

# FIDIC Capacity Building



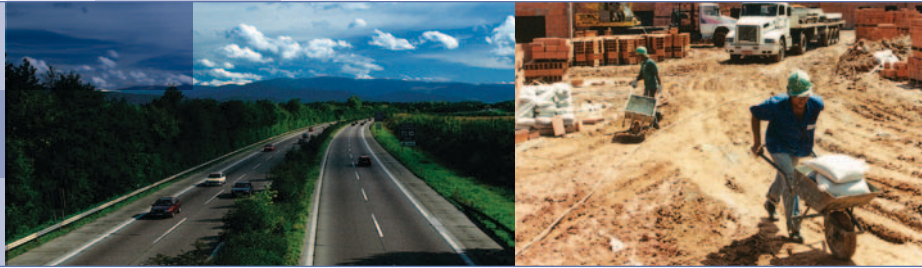
## A Major Role for FIDIC in the Consulting Engineering Industry



Fédération Internationale des Ingénieurs-Conseils  
International Federation of Consulting Engineers  
Internationale Vereinigung Beratender Ingenieure  
Federación Internacional de Ingenieros Consultores



## FIDIC Capacity Building



### A Major Role for FIDIC in the Consulting Engineering Industry

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### One of FIDIC's core objectives is to:

***"Promote and assist the worldwide development of a viable consulting engineering industry" through:***

*Assisting Member Associations and, where such associations are not yet formed, supporting the emerging consulting engineering industry. Appropriate capacity development is important for the industry to maintain best practices and high quality services which are sustainable.*

*Advocating the critical importance of engineering to economic growth.*

### Consulting Engineers role in society

Consulting Engineers are responsible for the planning, design, construction inspection and project management of infrastructure needed to meet the world's ever increasing demand for food, water, sanitation, energy, transportation, communication, shelter and health services.

### Definition of Capacity Building

Capacity building at FIDIC refers to enhancing the skills, knowledge and abilities of consulting engineering firms and professionals within firms in the management and development of successful consulting engineering practices.

For this purpose, FIDIC makes available to its members a number of training courses, modules and best practice guidelines and documents.

At the same time FIDIC has appointed a dedicated Capacity Building Committee which, among other tasks, evaluates capacity gaps in Member Associations and consulting firms, using objective criteria and available information wherever possible; promotes capacity building for Member Associations and firms as an important activity within FIDIC, and ensures that capacity building programs are delivered at annual conferences; and advises FIDIC on information needs to support capacity building initiatives.

The responsibility for acquiring these skills within firms rests with the owners, managers and senior staff, and it is to these people that FIDIC addresses its capacity building initiatives.



## The consulting engineering industry today

Through its Capacity Building Committee FIDIC has surveyed some of its national member associations to identify the most important issues impeding the satisfactory development of capacity building in firms.

FIDIC Member Associations represent over 60,000 consulting firms, employing 1.5million staff. Some 38 members are based in countries with a Gross Domestic Product per capita in excess of \$10,000, 25 come from countries with GDP per capita between \$3,000 and \$10,000, and the balance represent countries with a GDP per capita of less than \$3,000.

The consulting engineering (CE) industry is fairly young in many countries, owing to changes in political systems. This is the case for Eastern Europe for example, where despite a relatively high GDP per capita, there is still a demand for capacity building in CE firms.

Consulting firms in emerging economies are at various stages of development, both technically and with regard to management skills and ownership.

*The private sector consulting industry makes substantial contributions to society and capacity development, by having local firms undertake work that is now being carried*

*out less efficiently by government or semi-government entities, NGO's, contractors or suppliers. The local engineering firms, however, need a reliable pipeline of work to be sustainable.*

The development of the consulting industry has taken different paths in different countries in recent years. Local consulting industries have emerged in Africa and Asia. At the same time local industries in other areas, for example South and Central America, have seen their activity expand.

### **Today knowledge sharing is power.**

*The ability to change is a determining factor for every national economy, including those of less-developed countries.*

*Many less-developed countries have pools of well educated citizens. But many governments have failed to develop sustainable, knowledge-based employment opportunities.*

*The consulting engineering industry is a dynamic, rapidly growing knowledge-based industry in both developed and less-developed countries. The growth and coming to maturity of the CE industry in less-developed countries therefore offers a significant opportunity to create rewarding, sustainable jobs.*

In the past, emphasis has been placed on the transfer of technology. Today, it is generally accepted by all the parties involved, including FIDIC and the international funding agencies, that technology transfer in the consulting industry in its traditional one-directional format, is no longer appropriate. The time has come to address differently the main objectives of local capacity building, namely, the establishment and strengthening of a local private-sector consulting industry. Within this perspective, knowledge transfer through partnering on project work is seen as one of the better mechanisms for capacity building.

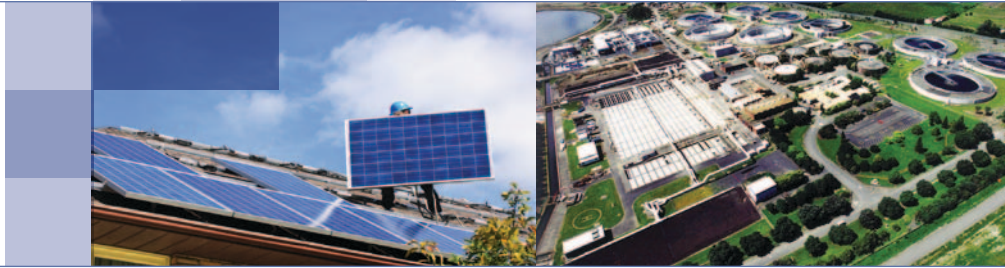
*The challenge for FIDIC and its Member Associations in all countries is to promote the development of a consulting industry which rewards entrepreneurship, and technical and financial investments that reflect risk taking and the very best in business practice. Being a service industry, the focus must be on clients' needs for good quality and integrity, provided from local sources.*

Clients - the owners of projects - will require quality of the highest international standards. This means that FIDIC's Member Associations and their firms should be internationally competitive.

Measures taken to build up the capacity of firms in less-developed countries should be careful in introducing preferential treatment as this could be detrimental to the industry's development in the long term. Efforts should focus on creating a "level playing field" which benefits both clients and the local CE firms.

The conditions needed to establish and maintain a strong consulting industry are common to all countries, and are well understood by FIDIC's Member Associations. They include:

- a reasonably steady demand by both government and private sector clients for project work offering a meaningful role for local consultants
- fair and transparent selection processes
- adequate fees to allow consulting engineering firms to become established via private financing, with a role for employee ownership. The tax and regulatory regime should also encourage such ownership
- the increased use of modern technology
- strong and well managed industry associations, which are able to articulate the views of member firms on the full range of issues that affect the financial and professional health of the industry.



## Recommended policy initiatives for FIDIC Member Associations

Several initiatives are recommended in order to create the policy and operating environment, in which responsible, financially stable and competent consulting firms can flourish. These are:

- Seek strong government support for the consulting engineering industry, through its established CE industry association, as a recognised “high technology” industry, worthy of positive public recognition and support
- Establish strong high-level liaison contacts within the industry through its Member Association aimed at resolving differences over matters such as procurement and contracting practices
- Encourage member firms to set funds aside from proceeds to educate, train and mentor young graduates in particular, to create critical mass teams within their own firm or elsewhere
- Seek to implement a public policy with transparent procurement procedures that favor quality-based selection and avoid cost-based selection
- Cooperate with the national consulting engineering association to develop an understanding of anticipated government requirements for services so as to assist the industry to adapt to changing needs
- Promote excellence in the education of engineers, technicians, scientists and allied professionals
- Minimise the use of in-house government engineering units through contracting out as much work as possible to independent privately owned consulting engineering firms
- Recognise only those firms which subscribe to quality and integrity and operate competitively within the private sector.



## FIDIC actions

FIDIC's actions to achieve its goals include:

- Minimise obstacles encountered by local consultants arising from the work allocation and selection procedures used by public authorities, clients and financing institutions
- Build the capacity of local consulting engineering firms. FIDIC and its member associations must be the driving force for identifying measures to be taken by all parties that will contribute to the capacity building of local firms

Having evaluated possible actions by government, by the international funding institutions (IFIs), and by FIDIC acting with its member associations, FIDIC recommends that initiatives be implemented as soon as possible in three areas: action by government; action by international agencies and action by the industry.

## Action by Government

### Legislative actions

Legislative initiatives are proposed to create the legal framework that will allow the consulting engineering industry to be regulated and focused into viable business units. These include:

- Recognise consulting professionals, e.g. through legislation
- Create a legislative environment which is conducive to the good management of design and construction risks, and within which a professional liability insurance industry can operate successfully.
- Recognise, through legislation, consulting engineering as a special self-governing area of practice with well-defined admission criteria
- Establish tax laws and related policies that will stimulate the growth of knowledge-based industries, with incentives to encourage employee ownership and the use of retained earnings to finance growth

- Secure contractual obligations for timely payment for services rendered

### Support from governments

Financial support from governments may be necessary in areas such as:

- Ensure that contractual obligations are met in respect of payments for services rendered
- support for education
- support for capacity building, notably the transfer of know-how and access to finance
- support for in-country technical events
- acquiring new technology such as sustainable techniques.





## Action by International Agencies

*Encourage meaningful participation in International Financial Institutions (IFIs) funded projects*

FIDIC believes that IFIs should support the development and use of consultants in borrower countries through:

- Encouraging the use of local consulting firms and individual consultants
- Avoiding price competition between private sector consulting firms and government-owned enterprises and non-governmental organizations
- Conducting workshops in developing countries on how to access IFI financed projects

*FIDIC is pleased to see that the procurement policies of the international funding agencies have increased support of efforts to promote the development and use of local consultants in borrower countries. However, it is FIDIC's opinion that further improvements can be achieved. FIDIC's review of procurement guidelines therefore focuses on:*

- measures to encourage the meaningful participation of consulting firms from developing countries in projects
- partnering between international firms and local firms
- the transparency of the consultant selection process

## Transparency in consultant selection

FIDIC recommends that guidelines for consultant selection include:

- Ensuring that the scope of work of each assignment, including the main deliverables, is clearly defined
- Ensuring that quality standards on all projects are clearly defined and rigorously enforced
- Informing clients on the use of quality based selection models with negotiated fee components
- Requiring disclosure before proposal submission of the detailed rating system to be used
- Consultants should have the right to an open debriefing following a proposal competition.

## Action by the Industry

### Management training

In order to be considered a good consulting engineering firm it should follow the guidelines outlined in the FIDIC Guide to Practice.

There is a need for training in how to organise and operate consulting firms and industry associations.

Several bilateral initiatives have led to training materials. FIDIC has also developed training materials adapted to local conditions, including the Guide to Practice (G2P), in collaboration with FIDIC Member Associations.

## FIDIC Training

FIDIC organizes international training events with national Member Associations, local organisers or international training suppliers. In-house training events may also be organised on demand.

Formats are courses or workshops, on-line courses, training programs organised as a series of courses, in-house events, assessments and conferences. The content of FIDIC training events may cover FIDIC contract topics or business practice topics.

Courses provide interactive structured training; workshops provide in-depth discussion with practical exercises in small groups; and conferences present

experts' views on the latest developments. Assessments are organised to accredit new FIDIC trainers or to nominate new FIDIC adjudicators.

The usual length of a training event is 2 days. In-house events may have a different length, according to the client's needs.

FIDIC training events are presented by FIDIC Accredited Trainers: international experts with in-depth knowledge of FIDIC contracts and business practice. They have long experience in the practical use of FIDIC contracts in international projects and have been assessed by FIDIC to ensure high quality of its training events.

## FIDIC Business Practice Modules

In the early 1990's, the World Bank sponsored FIDIC to prepare a training manual applicable to professional service firms. The result was the publication in 1994 of a 200-page manual entitled «The Professional Services Firm - A Training Manual and Guide to Practice». Since then, it has been updated and used at FIDIC training events held in several countries, and has served as a

useful reference document for FIDIC's Capacity Building program.

The Business Practice modules address business topics such as risk management, integrity management, and sustainable project management, among others. The following table shows the complete set of training modules currently available.

Area	Module	Topic	Programme
Business Practice: <i>FIDIC Business Practice Training Manual Modules</i>	FinM	Financial Management (Young Professionals Management Training Programme)	Two-day, English
	FirM	Firm Management (Young Professionals Management Training Programme)	Two-day, English
	BD	Business Development (Young Professionals Management Training Programme)	Two-day, English
	FO	Firm Organisation (Young Professionals Management Training Programme)	Two-day, English
	PSM	Project Sustainability Management	Two-day, English
	PSM advanced	Project Sustainability Management Advance Module: Sustainable Building and Construction Education and Training (FIDIC-IISBE) SBCET Programme Module	NA
	EM	Environment Management	Two-day, English
	RM	Risk Management	Two-day, English
	QM	Quality Management	Two-day, English
	FIMS	FIDIC Integrity Management	Two-day, English
	IPM	Integrated Performance Measurement	NA
	PM	Project Management for Consulting Engineers	NA
Procurement: <i>FIDIC Procurement Training Manual module</i>	Procurement	Capacity Development and Procurement	Two-day, English
Contracts and Agreements Training Manual Modules	1	Practical Use of FIDIC Contracts	Two-day, English
	1A	Practical Use of FIDIC Contracts Advanced Concepts	NA
	2	Claims and Dispute Resolution	Two-day, English
	2A	Claims and Dispute Resolution: Advanced Claims Management	NA
	3	Dispute Adjudication Boards	Two-day, English
	3A	Dispute Adjudication Boards: Detailed Procedures (supplied by DRBF; by invitation only)	NA
	4	Contracts Management and Administration	Two-day, English
	Special	FIDIC DBO Contract	Two-day, English
	Special	FIDIC EPC/Turnkey Contract	NA
	Special	FIDIC Construction Subcontract	NA



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