



FIDIC Policy Statement

INTERNATIONAL FEDERATION OF CONSULTING ENGINEERS

Background

The FIDIC 2001 survey on the Quality of Construction within Member Associations confirmed that the failure to achieve an appropriate Quality of Construction was a worldwide problem. As could be predicted, the pressure to reduce the costs of construction and supervision were found to have had an adverse effect on quality. The problem was serious, and was evident in both developed and developing countries.

Within the conventional processes for the procurement of construction contracts, contractors, who are keen to win tenders, can do so by submitting low prices, but at the risk of not being able to a) produce construction work which fulfills specifications, or b) meet standards for sustainable development. Likewise, consultants may be under pressure to reduce the initial cost of construction and construction supervision so that contractors are unable to deliver the required quality.

Lack of Quality of Construction has been manifested in poor workmanship, unsafe structures, delays, cost over-runs and disputes in construction contracts.

Consultants are often appointed by a client to only render a partial service during the construction phase. This increases the risks to the client and the consultant with respect to the quality and safety of construction, and frequently increases the overall cost of the project when account is taken of delays and disputes.

The FIDIC Policy Statement *Quality of Construction* was approved by the FIDIC Executive Committee in January 2004. Printed copies can be obtained from the FIDIC Bookshop, either individually or as inserts in the binder *FIDIC Policy Statements*. Electronic versions are available from www.fidic.org/policies. Reproduction is permitted provided the source is acknowledged.

Longer-term costs such as increased maintenance will also be incurred.

FIDIC wishes to take a leading role in working with other industry stakeholders to address the potentially serious problem of inadequate Quality of Construction.

FIDIC policy

FIDIC believes that construction should be sustainable, and to this end, it is the policy of FIDIC that each party in the construction process should be committed to satisfying its obligations with respect to achieving Quality of Construction.

The FIDIC publication *Quality of Construction: a guide for actions*, 2004, recommends a best-practice approach to achieving proper Quality of Construction, and proposes actions to be taken by each party concerned.

Actions by government

Government as client

Governments who, as clients, want to achieve Quality of Construction should consider the following:

- Adopt a Quality Management approach towards projects and construction. Quality Management should include Quality Management Systems such as those based on the ISO 9001 Standard for their own departments and as a prerequisite for suppliers of goods and services who want to do business with a department.
- Adopting Quality Management may mean a fundamental review of the process by which government procures the services of consulting engineers and contractors (for instance, changing

- from an adversarial, “us versus them” approach to a partnership-based, “we together” approach).
- Recognise that Quality Management is a prerequisite for sustainable development, since a lack of adherence to appropriate quality standards will lead to waste in goods and services, whether, for example, through over-design, under-design or incorrect design, or through faulty construction requiring higher maintenance costs or early replacement.
 - Adopt a sustainable development approach towards construction by:
 - Taking cognisance of the need to internalise total project cost as is pointed out in *FIDIC's Sustainable development in the consulting engineering industry - a strategy paper*, 2000. For example, calling for tenders to achieve lowest price may seem like an attractive option, but once all external costs such as tender preparation costs and future costs owing to lack of quality are internalised, the outcome may be very different.
 - Reducing the volatility in the construction industry by, for example, overcoming boom-and-bust, or feast-and-famine, cycles. These notorious cycles increase the construction industry's risk, with the resulting loss of the most talented and highest calibre staff, thus impacting negatively on Quality of Construction and the industry's sustainability.
 - Insist that, for the purposes of ongoing management, operation and maintenance, local capacity must be developed on all projects. “Local” may have the meaning of local areas within a country or a larger geographic region. Useful guides include *FIDIC's Capacity building: building the capacity of consulting firms*, 2001, and *Improving transfer of technology: guide for actions*, 1992.
 - Adopt a Quality Based Selection approach for the procurement of consulting services, and include in the selection criteria the need for consultants to have the following in place:
 - Quality Management System
 - Business Integrity Management System
 - Environment Management System
 - Risk Management System
 - Professional indemnity insurance
 - Membership of a recognized body representative of the profession or industry.
 - Adopt a quality-oriented selection process for the procurement of construction contracts, including:
 - Pre-qualification: this is no guarantee of quality, but it at least excludes those who are obviously less likely to execute the contract successfully.
 - Previous track record: in the context of pre-qualification, while requiring a solid track record may exclude possible new entrants and make the industry less competitive, it is essential for ensuring capability.
 - An appropriate combination of price and non-price award criteria (also known as tender evaluation criteria). This selection process has the advantage that it can be extended to include separate sections for sustainability dimensions such as the submission of a social plan and an environment management plan. Depending on the nature of the contract, for example, routine as opposed to complex and high risk, price could constitute 80% of the tender with the remaining 20% used for the non-price award criteria.
 - Promote the adoption of standardised documentation by all clients, especially government departments and government authorities, for:
 - procurement procedures for consulting engineers
 - procurement procedures for contractors
 - client/consultant agreements
 - construction contracts
 - tender and construction documentation.

Government as regulator

Government often has a second, very important function in that it can create, through laws and regulations, an enabling environment in which a construction industry can flourish and often, as a consequence, the economy in general. Such an enabling environment should provide more appropriate Quality of Construction since the “rules of the game are known and a good referee can help raise the quality of the game”.

Legislative and regulatory action that government may need to consider includes the following:

- Creation and application of effective anti-corruption policies and practices.
- Creation of a specific set of construction activity targets.
- Formation of a body geared towards creating a more enabling construction environment.
- Registration of professionally qualified firms and persons in their respective categories.
- Recognition of equivalent foreign qualifications and registrations.

Actions by international agencies

International funding agencies are often as powerful as government in setting the right climate for what is expected from a construction project. Hence, the actions for international funding agencies are similar to those for government as a client. In summary, they are:

- Adopt a Quality Management approach towards projects and construction. This may mean a fundamental review of the process by which the agency procures the services of consulting engineers and contractors.
- Recognise that Quality Management is a prerequisite for sustainable development since the lack of adherence to appropriate quality standards will lead to waste in goods and services.
- Adopt a sustainable development approach towards construction by:
 - taking cognisance of the need to internalise costs.
 - reducing volatility in the construction industry.
- Insist that, for the purposes of ongoing management, operation and maintenance, local capacity must be developed on all projects. Useful guides include FIDIC's *Capacity building: building the capacity of consulting firms*, 2001, and *Improving transfer of technology: guide for actions*, 1992.
- Adopt a Quality Based selection approach for the procurement of consulting services, and include in the selection criteria the need for consultants to have the following in place:
 - Quality Management System
 - Business Integrity Management System
 - Environment Management System
 - Risk Management System
 - Professional indemnity insurance
 - Membership of a recognized body representative of the profession or industry.
- Adopt a quality-oriented selection process for the procurement of construction contracts, including:
 - Pre-qualification: at least excludes those who are obviously less likely to execute the contract successfully.
 - Previous track record: in the context of pre-qualification, a solid track record is essential for demonstrating capability.
 - An appropriate combination of price and non-price award criteria.
- Make provision on all construction projects for adequate supervision by a consulting engineer.
- Promote the adoption of standardised documentation for:

- procurement procedures for consultants
- procurement procedures for contractors
- client/consultant agreements
- construction contracts
- tender and construction documentation.
- Additional actions, which include:
 - Insisting on the implementation of effective anti-corruption policies and practices.
 - Insisting on capacity building and technology transfer, possibly using FIDIC guides for action and guidelines.
 - Taking cognisance of local economic cycles, and smoothing these cycles rather than exacerbating or deepening them.
 - Reducing the project initiation period as continuity of firms and their staff improves Quality of Construction.
 - Reducing prolonged payment periods for claims from consulting engineers and contractors as this reduces the incidence of unacceptable shortcuts, and therefore improves the Quality of Construction.

Actions by industry

The various role-players in the construction industry, including FIDIC, FIDIC Member Associations, member firms and contractors, are mainly on the supply side of interventions intended to improve Quality of Construction.

FIDIC and FIDIC Member Associations are not direct providers of services, but have important roles to play in defining and disseminating best practice as facilitators, coordinators and providers of channels of communication.

FIDIC

Actions for FIDIC include:

- Draw attention to the benefits of Quality of Construction at all times.
- Continue liaison with international agencies.
- Channel information between Member Associations.
- Facilitate the production, review and improvement of appropriate documentation, including contracts.
- Engage in education and training initiatives, and in the production of appropriate materials for Member Associations and their member firms.

References and resources

Quality of Construction: a guide for actions, 2004.
FIDIC Policy Statements, 2004.
Engineering our future, 1998.
Capacity building: building the capacity of consulting firms, 2001.
Client/Consultant Model Services Agreement, 3rd Ed 1998.
Construction Contract, 1st Ed 1999.
Guidelines for Business Integrity Management in the consulting industry, Test Ed 2001.
Guidelines for the selection of consultants, 1st Ed 2003.

Guide to Quality Management in the consulting engineering industry, 2nd Ed 2001.
Consulting engineers and the environment, 1st Ed 1994.
Sustainable development in the consulting engineering industry: a strategy paper, 2000.
Quality Based Selection for procurement of consulting services, 1st Ed 1997.
Tendering procedures, 2nd Ed 1994.

Resources are available at www.fidic.org/policies/qoc

FIDIC Member Associations

Actions for Member Associations include:

- Draw attention to the benefits of Quality of Construction at all times.
- Act as communication channels between FIDIC and member firms, and between the firms and their clients.
- Assist with the education and training of members.
- Assist with the implementation of improved quality and quality-related systems such as Quality Based Selection, Quality Management Systems, Business Integrity Management Systems, Environmental Management Systems, Risk Management and professional indemnity schemes.
- Lobby government for the adoption of the actions outlined in the section "Actions by Government".
- Assist in the development of standard specifications.
- Encourage the use of internationally accepted contract documents.
- Publicise examples of good and poor practice.

Member firms

Actions for firms include:

- Produce standard but comprehensive tender and contract documents of the highest quality using established documentation.
- Include the requirement for project quality plans in bidding documents and contracts.
- Adopt Quality Management Systems, Environmental Management Systems, Business Integrity Management Systems and Risk Management.

- Review the Quality of Construction after the completion of projects for continuous improvement of the construction quality.
- Participate actively in Member Associations.
- Assist with:
 - lobbying government
 - reviewing FIDIC documentation and its local equivalents
 - providing feedback on systems and documents promoted by FIDIC for future review.
- Provide feedback to sub-consultants and contractors on performance regarding Quality of Construction.

Contractors

Actions for contractors include:

- Recognise the importance of Quality of Construction.
- Adopt Quality Management Systems.
- Provide procedures for corrective action when quality control and/or acceptance criteria are not met.
- Provide feedback to consultants for improvement of Quality of Construction.
- Recruit, train and deploy a skilled work force.
- Take measures to ensure that subcontractors are qualified, and/or licensed as required.

Further actions should be developed in consultation with the representative bodies of the international contractors.

FIDIC - International Federation of Consulting Engineers
 World Trade Center 2, Geneva Airport
 Box 311, CH-1215 Geneva 15, Switzerland
 Telephone: +41 22 799 49 00 Email: fidic@fidic.org
 Telefax: +41 22 799 40 01 Web: www.fidic.org