specified internal management systems, procedure reviews or audits. Recently, the Vancouver office of Revay and Associates was involved in designing and providing such services to clients by reviewing project implementation cycles, or parts thereof, and the procedures under which the design, procurement and construction phases of projects are carried out. In performing these services, it has become obvious that, to be credible, such an exercise must be formal, independent and structured. It is particularly important that these procedures start early in the planning and design phases of the project, when most of the quantifiable and non-quantifiable costs and other parameters are built into the project. They must continue throughout the construction and operation phases. Those carrying out such an exercise should be knowledgeable and experienced in identifying the sources of these costs and in the techniques involved in cost and schedule risk analyses.

There is, as yet, no recognized format for these exercises and, as a relatively new concept, neither the scope nor nomenclature have been standardized. They are variously referred to in the literature as Capital Management Systems, Value-for-Money Audits[1] or Performance Audits[2]. However, the term "audit" seems to restrict the exercise to a one-time examination, primarily of the financial aspects of a project and therefore falls short of the concept discussed here. For the purposes of this paper, the exercise is described as a "Project Performance Review" or PPR and the organization carrying out the review is called a "Reviewer".

THE OBJECTIVES OF A "PROJECT PERFORMANCE REVIEW"

The public, investors and project sponsors, naturally expect "performance" from their capital projects, but what is meant by project performance and how can a PPR help in assuring it?

The literature provides a number of definitions of such reviews:

- *"A systematic, neutral, evidence-based rapid assessment of the performance of a project."*[3]
- *"A review of a project by experienced people, independent of the project team, on behalf of the project sponsor. The purpose is to assure that the project is justified, the procurement strategy sound that the implementation is carried out so as to provide value-for-money."*[4]
- *"The optimization of a project's life-cycle cost and quality to meet the customer's requirement."*[1]

These definitions are all very general in nature and appear to broaden the classic cost/benefit analyses carried out as an ongoing process by independent specialists by taking into account both quantitative and qualitative aspects of project costs. As already stated, the marketplace (competition) is no longer accepted as the sole assuror of value-for-money. A PPR's prime objective, as stated in the last of these definitions, is to ensure that the project "meets the customer's requirements". To do this a PPR examines a project with regard to two major criteria:

- Relevance – Is this the right project at the right time to fulfill the public or private customers' needs?
- Performance – Is value being achieved in implementing the project?

The first criterion requires a staged exercise, starting early in the project's planning, to evaluate customer needs and how they are to be met and, again, during the project's implementation, to assess whether these needs have changed and that they are still being met. The second criterion also requires an ongoing exercise during all project phases (planning, purchasing, construction, operation and finalization), to assure that the customer is receiving value for the resources being expended.

These goals are accomplished by continuously answering the following questions:

- Economy – Are the right input resources (physical, financial and human) being employed, are they of the right kind, at the right place, at the right time and at the right cost to achieve the required quality and quantity of output?
- Efficiency – Are these resources being deployed in an affordable manner to achieve the required quality and quantity of output?
- Effectiveness – Are the project's objectives being achieved in the most effective manner?

The PPR must encompass all elements of a project, such as its life-cycle costs and its functionality, as well as ensuring that it meets the necessary social and regulatory requirements. The purpose is not just achieving the lowest cost product; qualitative as well as quantitative, but that due-diligence is also demonstrated.

Aspects that require examination and monitoring include the following:

- Financial – estimates, budgets, financial risk management, contingencies, changes and life-cycle cost control.
- Design – durability, appropriateness, adaptability, constructability, design risk management, innovation and environmental impact.
- Procurement Strategy – risk assignment, vendor capabilities and capacity, partnering, schedule, maintenance and warranties.
- Procurement and Construction – construction risk management, cost minimization, environmental impact, changes, cost and schedule control (as opposed to mere recording).
- Management – capability, monitoring, control and feedback.
- Social – health and safety, sustainability and social impact risk management.

In its simplest form, a PPR can be similar to a traditional compliance or attestation audit which is an audit that attests to the party's compliance with a pre-agreed to set of rules or instructions. However, such audits, like all audits, are usually single after-the-event examinations of existing facts and are limited in their effectiveness by the adequacy of those pre-agreed rules or instructions. Furthermore, audits of this type are unable to provide any ongoing influence on optimizing the project's implementation. Also, PPRs do not replace, but rather complement, traditional financial audits, which are primarily interested in the extent of project expenditures rather than their relevance and performance.

Examining all facets of a project covered in a comprehensive PPR requires a panoply of expertise (financial, engineering, construction, social and, most importantly, risk analysis) that are not necessarily available within a single organization. In addition, it is advisable that a PPR not be carried out by members of, or those connected with, the project's or sponsor's management teams.

THE INDEPENDENT REVIEWER

An experienced independent Reviewer, as opposed to one that is an agent or employee of the project sponsor (be it government, a regulatory agency or a private owner), brings the following advantages to any review process:

- He has knowledge of the PPR concept, its techniques and is experienced in applying that knowledge.
- He can bring together state-of-the-art subject matter expertise that may not be available to the project's sponsor or investor. He also brings real-life business experience to government sponsors.
- He is appointed only because of his possession of the above knowledge and expertise and not because of his position within the sponsor's organization.
- He is free from the day-to-day administration of the project, is uninvolved with personality or contractual conflicts within the project and has no direct involvement in the

project outcome. He can, therefore, be neutral in his assessment and recommendations.

- His reports are not influenced by bureaucratic policy, protection of turf and (hopefully) political considerations.

The major administrative difference between an independent Reviewer and an agency Reviewer is that the former receives no direct instruction from the sponsor, or other parties, regarding how the review is conducted. Although the independent Reviewer would be open to discussions with or receiving criticisms of his reports from the project managers, there is no obligation to amend them. To lend credibility, an independent Reviewer should develop a sound knowledge of the project being reviewed, the organizational arrangements of its implementation and the environment in which the various entities involved operate. Such credibility insulates the Reviewer's report from the project's sponsor, the project team, the constructors, the vendors, the operators, the customers and the public. This is of particular attraction especially in the context of high profile or controversial projects, where the impartiality of the sponsor itself may be suspect.

Unless specifically requested to do so as part of the project management process, it is not the role of a PPR to carry out any of the activities being examined, to identify/assign the project's risks or otherwise to control the project activities in any way; these remain the project management's responsibility. The Reviewer's responsibility is only to report on whether these activities are carried out, that they are carried out comprehensively and to monitor whether the results of these activities and the PPR's findings are incorporated into the project's design and implementation.

WHEN SHOULD PROJECT PERFORMANCE REVIEWS BE USED?

PPRs are usually instigated by project sponsors (owners) or major investors. The traditional capital expenditure control methodology (the lowest bid) as the only way of ensuring the lowest costs of implementing capital works is being transformed by recent evolutions in public and private sector procurement policies and government regulations. Some of these are discussed below:

Public Private Partnerships (PPP) for the Construction and Operation of Public Facilities

Though fully accepted in many other jurisdictions, Public Private Partnerships are still relatively new in Canada and a sceptical public requires reassurance that such arrangements provide more value compared to traditional public-sector procurement methods. To provide the required assurance, whenever such a method of project delivery is being contemplated, it is presently common to carry out "Value for Money (VFM) Audits". These are normally before-the-fact formularized appraisals of the relative financial merits of traditional and PPP implementation methods and are carried out either in-house or by third parties on behalf of a particular project's sponsor.

These limited exercises are not PPRs, as discussed in this paper, and they have been primarily criticized for their conclusions being overly dependent on the discount rates used in calculating the net present values of the PPP versus the traditional procurement models. Other criticisms are that their quantifications of costs associated with risk transfer are debatable and that they are not true "audits" because, being merely forecasts, they provide no assurance of a particular outcome. A PPR, however, rather than simply quantifying the direct financial repercussions of a particular delivery system, would also provide a risk-burdened analysis of all alternate delivery systems as part of the ongoing evaluations of project performance that continue throughout its full implementation. In the case of a project ultimately undertaken under a PPP arrangement, any PPR would, of course, be limited during the period of the PPP contract as, once such an arrangement is in place, all contractual requirements are fixed.

Within PPP Partnerships

As PPP arrangements become more popular, the members of the constructor/operating consortium themselves are becoming aware of the advantages of a PPR-type mechanism overseeing the consortium's operations within the PPP arrangements. Such a PPR is normally sponsored by the consortium's financial members to provide them with confidence that the capital expenditures are optimized and other project risks are being properly evaluated and managed.

Other Public Capital Expenditures

The public, or at least public-advocacy groups, are becoming more aware of the costs (financial, environmental and social) associated with the major public-sector capital works and are demanding more accountability from the project sponsors, as they are aware that they are the ultimate customers and financiers. The sponsors of such projects, whether PPP is being considered as a method of delivery or not, are, therefore, becoming more conscious of the advantage of having such an exercise as a PPR instigated within the project, not only as a means of optimizing the project's performance but to also to insulate the sponsor from criticism regarding possible project shortcomings. This is particularly true regarding high-risk projects which include those using novel or untested technology/construction methods, those for which the sponsor may lack experience, those that have complex inter-dependability with other projects, those that have significant public impact, require a large financial commitment or are politically sensitive. Another advantage of a PPR process is that it can bring the discipline of commercial accounting methods to project expenditures.

Regulated Industry Capital Expenditures

In regulated industries, capital expenditures together with operating and overhead costs are often blended into a composite total project cost, from which tariff calculations are made. These are then approved by the applicable regulating authority and charged to the customer (the public). The calculations themselves are of an accounting nature but the capital expenditure component usually constitutes the largest part of the composite cost and, hence, the tariff. These capital expenditures are subject to a number of variables, depending on

the design of the structure, the method of procurement, the external environment and other factors. A PPR can assure that these variables are optimized during the implementation of a project, as well as assuring that the project fulfills its other non-financial objectives. This process provides a certain level of comfort to the customers who are obliged to pay the resulting tariffs.

Inter-Jurisdictional Trade Agreements

Inter-provincial agreements, NAFTA and other inter-jurisdictional trading arrangements cover, among many other things, the transmission of certain commodities across borders by monopolistically regulated carriers, for which the transport/transmission tariffs become part of the export price. It is often necessary to demonstrate that the tariff reflects the true optimum costs without subsidies or other distortions. As with the regulated industries discussed above, when a formal PPR is part of a project's implementation, the purchasers can be more confident that the capital expenditures used in calculating these tariffs have been optimized and that other non-financial objectives have been met.

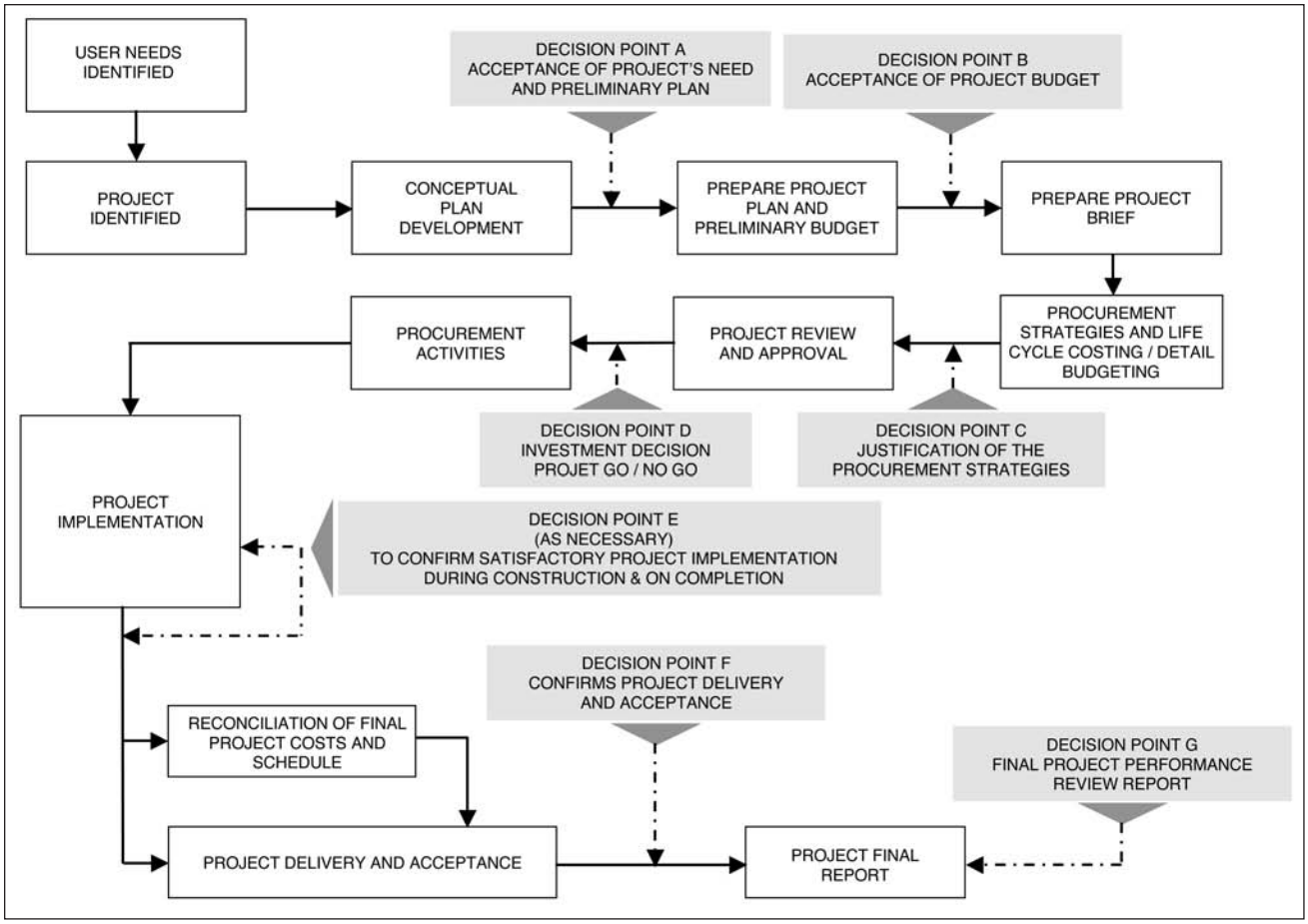
Financial Security Regulations

Regulations dealing with corporate governance in publicly traded companies now require greater accountability on the part of company officers. The Sarbanes-Oxley Act of 2002 in the United States requires, particularly under Section 404, that an "adequate" and "effective" control structure be maintained on all capital expenditure projects undertaken by organizations covered by the act and, particularly, that comprehensive external audits by "compliance specialists" be implemented to "identify areas of risk". Section 409, furthermore, requires that such actions be carried out on an "almost real time basis". It is anticipated that similar regulations may soon be imposed in other jurisdictions. A PPR, carried out by an independent Reviewer, would fulfill these requirements and this type of an arrangement is, therefore, expected to soon become more commonplace in the private sector.

THE PROJECT PERFORMANCE REVIEW PROCESS

The administrative format (appointment of reviewers, meetings, duties, responsibilities, sampling methods, documentation, appeal process, etc.) under which a PPR is conducted can follow a number of recognized financial or attestation audit formats. These lay out standardized auditing procedures that cover audit trails, testing and sampling methods, documentation formats, etc., which would also be applicable to PPRs.

This paper contends that worthwhile PPRs should, to the extent possible, be custom-designed to the requirements of an individual project or to common types of projects and that, being an ongoing exercise, the review process should consist of a number of sector-specific sub-reviews carried out at major decision points (DPs) within a project implementation cycle. Each set of sub-reviews result in periodic reports to the project's sponsor and/or investor. The following flow chart illustrates the typical steps involved in a project's



FLOWCHART INDICATING TYPICAL PROJECT CYCLE AND THE PROJECT PERFORMANCE REVIEW PROCESS

implementation cycle and indicates certain DPs where sets of sub-reviews should be undertaken. The sub-review sets and the reports they generate constitute the full PPR process.

Following is a list of suggested sub-reviews:

1. Project Plan Sub-Review
2. Health and Safety Sub-Review
3. Environmental and Sustainability Sub-Review
4. Project Management and Control Sub-Review
5. Delivery System Sub-Review
6. Project Risk Sub-Reviews (Plan, Costs and Schedule)
7. Value Engineering Sub-Review
8. Financial Closure and Administrative Closure Sub-Review
9. Post Project Sub-Review

The following table indicates which sub-reviews should be carried out at various DPs in the project cycle.

Depending on the nature of the project and the extent of the sponsor's or investor's involvement, not all the DPs may be applicable to every project. Similarly, not all sub-review sets may be required at each DP. Certain sub-reviews are re-evaluated at a number of subsequent DPs, so as to incorporate into these reviews any changes to the project plan and to update it to the economic, political, regulatory or social environment in which the project is then being implemented.

The objectives, results and matters to be addressed within individual sub-reviews are described as follows:

Project Plan Sub-Review

A Project Plan Sub-Review is carried out to verify that the project plan fulfills the project's primary objective of satisfying the customers' needs. The following issues are addressed during this sub-review.

- The project plan and its implementation strategy address the customers' needs and there are no inconsistencies in the plan. Also, the project objectives are measurable.
- The financial and other resource requirements of the project plan are complete, realistic and measurable.
- The project complies with regulatory requirements.
- The strengths of the project plan are identified and strategies to leverage them are developed.
- The weaknesses of the project plan are identified and ways to compensate for them are developed.
- All external and internal risks to the project plan are identified and contingency plans and/or finances are made available to compensate for them.
- The project management structure is in place and roles and responsibilities are identified.

This sub-review tests the necessity, feasibility and financial capacity of the project plan as well as establishing the project designers' understanding of its strengths, weaknesses and inherent risks. Armed with this knowledge, decisions as to whether to proceed with the project, re-evaluate the project plan or initiate a different project can be made.

Decision Point	Description of Decision Point	Sub-Review Sets to be Undertaken at the Decision Point
A	Acceptance of Project's Need and Preliminary Plan	1
B	Acceptance of the Project Budget	1, 6
C	Justification of Procurement Strategies	2, 3, 4, 5, 6
D	Investment Decision (Project Go/No Go Decision)	2, 4, 5, 6
E	Confirms Satisfactory Project Implementation	2, 3, 4, 5, 6, 7
F	Confirms Project Delivery and Acceptance	8
G	Final Project Performance Review Report	9

Health and Safety Sub-Review

To achieve project value and performance, health and safety of the constructors, operators and users of the project are of paramount consideration in the design and implementation of the project. Despite the fact that this aspect of project performance may be part of other sub-reviews, its importance is such that it deserves a sub-review by a specialist. The issues to be addressed during a Health and Safety Sub-Review are the following:

- Commitment to health and safety requirements in the project's design, construction and operation phases goes beyond merely meeting regulatory requirements.
- Health and safety specifications are performance-based, wherever possible.
- All potential vendors, contractors and consultants are assessed to establish their commitment to health and safety.
- Health and safety reviews are incorporated into the project implementation plan.
- A single point of project health and safety responsibility is identified.

This sub-review tests the project plan's level of commitment to health and safety issues.

Environmental and Sustainability Sub-Review

Sustainable development is the achievement of quality through the efficient use of resources, while ensuring that the environment is treated with care. Sustainability decisions involve taking into consideration the project's total resource requirements and balancing long- and short-term economic, environmental and social issues. Despite that this aspect of project implementation is incorporated into other sub-reviews, and as with health and safety, it deserves a specialist sub-review. The issues addressed during an Environmental and Sustainability Sub-Review are the following:

- Whether the project requirements can be delivered by re-using or modifying an existing asset.
- Sustainability and environmental considerations are incorporated into the project's design and construction phases and into its disposal mechanism at the end of the project's useful life.
- Sustainability and environmental targets are identified and their specifications are clear and measurable.
- Various options are appraised to ensure delivery of sustainable objectives and minimal environmental impact.
- A single point of project environmental and sustainability responsibility is identified.

This sub-review examines the project plan's commitment to environmental and sustainability issues.

Project Management and Control Sub-Review

The Management and Control Sub-Review examines the project management team's ability to control costs, schedules and other aspects of project performance. The following are addressed during this sub-review:

- The management team's ability and capacity is assured by regular assessments by its superiors.
- The management structure is regularly assessed.
- There are methods provided whereby stakeholders can comment on management capability.
- There are regular project control reports that incorporate,
  - current/planned cost and schedule status – including acceptable variance criteria, earned values calculations and forecast of costs/time to completion,
  - constructability status,
  - design and scope change management status,
  - health and safety status and
  - environmental and sustainability status.

This sub-review examines the capability of the management team and the robustness of the project's control system continuously during the project implementation period.

Delivery System Sub-Review

A Delivery System Sub-Review is carried out in order to ensure that the delivery and tendering systems chosen for the project are optimal from life-cycle performance viewpoint. The issues addressed during this sub-review are the following:

- The project has been broken into appropriate packages and appropriate types of delivery systems (direct work, design/tender/build, project/construction management, design/build, PPP, owner/contractor material purchase, etc.) have been considered for each package. The methods chosen are based on factors such as:
  - package complexity and schedule,
  - life-cycle costing,
  - quality requirements,
  - risk transfer and the inclusion of incentives/penalties,
  - possibility of changes in design,
  - technological knowledge,
  - internal management capability,
  - consultant, vendor and contractor capacity, capability and possible partnership and
  - political considerations.
- The standardization of materials, documentation, etc. has been considered.
- The use of electronic commerce has been considered and evaluated.
- In the case of public funded projects, procurement policies are made public.
- A strategy for competitive tendering, tender evaluation and award mechanisms procedures has been developed to consider transparency and contract selection criteria. Also, policies for seeking and accepting alternative product/procedures and single-source tenders are developed.

This sub-review examines whether optimum project delivery systems are selected so as to ensure that the tender/award mechanisms are efficient, economical, fair and transparent.

Project Risk Sub-Reviews (Plan, Costs and Schedule)

Modern project management relies on a number of mathematical models

(financial and schedule) to forecast, control and record the utilization of resources. The success of these models is highly dependent on the accuracy of the data input. This, in turn, renders the models subject to risks. Managing these risks is one of the prime responsibilities of management.

These models can be deterministic (based on a single possible outcome), where risk is assessed and managed only in an intuitive manner, or risk-based, where the probabilities of a particular risk occurring and the impact(s) of that risk on other aspects of the project are assessed. Such risk analyses should be incorporated into the management process of all projects to allow:

- Identification of the risks with the highest performance impact.
- Appreciation of the project plan's degree of variability and uncertainty.
- Understanding of the sources of uncertainty and their impact on the plan's outcome.
- The provision of confidence levels for specific outcome over a range of scenarios.

There are a number of commercially available computer applications for carrying out non-deterministic project risks analyses. These are all based on variations of the "Monte Carlo" statistical methodology and all major capital projects would profit from incorporating such techniques. The Project Plan, Cost and Schedule Risk Sub-Review examines the use of whatever application is employed to ensure that the following issues are addressed:

- How risk analyses and management are to be carried out and who is assigned responsibility.
- The risk management process covers:
  - costs, time, quality, health, safety, strategic, commercial and political risks,
  - risks inherent in chosen delivery systems,
  - consultant, vendor or contractor default,
  - an assessment of the impact and probability of occurrence of each risk,
  - risk response procedures (avoidance, retention, transfer, allowances),
  - risk reporting, presentation and follow-up procedures.
- Tools, such as a sensitivity analysis of particular risks and calculation of internal rates of return or net present costs for project expenditures are used correctly in the analyses processes.

This sub-review examines whether the risk analysis and risk management process are designed and employed to ensure that the potential impact of the cost of each risk is not outweighed by the direct costs to mitigate that risk either by:

- Reducing or transferring the risk (by sub-contracting, imposing contract conditions or by purchasing additional insurances).
- Accepting it and providing an appropriate contingency within the project budget.

The sub-review also verifies that risks are allocated to the parties best equipped to manage them and that an operable risk management plan is prepared and updated.

Value Engineering Sub-Review

A Value Engineering Sub-Review examines whether a project's design has been subjected to an independent evaluation of its engineered components. This evaluation is a strategic approach to achieving maximum value-for-money in a project. It involves a structured team approach applied to the concept, design and construction stages of the project. Value engineering focuses on obtaining the optimum combination of life-cycle cost and quality. Value is appraised by analyzing the objectives of the project, with the purpose of identifying alternatives and the most cost effective way of achieving them. The quality of the value engineering exercise is assessed by ensuring the following:

- The design objectives of the project are based on the relative importance of the identified customer's needs.
- Full consideration is given to all design options, alternatives, future modifications and to innovative ideas.
- The principles of life-cycle costing and sustainability are accounted for in the design.
- A methodology is in place to assess, review and manage alternative design proposals during the pre- and post-procurement stages of the project.

This sub-review examines whether the design is economical, efficient, flexible and sustainable. It also verifies whether the designers have provided for future modifications.

Financial Closure and Administrative Closure Sub-Review

The Financial and Administrative Sub-Review examines the final cost and as-built schedules and their variances with the project's original budget and schedule. This sub-review cannot be carried out until all project construction activities are complete, costs finalized and the project is operational and accepted by the owner. Unlike other sub-reviews, this one does not merely review and report on the actions or inactions of the management team but, together with them, it assesses the total cost and schedule variances experienced during project implementation by identifying, quantifying and, where applicable, justifying the following:

- Labour, equipment and material escalation,
- Design changes,
- Changes to the project scope,
- Changes in site conditions,
- Regulatory changes,
- Delays experienced,
- Constructability problems,
- Errors in the original project budget and schedule.

The outcome of this sub-review is an analysis and report on the adequacy of the project's original estimated cost and schedule and the causes and effect of variations between those of the project as implemented.

Post Project Sub-Review

The Post Project Sub-Review can be carried out only after the project has been operating sufficiently long to ascertain its operational capabilities. This sub-review examines the project's total performance and allows the project's sponsor or investor to assess whether the project's objectives have been achieved, as well as its overall costs. The process involves reviewing and updating all the sub-reviews carried out throughout the project's implementation, summarizing them and presenting a report covering the following:

- An evaluation as to whether the project sponsor's needs have been met and, if not, why?
- An evaluation of the project resources inputs and their variance from those originally expected and the reasons for such variance.
- An evaluation of the project output capabilities and whether they represent value-for-money and, if not, why?
- An evaluation of the project's health and safety record and whether the product meets its original health and safety expectations and, if not, why?
- An evaluation of the project's environmental and sustainability record and whether the product meets its original environmental and sustainability expectations and, if not, why?
- An evaluation of the project management team's capability and the level of success of its cost and schedule control mechanisms and whether they meet the project's original expectations and, if not, why?

The outcome of this sub-review:

- Provides the project sponsor with information regarding the performance of the project and whether it was efficient, economic and effective.
- Provides a record of the performance of the project, in order to identify and explain any deviations from its original expectations.
- Provides valuable information regarding the design and implementation of similar projects in the future.

REVIEW REPORTS

The Reviewer presents a series of Interim Performance Reports, containing the sets of sub-reviews undertaken at each DP during the project life. In these reports, the Reviewer summarizes the results of the sub-reviews in that set and presents comments regarding the performance of the project to that time as well as recommendations regarding its future implementation. A Final Performance Report, incorporating all previous Interim Performance Reports, is presented as part of the Post Project Sub-Review. This report also incorporates comments and recommendations regarding the implementation of future projects. All reports are first issued in draft form to the project management team, and their constructive comments incorporated into the document prior to delivery to the project sponsor.

Notwithstanding the number of reports generated, the objective of a PPR is not to produce reports, but rather to provide the project sponsor with real-time confidence that the project is being implemented with efficiency, economy and effectiveness.

CONCLUSION

A variety of political, economic, regulatory and social factors now require that all major capital expenditures (whether publicly or privately funded) undergo some type of review process to ensure that the sponsors and investors are receiving value for the money spent. Such a review process would evaluate the project on the basis of its relevance and performance and would ensure that it is implemented with economy, efficiency and effectiveness. This must be an on-going process that ascertains that all quantitative and qualitative life-cycle costs and benefits are integrated into the project plan and that risk management is optimized throughout the project implementation. A formal Project Performance Review as described in this paper, designed on a project-by-project basis and carried out by an independent Reviewer who assesses the many quantitative and qualitative parameters that make up modern understandings of both "value" and "money", can provide such assurance.

1 "Construction Procurement Manual", Scottish Procurement Directorate, 2005
2 "Performance Audit Manual", Auditor General of Canada, 2004
3 "Modernizing Evaluation Tools", Treasury Board of Canada (Value for Money Profile), 2006
4 "Managing Government Procurement", UK Office of Government Commerce, 2005

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