

*Australian Procurement and Construction Council Inc
Australian Construction Industry Forum*

IMPROVING PROJECT DOCUMENTATION

A GUIDE TO IMPROVE CURRENT PRACTICE

acif
Australian Construction
Industry Forum

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INTRODUCTION

Poor procurement and project management can often be traced back to insufficient planning and documentation, inadequate design briefs and a lack of clear understanding of the various roles and responsibilities. In addition, unrealistic expectations, inappropriate allocation of risk and inexperienced staff contribute to poor process and outcomes.

Effective procurement strategies, skilled and knowledgeable client representatives are an important component for needed reform.

This guide establishes a number of principles and protocols to guide practices of both the client and the consultant. The protocols follow the sequence of project establishment and progress through to tools and techniques during the design and documentation phases of a project. This guide is recommended for adoption by clients and design practitioners who seek to improve documentation.

This guide is the beginning of a process of continuous improvement. It is complemented by demonstration projects being undertaken by contributing jurisdictions and web based information including case studies of good and bad practice, and tools such as checklists and templates. It proposes the measurement of outcomes to verify whether there is improvement and to assess the extent of improvement in key areas. It should also help identify opportunities for ongoing improvements to process and practice.

Improved documentation standards are most likely to occur where there is recognition of the factors that are likely to lead to better project outcomes. It is recognised that the practice and behavior of clients as well as the disciplines adopted by project documentation teams will collectively contribute to the quality of service provided.



PROJECT OBJECTIVES AND STRATEGIC OUTCOMES

An apparent decline in project documentation quality over the past few years was considered to be causing inefficiencies and costs in the construction process.

This concern led to the Australian Construction Industry Forum (ACIF) and the Australian Procurement and Construction Council (APCC) agreeing to undertake a joint project to identify the key issues for government as the client and buyer of services and the construction industry as the seller and supplier of services.

The Commonwealth Department of Industry, Tourism and Resources provided the financial support to enable the ACIF to commission research into issues relating to project documentation. The research undertaken by CSIRO to identify common concerns and possible solutions was completed in March 2002.

The ACIF has worked with the APCC on a series of projects, each of which aims to improve understanding and encourage continuous improvement in the building and construction industry.

The ACIF and the APCC outlined the following project objectives and strategic outcomes for improving project documentation:

- To review the current quality and standards of technical documentation in both public and private sectors on a national basis and to assess their impact on construction cost and time.
- To define the best practice principles in project documentation and their application within the construction industry.
- To define initiatives and develop a strategy for documentation improvement.
- To raise national awareness and promote shared solutions to good construction documentation.



PROJECT OBJECTIVES AND STRATEGIC OUTCOMES

continued...

The CSIRO and the ACIF identified the following key areas of concern in project documentation as leading to design problems:

- Inadequate client briefs.
- Design details not known – ie standards not clearly defined.
- Constructability problems.
- Statutory compliance problems.
- Time availability problems.

Consultants, as the suppliers of services where government is either the direct client or the project initiator, would like to see:

- Better agency front-end planning and better project briefs from the client.
- Better assessment of the complexity of work required.
- Allocation of appropriate fees and timelines commensurate with the complexity of the work to ensure all necessary work can be done within the budget and timelines.

For this guide the definition of client is – parties inviting the receiving tenders, for example project owner, project initiator, property manager or contractor in the supply chain.



PRINCIPLES AND PROTOCOLS

Five sets of protocols have been developed:

Protocol 1 – Client Brief & Project Establishment

- Establishment of well defined client brief comprising key drivers and parameters such as: budgets, functions, quality, sustainability, urban issues and commercial returns.
- Better articulation of requirements by the client equates to better consultant response.
- Client brief to include any requirements for document checking and coordination services (which will be reflected in consultants fees offered).
- Client may require additional advice in brief preparation, budgeting and programming, and engage specialist expertise, as in the case of highly complex projects. This may include engagement of facilities planners and/or independent cost advisors that may not necessarily be part of the project team.
- Clearly articulate client expectations of the consultant in the request for proposal and state criteria for selection.
- Clearly articulate the conditions of contract and obligations on the consultant i.e. quality control, assurances.

Protocol 2 – Consultant Selection

- Client recognition that consultant fees would be commensurate with the effort required and selection based on non-price and price criteria to establish value.
- Clients to inform themselves of reasonable benchmark fees (see the APCC document on selection of consultants) required for the services being requested.

PRINCIPLES AND PROTOCOLS *continued...*

- Ensure selection assessment practices are ethical and transparent.
- Client recognition that fees and premature commitment of work will increase the probability of inadequate documentation and claims.

Clients could consider prequalification of consultants with proven record of performance and base selection on previous performance assessments, thereby reinforcing the selection of the better performers.

- Clients may insist on demonstrable quality control consultants.
- Consultants to articulate the project methodologies including design approaches and quality controls in response to invitations to submit proposals.
- Primary consultants should select any secondary consultants on a value for money basis and submit with their proposals the rationale for selection of their consultant team.

Protocol 3 – Team Formation and Project Integration

- At the commencement of the project, client and project team should ensure that roles, responsibilities and obligations of all parties are clearly understood.
- Assumptions underpinning the project and key drivers for the project should be tested.
- Establish and agree a design and documentation review process including review points and agree milestones for client and project team sign-off.
- Develop a quality plan including procedures for communication, document control and coordination.
- Client may create obligations on consultants to report on risk and options for managing risk.



PRINCIPLES AND PROTOCOLS *continued...*

- Obtain approvals and sign off progressively throughout the project.
- Encourage project teams and clients to utilise tools to assist e.g. value management.
- Encourage establishment of integrated teams and articulate procedures for problem resolution.
- Encourage design and documentation teams to bring construction expertise to the team to provide greater confidence e.g. early use of contractors on build-ability. Recognise that different parties bring different skills.

Protocol 4 – Quality Management Incorporating Project Implementation, Design and Documentation

- Actively consider total cost of project (over the life cycle) as part of the design and documentation process.
- Develop and agree upon a range of Quality Management Tools including checklists, review procedures and audit processes.
- The client and project team to consider the role of independent reviewer or value management.
- Consultants to provide advice on the quality of documentation that could be reasonably expected from the agreed resources allocated and timelines established for the period.
- Consultants to warrant that they have undertaken the design and documentation in a manner consistent with their quality plan.
- Use of technology by consultants to assist in documentation control and coordination.



PRINCIPLES AND PROTOCOLS *continued...*

- Project team to agree upon and nominate an experienced person responsible for documentation coordination.
- Quality plan to make provision for secondary consultants to be satisfied on the completeness of information supplied by the primary consultants.
- Obtain approvals and segmental sign off.

Protocol 5 – Consultant Obligations and Functions

- Comply with code of ethics and professional conduct requirements concerning quality of documentation and offer fees commensurate with the effort involved.
- Advise the client on the adequacy of the brief and the risks associated with any inadequate allowance for proper documentation in both budgets and programs.
- Coordinate secondary consultants, obtain their sign-off on completeness of their documentation, and provide overall sign-off to the client that project documentation is comprehensive.
- Ensure version control of documents to secondary consultants.
- Create design and documentation coordination roles within project team.

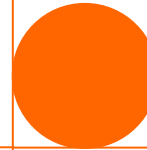


CONCLUSION

The ACIF and the APCC will continue to work cooperatively to encourage the adoption of the protocols identified in this guide. The ACIF and the APCC will work with interested stakeholders in the development of specific tools and techniques that will assist in their application.

These protocols by clients and consultants are expected to improve project documentation within the building and construction industry.

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