

# capacity building



BUILDING THE CAPACITY OF CONSULTING FIRMS





# capacity building



## BUILDING THE CAPACITY OF CONSULTING FIRMS

A major role for industry

Recommendations

Action by government

Action by international agencies

Action by the industry

Inserts

- Capacity benchmarking of firms and at the national level: recommendations for the consulting engineering industry
- Building the capacity of consulting firms: recommended government initiatives
- Building the capacity of consulting firms: recommended actions by international agencies

Further information

FIDIC Capacity Building Task Force

## a major role for industry

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### The consulting industry today

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FIDIC through its Capacity Building Task Force has surveyed the Federation's over 60 national member associations to identify the most important issues impeding the satisfactory development of capacity building in various countries.

These associations represent over 20,000 local firms employing more than approximately 700,000 staff. Some 25 are based in countries with a Gross Domestic Product per capita in excess of \$10,000, nine 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.

In less-developed countries, the FIDIC member association will normally represent a large proportion of a nation's consulting skill, whereas associations in some developed countries may

represent less than 50% of the national industry's total capacity.

The need for capacity building of local firms normally decreases as the GDP per capita increases.

In some economies, however, the industry is fairly young, owing to changes in political systems. This is the case for Eastern Europe, where despite a relative high GDP per capita, there remains a strong demand for capacity building.

Consulting firms in emerging economies are at various stages of development, both technically as well as with regards to management skills and ownership. Considered globally, there are many obstacles to the industry's further development, all of which may not apply to every country to the same degree.

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### A \$270 billion industry worldwide

Gross Fixed Capital Formation - a country's purchasing parity adjusted investment in construction and in machinery and equipment - for the 32 countries surveyed by FIDIC in its 2000 annual survey amounted to \$5770 billion in 1999 out of a worldwide total of \$6580 billion.

Investments requiring knowledge-based design services totalled \$4461 for the 32 countries. On average, some 8.46% of this investment was spent on design services, so the potential market for knowledge-based design services was \$377 billion, equivalent to approximately \$546 billion worldwide.

The consulting engineering industry is composed of those firms for which the supply of technology-based design services represents more than approximately 50% of their turnover.

The survey indicated that these firms supplied \$237 billion in services - 63% of the potential market - in the 32 countries. Extrapolating worldwide, consulting engineering therefore represented a \$270 billion industry in 1999.

In 1999, FIDIC member associations represented firms employing a total professional and technical staff of more than approximately 700,000. It is estimated that these associations represent 20 - 30% of total employment in the consulting engineering industry, so total employment in the industry is some 2.3 - 3.5 million.

Excluding China and India, this is equivalent to one job per 1000 inhabitants for the countries surveyed.

The turnover per staff member was \$80,000 - 115,000.

The private sector consulting industry can make substantial contributions to capacity development, by having local firms undertake work that is now being carried out perhaps less efficiently by government entities, and by increasing the firms' maturity and effectiveness as businesses.



The need for capacity building, and for the transfer of technology, has been understood for decades. Ensuring the implementation of adequate measures has received focus from many corners, not least from the international funding agencies, notably The World Bank with its publication of guidelines for consultant selection in 1974.

FIDIC has vigorously endorsed the principle of promoting national industries and the transfer of technology. The Federation issued position papers in 1994 (*Policy statement on the transfer of technology*) and in 1995 (*Improving transfer of technology - a guide for actions*).

The development of the consulting industry has taken different paths in the different countries over the last 25 years. Local consulting industries employing more than 50,000 professionals have emerged in some 10 African countries, and in 12-15 Asian countries. At the same time local industries in other areas, for example, South and Central America, reached maturity in the 1960's and 1970's, and have seen their activity peak. FIDIC, the international federation representing suppliers of technology-based intellectual services, presented a detailed picture of these developments in its 1998 report *Engineering the Future*.

Over the years, 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 has not given satisfactory results. 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, transfer of technology - or know how - is seen as one of the mechanisms for capacity building.

In the information age knowledge is power. A nation's primary assets will be its citizens' skills and insights, and the "jobs of the future" will be knowledge-based jobs. Cultural assets may well be of greater value than financial resources.

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

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

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

## recommendations

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### many obstacles

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#### In general

Too much work is carried out by in-house - often less efficient - units

Inadequate sources of finance for establishing private firms

A local preference for employing individuals, non-governmental organizations and university institutions

A lack of legal instruments, insurance cover and a contractual framework

A lack of foreign language capabilities

An unacceptable taxation and business environment

Poor acknowledgement by society of the importance of knowledge-based industries

Corruption

#### At the project level

Discrimination of firms based in less-developed countries in favour of firms from developed countries

Relatively unclear shortlisting procedures, and a widespread lack of transparency in bidding and selection processes

A lack of meaningful roles in joint ventures

Poor transfer of know-how on projects

Generally unacceptable contract conditions as regards liability and insurance, cash-flow support and methods of payment

Bureaucracy in implementation leading to delays and overruns

Corruption

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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, notably global quality from local sources.



In the “world of tomorrow”, the consulting industry must understand that clients - the owners of projects - will everywhere require quality of the highest international standards.

This means that FIDIC's member associations and their firms should prepare themselves for competition on a worldwide scale.

Measures taken to build up the capacity of firms in less-developed countries must avoid introducing preferential treatment as this will be detrimental to the industry's development in the long term. Such measures include perceived disadvantages in competition with foreign firms. Efforts should focus on creating a “level playing field”.

The conditions needed to establish and maintain strong consulting industries 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 - and result-oriented - selection processes
- financial resources to allow consulting firms to become established via private financing, with a strong role for employee ownership, and profitability, tax and regulatory regimes that encourage such ownership;
- the increased use of modern technology
- managerial ability within consulting firms that allows both the firms and their projects to be managed profitably
- strong and well managed industry associations, able to articulate the views of member firms on the full range of issues that affect the financial and professional health of the industry.

FIDIC's actions to achieve its goals will aim to:

- minimize obstacles encountered by local consultants arising from the work allocation and selection procedures used by society, clients and financing institutions;
- build the capacity of local consulting industry.

FIDIC and its member associations must be the driving force for identifying measures to be taken by all the parties that will contribute to the capacity building of local firms.

Having evaluated possible action by government, by the international funding agencies, and by FIDIC acting with its member associations, FIDIC recommends that initiatives be implemented as soon as possible in three areas.

- |                                    |  |
|------------------------------------|--|
| - action by government             | legislative actions<br>policy initiatives<br>financial initiatives   |
| - action by international agencies | procurement guidelines<br>business integrity                         |
| - action by the industry           | business development<br>management training<br>capacity benchmarking |

## action by government

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### Policy initiatives

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

- Declare strong government support for the consulting industry, through its established industry association, as a recognized “high technology” industry, worthy of positive public recognition and support.
  - Establish strong, high-level liaison contacts with the industry through its industry association via a formal structure and mandate aimed at resolving differences over matters such as procurement and contracting practices.
  - Declare a public policy for enhanced participation by national consulting firms in domestic and international agency funded projects through responsible participation in consulting assignments.
  - Implement this policy with procurement procedures that favour open, transparent procurement and quality-based selection, with price being a deciding factor under strictly controlled and transparent circumstances.
  - Cooperate with the national consulting engineering industry 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 training and education of engineers, technicians, scientists and allied professionals.
  - Minimize the use of in-house government engineering units through contracting out as much work as possible.
  - Recognize only those consulting firms that operate competitively within the private sector.
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Action by government

legislative actions  
policy initiatives  
financial initiatives

Action by international agencies

procurement guidelines  
integrity management

Action by the industry

business development  
capacity benchmarking  
management training



**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.

- Recognize individual consulting professionals through legislation.
- Create a legislative environment which is conducive to the good management of design and construction risk, and within which a professional liability insurance industry can operate successfully.
- Recognize, 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.

**Financial initiatives**

The consulting engineering industry is capable of operating without government hand-outs as a sustainable and profitable sector that contributes to the development of every national economy. However, financial support from government is necessary in areas such as:

- education
- capacity building, notably the transfer of know-how and access to finance
- technical conferences, workshops, courses and the like held in the country.

Government actions are able to make major contributions to the promotion of a less-developed country's consulting engineering industry.

The private sector consulting industry can represent a sustainable resource, contributing to the growth of national wealth and stability. The FIDIC survey has however shown that in many countries, the basis for creating and further developing the sector does not exist, or is not adequately supported by government legislation, financial conditions and the public sector procurement rules.

FIDIC recommends government initiatives that create a favourable business environment in which the consulting industry can flourish - providing a valued and responsible service for a fair price, with incentives to invest in a growing and viable sector.

The FIDIC position paper *Building the capacity of the consulting industry in developing countries - recommended government initiatives*, outlines specific actions for individual countries. Several countries have already implemented many of these actions.

The proposed action by government covers legislative actions, policy initiatives and financial initiatives.

## international agencies

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### Minimize contractual bias

Ensure that contractual terms minimize negative effects arising from:

- prolonged waiting periods for payment, especially if operating as a sub-consultant
- payment in local currency in the absence of protection against cost escalation and currency devaluation
- the inability to acquire new technology owing to a shortage of capital.

### Encourage meaningful participation

FIDIC believes that the international funding agencies' declared objective of promoting: "... the development and use of consultants in borrower countries" can be advanced by:

- encouraging the use of consulting firms as opposed to individual consultants
- clarifying the eligibility of consulting firms from developing countries to receive preferential treatment
- avoiding price competition between private sector consulting firms and government-owned enterprises and non-governmental organizations
- revising guidelines for establishing shortlists.

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## Transparency and business integrity

FIDIC views institutional corruption, or the abuse of public power for private gain, as a serious problem.

The fight against international corruption has gained momentum since the early 1990's with the 1998 OECD antibribery convention to which FIDIC is a signatory, the World Trade Organization's multilateral agreement on transparency in government procurement, and several World Bank initiatives.

The United Nations, the International Chamber of Commerce, the Organization of American States, and the European Union have all adopted anti-corruption declarations.

To be controlled effectively, systemic corruption clearly requires a system's approach encompassing both givers and takers.

### On the demand side

FIDIC seeks a transparency policy for government that translates into a comprehensive, timely and systematic disclosure of procurement records, coupled with adequate accounting measures.

### On the supply side

FIDIC is developing a Business Integrity Management System that is being implemented by firms through their member associations within the framework of quality management and quality-based selection.

Action by government      legislative actions  
 policy initiatives  
 financial initiatives

**Action by international agencies**      **procurement guidelines**  
**integrity management**

Action by the industry      business development  
 capacity benchmarking  
 management training



### Transparency in consultant selection

FIDIC recommends that guidelines for consultant selection:

- ensure that the scope of work of each assignment, including the main deliverables, is clearly defined
- ensure that quality standards on all projects are clearly defined and rigorously enforced
- caution borrowers on the use of quality-cost based selection for projects of intermediate complexity
- require disclosure before proposal submission of the detailed rating system to be used.

FIDIC believes that consultants should have the right to an open debriefing following a proposal competition.

FIDIC is pleased to see that the procurement policies of the international funding agencies have intensified their support of efforts to promote the development and use of local consultants in borrower countries. This feature is reflected in the latest revisions of some of the agencies' guidelines for procurement.

However, it is FIDIC's opinion that further improvements can be achieved. FIDIC's review of procurement guidelines therefore focused on:

- measures to encourage the meaningful participation of consulting firms from developing countries in projects
- contractual terms biased against consulting firms from developing countries
- the transparency of the consultant selection process.

FIDIC's reviews started with:

- The World Bank
- Asian Development Bank
- African Development Bank

They will continue with the:

- Inter-American Development Bank
- Islamic Development Bank
- European Bank for Reconstruction and Development
- European Union.

## action by the industry

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### Capacity benchmarking

FIDIC's has identified a definite need for capacity building in the consulting industry, especially in less-developed countries. However, it was also found that considerable and adequate resources were often available, without their being known to potential clients, especially those in the public sector.

FIDIC therefore strongly recommends measures to improve the identification, via member associations, of available resources at the individual firm level as well as at the national level. A consequence is that member associations must clearly be seen to represent a major part of the local consulting industry.

In cooperation with its member association for France, FIDIC has developed a capacity survey to assist firms and associations at the national level, and FIDIC at the international level, to register local resources and to make them known to political decision makers, and to present and future clients. The survey will be continuously improved based on the experience gained.

Although the survey primarily aims to raise the industry's profile and highlight available resources, it also has another important function. It provides the basis for benchmarking individual firms and member associations against their peers - nationally as well as internationally. The survey therefore offers essential support for planning future capacity building activities, for setting goals for necessary improvements in technical education and management training, and for establishing priorities in developing auxiliary facilities and resources.

### Management training

Closely linked to capacity benchmarking is the need for training in the organisation and running of consulting firms and industry associations.

This need has been fully appreciated by The World Bank which, together with FIDIC, published in 1994 the manual *The business of a professional services firm: guide to practice* that has been used in management training around the world.

Several bilateral initiatives have also led to training materials, including an Australia - Vietnam mentoring programme, launched in 1999, and a Denmark - Ghana programme for institutional development launched in 1997. Meanwhile, FIDIC member associations have developed training materials adapted to local conditions, notably the Association of Consulting Engineers of Canada training manual *Human resource management for design firms* and a South African Association of Consulting Engineers training programme.

FIDIC aims to publish an updated edition of The World Bank manual that will form the basis for an international train-the-trainers programme, starting with activities based on a FIDIC-sponsored training centre in Beijing, China.

Action by government      legislative actions  
policy initiatives  
financial initiatives

Action by international agencies      procurement guidelines  
integrity management

**Action by the industry**      **capacity benchmarking**  
**management training**  
**business development**



### Business development

FIDIC aims to undertake several business development programmes in collaboration with its member associations.

- Prepare promotional materials, suitable for use in less-developed countries, that demonstrate the importance of a strong and thriving, independent consulting industry for stimulating the growth of a developing economy
- Lobby bilateral and international agencies for the more effective use of consulting firms based in less-developed countries
- Develop promotional campaigns in cooperation with local and private industry, and participate in formulating and implementing local industry development programmes.
- Provide direct support to member associations to strengthen their operations and to enable them to help member firms become more effectively managed, and increasingly more viable members of the consulting industry.
- Establish channels of information that keep member associations and their member firms fully informed about developments relating to procedures and opportunities in public procurement, government funding and private investment.

FIDIC represents internationally the business interests of independent suppliers of knowledge-based design services for the built and natural environment.

These suppliers are represented locally by national FIDIC member associations, which are recognized by government as the principle voice of the local consulting engineering industry.

FIDIC, in collaboration with its national member associations, aims to promote the independent consulting engineering industry through the further development of high standards for quality of service, professional conduct and business integrity by addressing specific industry needs in:

- capacity benchmarking
- management training
- business development.



## Further information

on FIDIC capacity building initiatives is available from:

- [FIDIC.org/capacity](http://FIDIC.org/capacity)  
*FIDIC Capacity Building programme*
- [FIDIC.org/annualsurvey](http://FIDIC.org/annualsurvey)  
*FIDIC Annual Survey*
- [FIDIC.org/BIMILACI](http://FIDIC.org/BIMILACI)  
*BIMILACI: Biennial Meeting of the International Lending Agencies and the Consulting Industry*

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## FIDIC Capacity Building Task Force

was established in 1998 with the following members:

- Eigil Steen Pedersen, *Denmark* (Chair)  
Member, FIDIC Executive Committee
- Fatma Çölasan, *Turkey*  
Member, FIDIC Executive Committee
- Felipe Ochoa, *Mexico*  
Member, FIDIC Executive Committee
- Mohamed Rafik Meghji, *Tanzania*  
Member, FIDIC Executive Committee
- John Ritchie, *Canada*
- José Speziale, *Argentina*

*To determine whether and to what extent capacity building of local consulting firms, and thereby the optimal use of such firms, is impeded by the procurement rules of the international financing institutions or the practices of consulting firms from abroad.*

*The Task Force shall furthermore define the problems, recommend measures that would overcome such negative effects, strengthen the local firms and encourage the transfer of know-how between local firms and consultants from abroad.*

The Executive Committee of FIDIC acknowledges the effort of all who contributed to this document.

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## Recommended government initiatives

In the information age, knowledge is power. Each nation's primary assets will increasingly be the skills and insights of its citizens, and the "jobs of the future" will be knowledge-based jobs. The ability to adapt to these new realities will determine the future strength of all national economies - including those of the less-developed countries. Many less-developed countries have pools of well-educated and talented people, but in many cases these national assets are not adequately focussed so as to be able to contribute to national development, or to adapt to the information age.

The consulting engineering industry is a dynamic, rapidly growing and evolving knowledge-based industry in both developed and developing countries. Many firms known for their skills as consulting engineers no longer focus exclusively on providing independent and impartial design engineering services. Instead, they provide advisory services in several areas, as well as planning and management, and other science- and technology-based intellectual services. These firms are involved at every stage of a project, from project development through to delivery, including conception, design, implementation, operations, maintenance, and decommissioning. A 2000 survey indicated that engineering and related services valued at about US \$270 billion per annum were provided by technology-based design firms worldwide.

A nation's private sector consulting engineering industry often represents a sustainable resource that can make a significant contribution to the growth of national wealth and stability. However, over the past 25 years, the development of the industry has taken different paths in various countries. Substantial consulting industries have emerged in some 10 African and 10 to 15 Asian countries, and together they employ today several hundred thousand people. At the same time, other national industries, for example, those in Central and South America, have seen their activities peak in the 1960s and 1970s and then decrease. The reasons for the varied success and sustainability of national consulting industries are diverse and complex, but many can be traced to government action, or more precisely, its inaction. The main factors affecting the consulting industry in less-developed countries are:

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- **long-term economic growth**  
determined by each nation's resource base, but strongly influenced, both positively and negatively, by government
  - **volatility of economic activity**  
boom-and-bust cycles; hyperinflation
  - **overall business environment**  
taxation levels; legal framework; corruption
  - **government intervention**  
in-house *versus* contracting out; import substitution *versus* focusing on national advantages
  - **government procurement policies**  
transparency; role of cost in the selection of professional services
- 

In recognizing the importance of the economic viability of all of its member firms and national member associations, FIDIC has launched a campaign to promote capacity building in the consulting engineering industry, with the initial focus on less-developed countries.

As the international federation representing the majority of consulting engineering firms worldwide, FIDIC is well placed to articulate the national industries' needs to government and to the international financial institutions, and to assist member firms in less-developed countries improve their business practices. This position paper summarises FIDIC's recommendations for government actions to foster healthy and competitive national consulting industries.

Many developed countries will have adopted most of the recommendations, but there are some significant exceptions in several countries that should be rectified. The list of recommended actions given below can therefore be used as a checklist applicable to any country.

FIDIC recommends that governments undertake **policy**, **financial** and **legislative** initiatives to promote a favourable business environment in which the national consulting engineering industry can flourish, providing valued and responsible services for a fair price, with incentives to invest in a growing and viable national consulting industry.

## Policy initiatives

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Several government initiatives are recommended to create the policy and operating environment in which responsible, financially stable and professional consulting engineering firms will prosper.

- 1 Declare strong government support for the consulting engineering industry through its established industry association, as a recognized “high technology” industry worthy of positive public recognition and support.
- 2 Establish robust, high-level liaison contacts between government and industry through the industry association, with a formal structure and mandate aimed at resolving differences over matters such as procurement and contracting practices. Provide strong, public support for the use of these links to help establish a more viable national industry through fair and transparent procurement and contracting practices.
- 3 Declare a public policy of support for the participation of national consulting engineering firms in domestic and internationally funded projects through effective participation in consulting assignments.

Implement this policy with procurement procedures that favour open, transparent procurement and Quality Based Selection, with price being a selection criterion under strictly controlled and transparent circumstances. The risk of selection based on the lowest price leading to the lowest value must be openly recognized. Procurement guidelines should include the following provisions:

- Whenever possible, engage consulting firms, rather than individuals.
  - Engage firms or consortia to provide a complete service for a project, rather than subdividing projects to “spread the work around”.
  - Insist on strong Quality Management in all projects, and hold consulting firms accountable for the quality of their work.
  - Officially recognize and encourage the transfer of know-how within projects to the staff of national firms.
  - Discourage price-based competition between private sector consulting engineering firms and non-governmental organizations, universities and other organizations that enjoy sources of funding that are not based on fees for services.
- 4 Work with the local consulting engineering industry association to develop an understanding of expected government requirements for services in order to help the national industry adapt to changing needs.
  - 5 Promote excellence in the education of engineers, technicians, scientists and allied professionals. Curricula should cover technical subjects that are important to the national economy, business and professional management, and the international languages of business and engineering.
  - 6 Minimize the use of in-house government engineering units by contracting out as much work as possible to the private sector. This will imply that government must become better informed and more competent purchase of services, and able to enforce proper procedures and contractual performance.
  - 7 Recognize only those consulting engineering firms that operate competitively in the private sector. The contribution of non-governmental organizations and universities to development can be substantial, but they should be discouraged from competing for consulting assignments in which technology-based design plays a substantial role.

## Financial initiatives

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The private sector consulting engineering industry is capable of operating without government subsidy as a sustainable and profitable industry that contributes to the development of every national economy. Financial support is necessary, however, in three principal areas:

### 1 Support for education

A steady supply of well-educated and well-motivated young engineers and technicians having both technical and foreign language skills is an essential ingredient for a viable consulting engineering industry.

Governments must address this need through an adequate, long-term funding of universities and technical institutions.

### 2 Support for capacity building

#### - Transfer of know-how

Contracts for engineering services in less-developed countries, especially those financed through international financial institutions, need to recognize the transfer of know-how to national consulting firms.

Funds for this transfer should be allocated within every contract, and clear indicators of the results achieved should be established for each project.

Achieving defined goals should be rewarded, and shortfalls should result in penalties under specific contractual provisions.

#### - Access to finance

Proper financing is required for national engineering consultants in less-developed countries to modernize their services and to access information technology. A shortage of capital for the medium- and long-term financing of consulting firms is endemic in most of these countries.

Governments must initiate priority programmes to enhance the development of national consulting capacity by providing mechanisms for an adequate financing of the consulting engineering industry. These programmes should cover the following essential components:

- Government-backed development funds, structured to provide debt or equity financing based on sound business plans.
- Trust funds that target consulting assignments for national firms which meet specific capacity-building criteria.
- Financial terms under government contracts that provide sufficient working capital to fund equipment, skills acquisition and training.
- Government procurement of consulting services to provide for proper advance payments, specified payment schedules, provision for interest for delayed disbursements and a system to monitor its compliance.
- For projects financed by the international financial institutions, the reservation of funds for capacity building activities that will benefit private sector, for-profit consulting engineering firms, with a special emphasis on training loans aimed at enhancing technology development.

### 3 Support for in-country technical events

The development of professional and managerial capabilities in the national consulting industry is enhanced through attendance at relevant technical and professional conferences. Such events are usually expensive to attend, but the cost can be reduced and considerable national benefits gained if they are held within the country. Government financial and logistic support is often necessary to make such conferences successful.

## Legislative initiatives

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The following legislative initiatives are proposed as examples of measures that will help create the legal framework to allow the national consulting engineering industry to be regulated and focussed into viable business units.

- 1 Recognize individual engineering professionals through legislation. The basic elements of this legislation must include:
  - The self-regulation of professionals, without government interference beyond the creation of a legislative framework.
  - Rigorous entry criteria - both academic and work experience.
  - The assignment of professional responsibility and accountability.
  - Adherence to a code of ethics.
  - The requirement for a registered professional engineer to approve construction works affecting public safety.
  - Independent and fair disciplinary action for those who fail in their professional obligations, including the withdrawal of registration and fines.
- 2 Create a legislative environment which is conducive to the good management of engineering and construction risk, and in which appropriate insurance arrangements can operate. This environment must:
  - Provide clarity in the legal obligations on design professionals - the obligations being to exercise reasonable skill, care and diligence in undertaking services.
  - Restrict the design professional's legal obligation to liability only for performing his or her personal legal and contractual obligations.
  - Require the claimant to prove failure by the professional to perform his or her legal or contractual obligations.
  - Apportion liability wherever more than one participant in the construction supply chain has potential liability for the same defect or damage.
  - Set clear time limits, after which liability is terminated.
  - Set a statutory maximum "cap" on liability, coupled with a requirement to insure up to the cap.
  - Encourage the use of recognized international conditions of contract and of professional engagement.
  - Permit freedom to insure in international insurance markets, so that losses are not concentrated within the local economy.
- 3 Recognize, through legislation, the national consulting engineering industry as a special self-governing sector of the economy with well-defined admission criteria. Link admission criteria to legislation recognizing professional engineers, and restrict the use of the term "consulting engineer" to firms in good standing. Examples of legislation that give special recognition to consulting engineering can be found in Tanzania and in the Canadian Province of Alberta.
- 4 Establish tax laws and related policies that will stimulate growth of knowledge-based industries, with incentives to encourage entrepreneurial private sector ownership. Laws must be consistent with the requirements of the World Trading Organization.

This position paper was prepared by the FIDIC Capacity Building Task Force. The FIDIC Executive Committee acknowledges the contributions made by members of the Task Force.

The paper forms part of a series of position papers *Capacity benchmarking of firms and at the national level: recommendations for the consulting engineering industry*, *Building the capacity of the consulting industry: recommended government initiatives* and *Building the capacity of the consulting industry: recommended actions by international agencies* that were prepared by the Task Force.

Copies can be obtained from the FIDIC Secretariat, and from most FIDIC Member Associations, together with the summary *Capacity building: building the capacity of the consulting industry*.

## Recommended actions by international agencies

### AFRICAN DEVELOPMENT BANK

In the information age, when a nation's primary assets are its citizens' skills, the "jobs of the future" will be knowledge-based jobs. Many less-developed countries have pools of well-educated people, but governments have failed to develop sustainable knowledge-based job opportunities.

The consulting engineering industry is a dynamic, rapidly growing, knowledge-based industry in both developed and less-developed countries. Its further growth offers a significant potential for creating both wealth and knowledge-based job opportunities. In the case of less-developed countries, an essential requirement for this growth is development of industrial and institutional capacities - a vital feature that has been recognized for many years by international initiatives from many actors, notably international agencies, and especially the international financial institutions.

It is generally accepted that the transfer of technology in its traditional one-directional and government agency-focused format has not given satisfactory results. National capacity building is now seen as involving the creation and strengthening of a private-sector, national consulting industry, while retaining transfer of technology - or know how - as only one of several mechanisms.

FIDIC endorsed the principle of promoting national industry and the transfer of technology by issuing policy papers in 1994 and 1995. The Federation then presented a detailed overview of the development of the consulting industry over the previous 25 years in the 1998 report *Engineering the Future*. Development had taken different paths in different countries. In particular, a vigorous national industry had emerged in some 10 African, and in 12 to 15 Asian countries, whereas other countries, especially those in South and Central America, saw their national consulting industry mature in the 1960s and 1970s, with activities peaking and then decreasing.

FIDIC established a Capacity Building Task Force in 1998 in order to refocus the Federation's initiatives, and to respond to the new set of challenges. The Task Force believes that an independent consulting engineering industry comprising privately owned firms can make substantial contributions to sustainable capacity development, by undertaking work that is perhaps performed inefficiently by government entities, and by enhancing the industry's maturity and effectiveness.

The Task Force had as its objectives: "To determine whether and to what extent the capacity building of local consulting firms, and thereby the optimal use of such firms, is impeded by the procurement rules of the international financing institutions or the practices of consulting firms from abroad. The Task Force shall furthermore define the problems, recommend measures that would overcome such negative effects, strengthen the local firms and encourage the transfer of know how between local firms and consultants from abroad."

The Task Force initially surveyed FIDIC member associations in order to identify the most important obstacles to capacity building in various countries. These associations represent more than about 700,000 employees working in more than 20,000 firms. GDP per capita exceeded \$10,000 in 26 countries, lay between \$3,000 and \$10,000 in six countries, and was less than \$3,000 in 32 countries. The survey indicated that the need for capacity building of national firms tended to increase as the GDP per capita decreased. However, the need remained in some countries with a large GDP per capita, such as those in Eastern Europe where the private-sector consulting industry remains fairly young following changes in political systems.

Based on the survey, and subsequent analysis, the Task Force made recommendations in four main areas, namely, government initiatives, actions by international agencies, training and capacity benchmarking. Now that the recommendations have been endorsed by the Federation, the stage is set for implementing an action plan in collaboration with member associations.

The actions recommended for international agencies, notably the international financial institutions or IFIs, focus on guidelines and procurement policies for consultancy services. Both have been reviewed for The World Bank, the Asian Development Bank and the African Development Bank, while those for the Inter-American Development Bank, the Islamic Development Bank, the European Bank for Reconstruction and Development, and the European Union will be reviewed during 2001/2002. These reviews are presented separately, with the present review dealing with the African Development Bank/Fund *Procurement Guidelines for Consultants*. They are made available as a continuously updated collection in the FIDIC publication *Capacity building: building the capacity of the consulting industry*.

## Stated principles of the revised Guidelines

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In the “Objectives” to the revised January 2000 version of the Guidelines, the African Development Bank provides the following background information:

- Through their use by the Borrowers, the Rules of Procedure are intended to achieve economy and efficiency in the acquisition of consultancy services financed by the Bank.
- Whether for activities related to a project in its different phases of implementation or for other operations such as technical assistance or institutional support, considerations of economy and efficiency require that the consultant provide the best possible service, namely, a high-quality service which will have a positive impact on the final resulting project and contribute to the latter's success.
- Consequently, the most important factors to be taken into consideration by the Borrowers in the selection of consultants are the technical qualifications of the consultants and the quality of the consultants' proposals.

Further it amplifies that apart from considerations of efficiency and economy, the underlying principles of the Rules of Procedure are the following:

- the need for the Bank to give all consultants of member countries equal opportunity of access to Bank-financed services;
- the need for the Bank to encourage the use of national and regional consultants, and to develop the capacities of regional member countries to provide consultancy services;
- the responsibility of selecting the consultant is incumbent, first of all, on the Borrower; and
- the importance of transparency in the procurement process.

The basic principles underlying the procedures for selecting consultants financed under Bank operations remain the same: the overriding concern for quality of the services provided, with due attention to economy, efficiency, fair opportunity for all firms, and transparency of process.

FIDIC supports the principles outlined above, but notes that the introduction of cost as a factor in the selection of consultants can have severe adverse consequences for both Borrowers and the consulting industry.

## Overview of FIDIC comments

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Given its mandate to explore new measures to enhance the capacity of the consulting industry in developing countries, the Task Force was pleased to note the many new features included in the revised guidelines. These no doubt reflect the African Development Bank's continuing policy to promote the development and use of consultants in Borrower countries.

Notwithstanding the advances that have been achieved with the revised Guidelines, FIDIC has adopted the Task Force recommendations, and seeks further changes under two broad headings:

- 1 Transparency of the consultant selection process

- 2 Encouragement of meaningful participation of consulting firms from developing country in African Development Bank financed projects.

Moreover, FIDIC recommends that outside the scope of the Guidelines, steps are taken to improve contractual terms that disproportionately affect developing country consulting firms.

The sections below therefore highlight specific comments under three headings: transparency of selection processes, encouragement of meaningful participation by firms from developing countries and improvements in contract terms.

## **Transparency of consultant selection process**

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FIDIC notes that Section 2.2 (d) of the Guidelines highlights the importance of transparency in the consultant selection process. FIDIC is encouraged to note that the Bank has defined “Fraud and Corruption”, and has detailed positive actions to be taken in case of proven engagement in corrupt or fraudulent practice. However, FIDIC believes that additional specific requirements, stated in the Guidelines, would enhance transparency of Borrowers’ consultant selection processes. The following paragraphs provide FIDIC’s specific recommendations.

- 1 FIDIC believes that the introduction of cost as a factor in selection of consultants often leads to less transparency in the consultant selection process. It can also lead to selection of the wrong consultant for the wrong reasons. FIDIC recommends the following changes to the Guidelines to reduce the harmful effects of using cost as an important factor in selecting consultants:
  - Ensure that the scope of work of each assignment is clearly defined, including the main deliverables. It is noted that if scope cannot be closely defined, the use of cost in selecting the consultant allows “rogue bids” to dominate the selection process.
  - Ensure that quality standards on all projects are clearly defined and rigorously enforced. Holding consulting firms accountable for the quality of their work will ultimately discourage rogue bids and strengthen the capabilities of the consulting industry.
  - Discourage selection procedure based on establishing the comparability of technical proposals and selection of the lowest financial offer.
- 2 Caution borrowers on the use of Quality and Cost Based Selection (QCBS) for projects of “intermediate complexity”. Such projects are often subject to wide variations in the interpretation of the scope of work, and therefore the cost of the assignment.
- 3 FIDIC believes that consultants should have the right to an open debriefing following a proposal competition. Borrowers should be required to provide debriefings upon request, with a Bank representative present as an option: the right to such debriefings should be documented in the Guidelines. The latest version (1997) of the The World Bank Guidelines: *Selection and Employment of Consultants by World Bank Borrowers* includes provision for debriefings by Bank staff, and by Borrowers.
- 3 FIDIC believes that manipulation of point rating systems by Borrowers can be used to distort the consultant selection process. The Guidelines should therefore require disclosure, before proposals are submitted, of the detailed rating system to be used to judge each firm’s qualifications, and the rating system to be used to rate the principal team members.
- 4 FIDIC believes that it is a good practice for Borrowers to prepare an evaluation report on how well the consultant has performed on completing of Consulting Services. However, to ensure fairness and transparency, it would be prudent if the Consultant received a copy of the report.

## **Encouragement of meaningful participation**

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FIDIC believes that incorporating the clarifications and additions described below would advance the Bank’s objective of promoting “... the development and use of consultants in Borrower countries.”

- 1 **By including public-sector and not-for-profit, private organizations, training institutions, universities and even associations of retired persons, the definition of a firm is too wide.**

FIDIC is encouraged to note that the Bank has separate sections for procurement for firms and for individuals. However, the definition of a firm remains too wide. FIDIC believes that wherever

possible, shortlisting should only include privately owned consulting firms operating for profit. The long-term development of the consulting industry in any country is greatly enhanced by establishing private consulting companies, and can be damaged by encouraging numerous individual consultants and other non-profit making entities in preference to consulting firms. This is specifically true for any selection process in which cost is a factor.

FIDIC is also concerned about unfair competition from universities (which are subsidized by governments) and non-governmental organizations (NGOs are eligible for favourable tax treatment, and often able to cover “core” expenses through donations). If such competition is unavoidable, the effects of cost should be eliminated when comparing the highest rated private sector proposal with the highest rated government agency, university or NGO proposal.

2 **Encourage the provision of high-quality consulting services from National and Regional consulting engineering firms as an essential step in developing a sustainable consulting industry.**

Quality standards should apply to both the consulting services themselves (for example, reports, designs and drawings) and completed projects.

3 **To encourage participation of national firms and to develop local professionals, the term “National Professionals” should be dropped from Clause 3.3.2 (b).**

The Bank’s criteria for preparing the “Cost Estimate of Consulting Assignment” are unbalanced. Instead of promoting local firms, they imply the favoured treatment of a foreign consulting firm employing local professionals. For instance, Clause 3.3.2 (a) and (b) indicates a clear discrimination between “Consultants Staff” and “National Professionals”, with costing for the former based on “fixed rate”, whilst that of the latter is based on “Local Salary”. It is recommended that the term “National Professionals” be removed from Clause 3.3.2 (b).

4 **Redraft evaluation criteria to specifically encourage National or Regional participation.**

An additional criterion “Transfer of Knowledge” should be introduced and assigned a meaningful weight in the point rating system

5 **Remove the requirement for the Client to complete an evaluation and the Bank to comment within “Time Limits”.**

Delays caused by the Client and/or the Bank can result in undue hardship on consultants, who may be required to both maintain the prices submitted in the Financial Proposal and absorb the effects of cost escalation. The combination can be especially damaging to national or regional firms, if their Financial Proposal is made in the local currency.

## **Improvements in contract terms**

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Contract terms need to be as generous as possible to firms from developing countries, many of which operate with a limited capital base. Specific problems include:

- prolonged periods for payment, especially if operating as a sub-consultant;
- payment in local currency in the absence of protection against cost escalation and currency devaluation;
- an inability to acquire new technology owing to a shortage of capital.

All of the above problems could be reduced or eliminated by incorporating reasonable financial terms in contracts, and by recognizing that acquisition of new technology is often expensive, and may require the use of project funds. FIDIC recommends that the Bank develops contractual provisions that would overcome these problems.

This position paper was prepared by the FIDIC Capacity Building Task Force. The FIDIC Executive Committee acknowledges the contributions made by members of the Task Force.

The paper forms part of a series of position papers *Capacity benchmarking of firms and at the national level: recommendations for the consulting engineering industry*, *Building the capacity of the consulting industry: recommended government initiatives* and *Building the capacity of the consulting industry: recommended actions by international agencies* that were prepared by the Task Force.

Copies can be obtained from the FIDIC Secretariat, and from most FIDIC Member Associations, together with the summary *Capacity building: building the capacity of the consulting industry*.

## Recommended actions by international agencies

### ASIAN DEVELOPMENT BANK

In the information age, when a nation's primary assets are its citizens' skills, the "jobs of the future" will be knowledge-based jobs. Many less-developed countries have pools of well-educated people, but governments have failed to develop sustainable knowledge-based job opportunities.

The consulting engineering industry is a dynamic, rapidly growing, knowledge-based industry in both developed and less-developed countries. Its further growth offers a significant potential for creating both wealth and knowledge-based job opportunities. In the case of less-developed countries, an essential requirement for this growth is development of industrial and institutional capacities - a vital feature that has been recognized for many years by international initiatives from many actors, notably international agencies, and especially the international financial institutions.

It is generally accepted that the transfer of technology in its traditional one-directional and government agency-focused format has not given satisfactory results. National capacity building is now seen as involving the creation and strengthening of a private-sector, national consulting industry, while retaining transfer of technology - or know how - as only one of several mechanisms.

FIDIC endorsed the principle of promoting national industry and the transfer of technology by issuing policy papers in 1994 and 1995. The Federation then presented a detailed overview of the development of the consulting industry over the previous 25 years in the 1998 report *Engineering the Future*. Development had taken different paths in different countries. In particular, a vigorous national industry had emerged in some 10 African, and in 12 to 15 Asian countries, whereas other countries, especially those in South and Central America, saw their national consulting industry mature in the 1960s and 1970s, with activities peaking and then decreasing.

FIDIC established a Capacity Building Task Force in 1998 in order to refocus the Federation's initiatives, and to respond to the new set of challenges. The Task Force believes that an independent consulting engineering industry comprising privately owned firms can make substantial contributions to sustainable capacity development, by undertaking work that is perhaps performed inefficiently by government entities, and by enhancing the industry's maturity and effectiveness.

The Task Force had as its objectives: "To determine whether and to what extent the capacity building of local consulting firms, and thereby the optimal use of such firms, is impeded by the procurement rules of the international financing institutions or the practices of consulting firms from abroad. The Task Force shall furthermore define the problems, recommend measures that would overcome such negative effects, strengthen the local firms and encourage the transfer of know how between local firms and consultants from abroad."

The Task Force initially surveyed FIDIC member associations in order to identify the most important obstacles to capacity building in various countries. These associations represent more than about 700,000 employees working in more than 20,000 firms. GDP per capita exceeded \$10,000 in 26 countries, lay between \$3,000 and \$10,000 in six countries, and was less than \$3,000 in 32 countries. The survey indicated that the need for capacity building of national firms tended to increase as the GDP per capita decreased. However, the need remained in some countries with a large GDP per capita, such as those in Eastern Europe where the private-sector consulting industry remains fairly young following changes in political systems.

Based on the survey, and subsequent analysis, the Task Force made recommendations in four main areas, namely, government initiatives, actions by international agencies, training and capacity benchmarking. Now that the recommendations have been endorsed by the Federation, the stage is set for implementing an action plan in collaboration with member associations.

The actions recommended for international agencies, notably the international financial institutions or IFIs, focus on guidelines and procurement policies for consultancy services. Both have been reviewed for The World Bank, the Asian Development Bank and the African Development Bank, while those for the Inter-American Development Bank, the Islamic Development Bank, the European Bank for Reconstruction and Development, and the European Union will be reviewed during 2001/2002. These reviews are presented separately, with the present review dealing with *Guidelines on the Use of Consultants by Asian Development Bank and its Borrowers*. They are made available as a continuously updated collection in the FIDIC publication *Capacity building: building the capacity of the consulting industry*.

## Stated principles of the Guidelines

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The Introduction (Section 1.01) of the Guidelines sets out important principles underlying the use of consultants. These include:

“The assistance of consultants is needed to ensure maximum efficiency and economy in the preparation, construction and operation of projects and in the undertaking of related activities.

The technical qualifications of consultants .... are .... the most important criteria in the selection of consultants ....

... the Bank will ensure that consultants .... represent the Bank’s member countries in a reasonably balanced way.

It is in the Bank’s policy to encourage the use of consultants from Developing Member Countries and to promote the development of domestic consulting professions.

It is the Bank’s policy that Borrowers .... (and) .... consultants .... observe the highest standards of ethics during the selection process and in execution of .... contracts.”

FIDIC supports the above principles, including the emphasis on technical qualifications of consultants as the most important selection criteria. FIDIC also notes that the introduction of cost as a factor in the selection of consultants can have severe adverse consequences for both Borrowers and the consulting industry.

## Overview of FIDIC comments

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The Task Force notes that the Guidelines, which are dated 1979, do not fully reflect the Bank’s current practices, the types of consulting services being provided and the entities providing them, or the practices of the other international financial institutions.

The Task Force’s comments therefore reflect its mandate to promote capacity building within the consulting industries of developing countries, and its concurrent review of guidelines that are presently being used by The World Bank and the African Development Bank.

FIDIC has adopted the Task Force recommendations, and wishes to comment on the Guidelines, and seeks changes under two broad headings:

- 1 Transparency of the consultant selection process
- 2 Encouragement of meaningful participation of consulting firms from developing country in Asian Development Bank financed projects

Moreover, FIDIC recommends that outside the scope of the Guidelines, steps are taken to improve contractual terms that disproportionately affect developing country consulting firms.

The sections below therefore highlight specific comments under three headings: transparency of selection processes, encouragement of meaningful participation by firms from developing countries and improvements in contract terms.

## Transparency of consultant selection process

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FIDIC notes that Section 1.05 sets out specific prohibitions against the use of corrupt practices, and requires that both Borrowers and consultants observe the highest standards of ethics. FIDIC fully supports these principles and their application. It recommends the following provisions under the general heading of transparency.

- 1 FIDIC believes that consultants should have the right to a non-confidential debriefing following a proposal competition. Borrowers should be required to provide debriefings upon request, with a Bank representative present as an option. Consultants competing for Technical Assistance assignments are normally provided with debriefings by Bank staff: the right to such debriefings should be documented in the Guidelines. The latest version (1997) of the The World Bank Guidelines: *Selection and Employment of Consultants by World Bank Borrowers* includes provision for debriefings by Bank staff, and by Borrowers.
- 2 FIDIC believes that manipulation of point rating systems by Borrowers can be used to distort the consultant selection process. The Guidelines should therefore require disclosure, before proposals are submitted, of the detailed rating system to be used to judge each firm's qualifications, and the rating system to be used to rate the principal team members.
- 3 Shortlisting practices for Technical Assistance assignments should be updated and clarified, especially with regard to the geographic distribution of firms on the short list.

## Encouragement of meaningful participation

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FIDIC believes that incorporating the clarifications and additions described below would advance the Bank's objectives to "... encourage the use of consultants from Developing Member Countries and to promote the development of domestic consulting professions."

- 1 **Encourage the provision of high-quality consulting services from Developing Member Countries as an essential step in developing a sustainable consulting industry.**

The Asian Development Bank should state its support for, and adherence, to clear standards of quality for all Bank-funded projects. These quality standards should apply to both the consulting services themselves (for example, reports, designs and drawings) and completed projects.

- 2 **Encourage the use of consulting firms, not individuals.**

FIDIC believes that the long-term development of the consulting industry in any country is greatly enhanced through the creation of consulting companies, and can be damaged by promoting the activities of numerous individual consultants in preference to consulting firms. To this end, FIDIC requests that the Guidelines be modified:

- to clarify that individual consultants are normally used only in the early phases of project preparation, and that consulting firms are preferred for assignments later in the project cycle, and are eligible for all types of assignments (Introduction - Paragraphs 1.01 and 1.03);
- to clarify those provisions of the Guidelines that apply only to one or other group through use of the terms "individual consultants" and "consulting firms";
- to declare clearly the Bank's support for the development of privately owned, competitive consulting firms in the Developing Member Countries: see Introduction - Paragraph 1.01; and
- to encourage Borrowers to engage consulting firms rather than individual consultants, wherever possible.

- 3 **Clarify the use of domestic consultants and consultants from Developing Member Countries**

Section 4 (Use of Domestic Consultants and Consultants from Developing Member Countries) needs clarification in order to enhance the development of the consulting industry in Developing Member Countries (DMC), and to define more clearly how selection processes may be used to favour DMC firms. FIDIC believes that the following provisions should be included in Section 4:

- domestic consultants, registered in the country which the work is to be carried out, should be favoured over other DMC consultants; and
  - regional DMC consultants should be accorded second priority.
- 4 FIDIC further recommends that the term “domestic” be replaced by the term “national” throughout the Guidelines.
- 5 Clarify recognition by the Bank of Developing Member Countries consulting firms that are eligible for preferential treatment under Section 4.

Recognition should be clarified by having eligibility criteria that specify, for example:

- firms that are majority owned by nationals of the Borrower country;
- firms that are majority owned by nationals of a regional member country, which is often translated to mean a regional Developing Member Country;
- subsidiaries of foreign firms that are registered in the Borrower country; and
- joint ventures that include participation of nationally owned firms.

- 6 Encourage meaningful participation of developing country national consulting firms in international projects.

FIDIC believes that meaningful participation in international projects would contribute significantly to the capacity building of the national industry. It recommends that joint venture partnerships between foreign and national consulting firms should be encouraged by establishing quantitative evaluation criteria for such partnerships during the procurement phase.

- 7 Recognize in the Guidelines the presence of government-owned enterprises and non-governmental organizations in consultancy, and clarify the competitive environment in which they can function.

FIDIC believes that strict measures are needed to eliminate competition from government-subsidized entities. FIDIC is also concerned about unfair competition from universities (they are subsidized by governments) and non-governmental organizations (they are eligible for favourable tax treatment, and are often able to cover “core” expenses through donations). If such competition is unavoidable in a given situation, cost must not be used as a selection criterion.

## Improvements in contract terms

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Contract terms need to be as generous as possible to firms from developing countries, many of which operate with a limited capital base. Specific problems include:

- prolonged periods for payment, especially if operating as a sub-consultant;
- payment in local currency in the absence of protection against cost escalation and currency devaluation;
- an inability to acquire new technology owing to a shortage of capital.

All of the above problems could be reduced or eliminated by incorporating reasonable financial terms in contracts, and by recognizing that acquisition of new technology is often expensive, and may require the use of project funds. FIDIC recommends that the Bank develops contractual provisions that would overcome these problems.

This position paper was prepared by the FIDIC Capacity Building Task Force. The FIDIC Executive Committee acknowledges the contributions made by members of the Task Force.

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## Recommended actions by international agencies

### THE WORLD BANK

In the information age, when a nation's primary assets are its citizens' skills, the "jobs of the future" will be knowledge-based jobs. Many less-developed countries have pools of well-educated people, but governments have failed to develop sustainable knowledge-based job opportunities.

The consulting engineering industry is a dynamic, rapidly growing, knowledge-based industry in both developed and less-developed countries. Its further growth offers a significant potential for creating both wealth and knowledge-based job opportunities. In the case of less-developed countries, an essential requirement for this growth is development of industrial and institutional capacities - a vital feature that has been recognized for many years by international initiatives from many actors, notably international agencies, and especially the international financial institutions.

It is generally accepted that the transfer of technology in its traditional one-directional and government agency-focused format has not given satisfactory results. National capacity building is now seen as involving the creation and strengthening of a private-sector, national consulting industry, while retaining transfer of technology - or know how - as only one of several mechanisms.

FIDIC endorsed the principle of promoting national industry and the transfer of technology by issuing policy papers in 1994 and 1995. The Federation then presented a detailed overview of the development of the consulting industry over the previous 25 years in the 1998 report *Engineering the Future*. Development had taken different paths in different countries. In particular, a vigorous national industry had emerged in some 10 African, and in 12 to 15 Asian countries, whereas other countries, especially those in South and Central America, saw their national consulting industry mature in the 1960s and 1970s, with activities peaking and then decreasing.

FIDIC established a Capacity Building Task Force in 1998 in order to refocus the Federation's initiatives, and to respond to the new set of challenges. The Task Force believes that an independent consulting engineering industry comprising privately owned firms can make substantial contributions to sustainable capacity development, by undertaking work that is perhaps performed inefficiently by government entities, and by enhancing the industry's maturity and effectiveness.

The Task Force had as its objectives: "To determine whether and to what extent the capacity building of local consulting firms, and thereby the optimal use of such firms, is impeded by the procurement rules of the international financing institutions or the practices of consulting firms from abroad. The Task Force shall furthermore define the problems, recommend measures that would overcome such negative effects, strengthen the local firms and encourage the transfer of know how between local firms and consultants from abroad."

The Task Force initially surveyed FIDIC member associations in order to identify the most important obstacles to capacity building in various countries. These associations represent more than about 700,000 employees working in more than 20,000 firms. GDP per capita exceeded \$10,000 in 26 countries, lay between \$3,000 and \$10,000 in six countries, and was less than \$3,000 in 32 countries. The survey indicated that the need for capacity building of national firms tended to increase as the GDP per capita decreased. However, the need remained in some countries with a large GDP per capita, such as those in Eastern Europe where the private-sector consulting industry remains fairly young following changes in political systems.

Based on the survey, and subsequent analysis, the Task Force made recommendations in four main areas, namely, government initiatives, actions by international agencies, training and capacity benchmarking. Now that the recommendations have been endorsed by the Federation, the stage is set for implementing an action plan in collaboration with member associations.

The actions recommended for international agencies, notably the international financial institutions or IFIs, focus on guidelines and procurement policies for consultancy services. Both have been reviewed for The World Bank, the Asian Development Bank and the African Development Bank, while those for the Inter-American Development Bank, the Islamic Development Bank, the European Bank for Reconstruction and Development, and the European Union will be reviewed during 2001/2002. These reviews are presented separately, with the present review dealing with The World Bank Guidelines: *Selection and Employment of Consultants by World Bank Borrowers*. They are made available as a continuously updated collection in the FIDIC publication *Capacity building: building the capacity of the consulting industry*.

## Stated principles of the revised Guidelines

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In the Foreword to the January 1997 version of the Guidelines, The World Bank provides the following background information:

“These Guidelines replace the 1981 Guidelines: Use of Consultants by World Bank Borrowers and the World Bank as Executing Agency. They take into account the following important developments, among others:

- a diversification of Bank lending to new sectors and the need to address the specific issues that apply to the use of consultants in these new areas;
- b the continuing policy to promote the development and use of consultants in Borrower countries;
- c worldwide increased use of cost as a factor in the selection of consultants, in both the public and the private sectors;
- d increased emphasis on transparency in the selection process;
- e need for simplification of the selection and review process; and
- f the Bank's policy of entrusting the beneficiary with the selection of consultants funded by trust funds, with the Bank acting as executing agency only exceptionally.

The basic principles underlying the procedures for selecting consultants financed under Bank operations remain the same: the overriding concern for quality of the services provided, with due attention to economy, efficiency, fair opportunity for all firms, and transparency of process.”

FIDIC supports the principles outlined above, but notes that the introduction of cost as a factor in the selection of consultants can have severe adverse consequences for both Borrowers and the consulting industry.

## Overview of FIDIC comments

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Given its mandate to explore new measures to enhance the capacity of the consulting industry in developing countries, the Task Force was pleased to note the many new features included in the revised guidelines. These no doubt reflect the World Bank's continuing policy to promote the development and use of consultants in Borrower countries.

Notwithstanding the advances that have been achieved with the revised Guidelines, FIDIC has adopted the Task Force recommendations, and seeks further changes under two broad headings:

- 1 Transparency of the consultant selection process
- 2 Encouragement of meaningful participation of consulting firms from developing countries in World Bank financed projects.

Moreover, FIDIC recommends that outside the scope of the Guidelines, steps are taken to improve contractual terms that disproportionately affect developing country consulting firms.

The sections below therefore highlight specific comments under three headings: transparency of

selection processes, encouragement of meaningful participation by firms from developing countries and improvements in contract terms.

## **Transparency of consultant selection process**

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FIDIC notes that Section 1.4 (f) of the Guidelines highlights the importance of transparency in the consultant selection process. However, FIDIC believes that additional specific requirements, stated in the Guidelines, would enhance the transparency of Borrowers' consultant selection processes.

- 1 FIDIC believes that the introduction of cost as a factor in selection of consultants often leads to less transparency in the consultant selection process. It can also lead to selection of the wrong consultant for the wrong reasons. FIDIC recommends the following changes to the Guidelines to reduce the harmful effects of using cost as an important factor in selecting consultants:
  - Ensure that the scope of work of each assignment is clearly defined, including the main deliverables. It is noted that if scope cannot be closely defined, the use of cost in selecting the consultant allows “rogue bids” to dominate the selection process.
  - Ensure that quality standards on all projects are clearly defined and rigorously enforced. Holding consulting firms accountable for the quality of their work will ultimately discourage rogue bids and strengthen the capabilities of the consulting industry.
- 2 Caution borrowers on the use of Quality and Cost Based Selection (QCBS) for projects of “intermediate complexity”. Such projects are often subject to wide variations in the interpretation of the scope of work, and therefore the cost of the assignment.
- 3 FIDIC believes that consultants should have the right to a non-confidential debriefing following a proposal competition. Appendix 4, paragraph 15 “Debriefing” is helpful in this regard, but it is “buried” in an appendix entitled “Guidelines to Consultants”. It deserves greater prominence in the document, and borrowers should be instructed to provide debriefings upon request. This will require, among other things, revision to paragraph 1.2 of the Guidelines stating that parties such as Consultants do not derive any rights from the Guidelines.
- 4 FIDIC believes that manipulation of point rating systems by Borrowers can be used to distort the consultant selection process. The Guidelines should therefore require disclosure, before proposals are submitted, of the detailed rating system to be used to judge each firm’s qualifications, and the rating system to be used to rate the principal members of each team.

## **Encouragement of meaningful participation**

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FIDIC believes that incorporating the clarifications and additions described below would advance the Bank’s objective of promoting “... the development and use of consultants in Borrower countries.”

- 1 **Encourage the provision of high-quality consulting services from Developing Member Countries as an essential step in developing a sustainable consulting industry.**

The World Bank should state its support for, and adherence to, clear standards of quality for all World Bank-funded projects. These quality standards should apply to both the consulting services themselves (for example, reports, designs and drawings) and completed projects.

- 2 **Encourage the use of consulting firms, not individuals.**

FIDIC believes that the long-term development of the consulting industry in any country is greatly enhanced through the creation of consulting companies, and can be damaged by promoting the activities of numerous individual consultants in preference to consulting firms. To this end, FIDIC requests that the Guidelines be modified:

- to distinguish between consulting firms and individuals (the present Guidelines use the term consultant for both); and
- to encourage Borrowers to engage consulting firms, rather than individual consultants, wherever possible.

### 3 Adjust eligibility criteria for preferential treatment under paragraph 2.6

The Guidelines encourage teams to be formed with a meaningful participation by firms from developing countries. To achieve this objective, eligibility criteria could specify, for example:

- firms that are majority owned by nationals of the Borrower country;
- firms that are majority owned by nationals of a regional member country, which is often translated to mean a regional developing country;
- subsidiaries of foreign firms that are registered in the Borrower country;
- joint ventures that include participation of locally owned firms.

### 4 Avoid competition - especially where cost is a factor in the evaluation - between private sector consulting firms and government-owned enterprises and non-governmental organizations.

FIDIC welcomes the restrictions of Paragraph 1.10 (b), but believes that stricter measures are needed to eliminate unfair competition from government-subsidized entities. FIDIC is concerned about unfair competition from universities (they are subsidized by governments) and non-governmental organizations (NGOs are eligible for favourable tax treatment, and are often able to cover “core” expenses through donations). If such competition is unavoidable in a given situation, the effects of cost should be eliminated when comparing the highest rated private sector proposal with the highest rated government agency, university or NGO proposal.

### 5 Revise Paragraph 2.6, which provides specific guidelines on the creation of shortlists.

FIDIC supports the following measures concerning the shortlisting of consulting firms from developing countries:

- the definition of National Consultant should be restricted to privately held consulting firms operating on a for-profit basis. This would also require revision of Paragraph 1.10;
- priority for short-listing in Paragraph 2.6 should be accorded to a National Consultant rather than to firms from another developing country;
- Regional Consultants, registered and owned in nearby developing countries, should be accorded second priority (next to National Consultants).

## Improvements in contract terms

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Contract terms need to be as generous as possible to firms from developing countries, many of which operate with a limited capital base. Specific problems include:

- prolonged periods for payment, especially if operating as a sub-consultant;
- payment in local currency in the absence of protection against cost escalation and currency devaluation;
- an inability to acquire new technology owing to a shortage of capital.

All of the above problems could be reduced or eliminated by incorporating reasonable financial terms in contracts, and by recognizing that acquisition of new technology is often expensive, and may require the use of project funds. FIDIC recommends that the Bank develops contractual provisions that would overcome these problems.

This position paper was prepared by the FIDIC Capacity Building Task Force. The FIDIC Executive Committee acknowledges the contributions made by members of the Task Force.

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## Building the capacity of the consulting industry

### Capacity benchmarking of firms and at the national level

#### Recommendations for the consulting engineering industry

Benchmarking is used to measure the performance of virtually every aspect of economic life, from the global level, through to regions, countries, industry sectors, firms and individual staff. In developed economies, many firms expect that organizations such as FIDIC member associations representing a national industry sector will provide guidance on how to benchmark business operations at the **firm level**, sophisticated business analysis and benchmarking at the **national level**, and benchmarking at **regional and international levels** to monitor trends and to ensure adequate representation and industry promotion.

Owing to its wide scope, benchmarking risks being “all things to all people”, and thus not sufficiently interesting or useful for any single audience. Experience shows that it is preferable to limit the audience, and to limit the focus, so as to generate results that capture an audience’s interest. International, regional, national and firm surveys therefore generally address different audiences, each with a special focus:

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- **clients**  
to measure quality of service
  - **firms, competitors, owners, management, and staff**  
to benchmark current operating performance, staff performance and financial performance within the immediate business environment
  - **international financial agencies and export agencies**  
to have an accurate assessment of the capacity that is available
  - **national member association**  
to quantify performance, representivity and efficiency with respect to industry norms
  - **the national industry sector and government**  
to identify strategic needs in areas such as media impact, industry representation and government regulation
  - **other national industry sectors**  
to pinpoint synergies and areas for business expansion and organizational rationalisation
  - **regional and international industry sectors and government**  
to promote international business standards, business practices and cooperation
  - **the general public**  
to build support for industry initiatives and increased recognition
- 

The challenge is to identify a limited set of benchmarking indicators that meets the needs of a specific audience and objective. In addition, indicators must be reliable, accurate, comparable between different countries, and efficient to collect, and thus largely based on existing and standard reporting practices.

#### Capacity building

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The creation and strengthening of the private-sector consulting industry is essential for developing sustainable knowledge-based job opportunities that generate wealth and empower citizens.

A survey carried out by the FIDIC Capacity Building Task Force identified a lack of information at the national industry sector level about capabilities, staff and facilities, and the corresponding lack of

visibility, as a major factor impeding capacity building. Another outcome was poor utilisation of the industry's capacity, and serious difficulties in identifying where resources should be directed to promote capacity building.

Moreover, defining indicators that could be used in benchmarking surveys to highlight problems was not straightforward since the indicators needed to reflect a complex set of linked factors. For instance, at the national industry sector level, simple economic indicators such as the Gross Domestic Product per capita were inadequate because the business and political environments were often more important in limiting the industry's performance.

Second, in countries where capacity building was required, firms rarely operate in a free-market environment, so established benchmarking tools would imply adopting inappropriate indicators. FIDIC believes that for capacity building it is necessary to focus on management skills, financial controls, staff, and the use of resources.

FIDIC thus saw a need for a comprehensive benchmarking system at the national sector level that was tailored for the needs of capacity building. The aim would be to assess the consulting capacity of individual countries, taking into account not only factors covering the industry structure, organisation and performance but also the overall business environment.

It was also realised that the benchmarking system, and the promotion of benchmarking at the national level, should be extended to firms, for in a competitive world benchmarking with the competition is a vital instrument for further development. Benchmarking strengthens the strengths and helps eliminate the weaknesses.

## The FIDIC benchmarking system

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While national industry surveys have relatively broad objectives, they are generally based on publicly available information, much of which is consolidated from firm surveys involving the confidential exchange of information that is pooled to provide a service to firms. So benchmarking at the firm level and at the national industry sector level, while making use of different methodologies, are closely linked

FIDIC therefore decided that its benchmarking system would cover both firms and the national industry sector. Furthermore, it would be based on indicators that were commonly used by the consulting industry for a variety of reporting tasks. The advantage of this approach was that the benchmarking system would draw upon the considerable experience gained by the many organizations that have tackled the problem of how to quantify performance at the firm and national industry sector levels in a variety of contexts, notably:

- registration
- benchmarking
- industry surveys.

Combining the indicators used in these various tools was justified because the benchmarking of firms, for example, overlaps with procedures to verify membership in an industry association, and to undertake certification, registration and prequalification.

The main industry reporting tools that have been analysed to define a suitable set of indicators were:

- *Sector Review* published annually by FIDIC's member association for Sweden
- *Wealth of Nations Triangle Index* of the World Summit for Social Development, Copenhagen, 1995
- The *World Bank DACON* and the *Asian Development Bank DICON* registration systems, and a prequalification/registration system proposed by the FIDIC's former Client-Consultant Relations Committee
- Firm benchmarking and industry reports carried out by FIDIC member associations in Australia, Canada, Denmark, and the UK.
- A benchmarking survey designed by the EFCA-FIDIC Task Force on Private Finance to identify firms that were best able to meet future industry needs.
- Selected firm surveys carried out internally by firms.
- National economic surveys generally carried out by governments by consolidating national industry sector data.

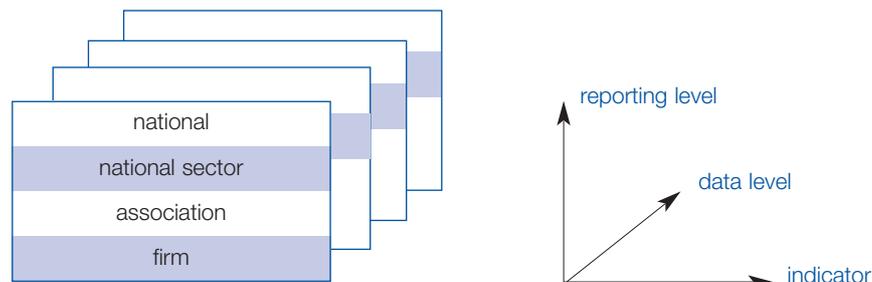
In comparing these various tools, it became apparent that indicators could be organized into categories dealing with a reporting unit's:

- national operating environment
- financial performance
- staff performance
- services

Reporting units were typically firms at the firm level, industry associations at the national industry sector level, and government departments at the national industry sector and national levels. Moreover, reporting at a given level involved indicators based on data for several levels. The result was an indicator cube with the indicator, reporting level and data level as axes.

Using this systematic approach that specified the reporting level had the major advantage that indicators were selected mainly for their reporting functionality, in other words, on their capacity to convey meaningful information to a specific audience.

Hence, firm and national industry sector benchmarking can be efficiently based on a common set of indicators. As shown in the figure, the difference was the reporting level: firm-level benchmarking used firm-level indicators to report at the firm level, while national industry sector benchmarking used indicators based on data for several levels (firm, association, national industry sector, national) to report at the national industry sector level.



## Benchmarking of firms

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FIDIC recommends that FIDIC member associations representing to a greater or lesser extent a national industry sector should:

- 1 develop and undertake the benchmarking of firms on a routine basis;
- 2 base these firm-level benchmarking surveys on a limited set firm-level indicators derived from the FIDIC benchmarking system.

### FIRM-LEVEL INDICATORS

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#### National operating environment

Infrastructure investment (in buildings, housing, industrial plant, R&D) as a percentage of GNP

#### Financial performance

##### - Capital

Equity as a percentage of total assets  
Return on equity capital

##### - Operating

Profitability or profit margin  
Work outstanding as a percentage of generated income  
Work in progress as a percentage of generated income in days  
Revenue for international work as a percentage of total revenue  
Applied costs of marketing, administration & proposals as a percentage of generated income  
Added value as a percentage of staff costs, both total & productive  
Debtor days outstanding as percentage of generated income in days

#### Staff performance

Total staff number, including temporary staff;  
Profitability as a function of firm size for less than 10 full-time equivalent staff, with 10 to 50 staff, and with more than 50 staff  
Average revenue per staff  
Revenue per staff of most qualified 20% of staff

#### Services

Percentage of fee income from projects costed on the basis of the cost of the work as opposed to a lump sum or time basis  
Percentage of fee income from QBS projects.

## National industry sector benchmarking

FIDIC recommends that member associations should:

- 1 undertake national industry sector level benchmarking as a priority;
- 2 remain within the framework of the benchmarking system by considering themselves as a national-level reporting units representing the entire national consulting sector;
- 3 focus on the same generic indicators as for firms, namely their national operating environment, their performance (financial and staff), and the services they offer;
- 4 report at four levels (firm, association, national industry sector and country) as opposed to a single level for firms, since member associations must address audiences at all these levels.

Summarised in the table is the recommended set of indicators that should be reported by member associations in reviewing the capacity of its national industry sector. It is based on the concept that a single indicator should be generated for each of 16 categories.

### NATIONAL-LEVEL INDICATORS

Reporting Level	Data Level			
	National operating environment	Financial performance	Staff performance	Services
National	GNP/capita	Average firm turnover per unit GDP	Average revenue per staff	Corruption index
National industry sector	Degree of market liberalisation?	Sector turnover per unit GDP	No. staff per capita	Clarity of procurement rules
Association	Support for training per member firm staff?	Annual budget / member firm turnover	Percentage of industry sector staff represented	Distribution of activities
Firm	Stock market capitisation	Percentage of firm turnover earned internationally	Staff distribution in small versus large firms	Percentage of QBS versus QCBS

## National Capacity Index

In order to facilitate comparisons between countries, FIDIC has found it useful and extremely instructive to generate a National Capacity Index by taking an average of the 16 indicators. Starting in 1999, FIDIC collects each year national, national industry sector, association and firm level statistics to generate an index that is reported as part of the FIDIC Annual Survey at [FIDIC.org/annualsurvey](http://FIDIC.org/annualsurvey).

For the 16 categories, suitable indicators for only two categories (the national operating environment reported by the national industry sector and by industry sector associations) have not been established. So the current index is based on 14 indicators. Possible indicators for the two missing categories include the degree of market liberalization experienced by the national industry sector, and amount of government support provided to associations for training member firm staff.

The number of indicators can be increased. However, the same overall balance as the basic set of 16 indicators (one per category) should be maintained. So the next step would be to have two indicators for each of the 16 categories, giving 32 indicators. Since it is unrealistic to collect reliable data for this relatively large number of indicators, it is concluded that the FIDIC National Capacity Index based on a single indicator for each of 16 categories provides a valuable tool for a FIDIC member association to monitor the capacity of its national industry sector.

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