



***CONSULTING ENGINEERING
PRESENT AND FUTURE***

Abridged English version

December 2000

Eng. José Francisco Speziale
Argentine Chamber of Consultants. *President*
FEPAC. *Director*
FIDIC Task Forces. *Member*

CONSULTING ENGINEERING PRESENT AND FUTURE

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GLOSSARY OF THE ACRONYMS USED IN THE TEXT

ABCE	Asociación Brasileña de Consultores de Ingeniería	EIB	European Investment Bank
ACEC	Association of Consulting Engineers of Canada American Consulting Engineering Council	EPC	Engineering, Procurement, Construction
ADB	Asian Development Bank	FELAC	Federación Latinoamericana de Consultores
AfDB	African Development Bank	FEPAC	Federación Panamericana de Consultores
BCB	British Consultants Bureau	FIDIC	Fédération Internationale des Ingénieurs Conséils
BID	Banco Interamericano de Desarrollo	FINEP	Financiadora de Estudos e Projetos
BIMILACI	Biennial Meeting of International Lending Agencies and the Consulting Industry	IBRD	International Bank for Reconstruction and Development (also referred to WB)
BIRF	Banco Internacional de Reconstrucción y Fomento (Spanish for IBRD)	IDB	Interamerican Development Bank (English for BID)
BM	Banco Mundial (Forma abreviada por BIRF – English WB)	IFI	International Financial Institutions
BOOT	Build, Operate, Own, Transfer	ISO	International Standards Organization
BOT	Build, Operate, Transfer	LDCs	Lower Developed Countries
CAC	Cámara Argentina de Consultores	NADB	North American Development Bank
CBS	Cost Based	NGOs	Non Governmental Organizations
CDB	Caribbean Development Bank	PPP	Public Private Partnership
CEC	Commission of the European Communities	QBS	Quality- Based Selection
DBOT	Design, Build, Operate, Transfer	RYUTG	Red (and) Yellow Books Update Task Group (FIDIC's)
DCs	Developed countries	TFCB	Task Force on Capacity Building (FIDIC's)
EBRD	European Bank for Reconstruction and Development	TFTT	Task Force on Transfer of Technology (FIDIC's)
EFCA	European Federation of Engineering Consultancy Associations	UPADI	Unión Panamericana de Ingenieros

CONSULTING ENGINEERING PRESENT AND FUTURE

Foreword⁽¹⁾

A new environment

Consultancy's environment has changed over a very short period of time, along which the already precarious professional/intellectual arena became entangled with political (globalization) and economic/financial (globalization and privatization) priorities that have driven the consulting activity on an uncertain road, thereby impairing its prestige. These consequences are particularly serious in developing countries, somewhat disrespectfully and unfairly categorized as "LDC's", due to the advance of external consultants, as well as from unexpected hostility and trespassing from various sources such as: competing stand of firms alien to the engineering field of activity, advent and beatification of NGOs and universities as consultants, and also because of a tendency to demand diverse certifications from consulting firms. It is in this confused -and may I even say hostile- environment, that the consulting activity is faced with a scenario of multiple indeterminations.

Get leadership back

In view of the above, far from passing judgement on "how the situation must be" for it to favour the consulting activity, we shall satisfy ourselves with just expressing -on a conciliatory mood- "how we would wish it were" and in so doing we cannot avoid clarifying the "reason behind every argument", which again will doubtfully succeed in its goal to display a diaphanous well defined panorama, but may well expound the many faces of to-day's reality as derived from our disquieting evaluation. We shall nevertheless from the consulting engineering firms of private enterprise aim all our efforts at exercising our rights to recover the honorable leadership of our professional practice.

Facing this situation, we have deemed it necessary to begin with a briefing of issues that cannot be ignored, both to have a clear picture of the magnitude of the changes occurred and of the new domineering forces, and to further emphasize the arguments and objectives of this presentation.

(1) Paragraphs of a note sent to FEPAC's President on 1/20/2000

All questions, objections and criticism should be understood to mean that no specific document can be expected other than a **guide** which could reflect the goodness of procedures learnt and successfully applied (until the arrival of the privatizing-globalizing current) as opposed to the risk of modern retrogressive trends affected by not little arbitrariness. This approach shall permit the adequacies and applications which each user might consider suitable and in line with his country's tradition, and which might satisfy the likely need of achieving dignified coexistence with to-day's doctrines and competitiveness. It is also hoped that the proposed **general guidelines**⁽²⁾ have been carefully worded and edited so as to hold the maximum advisable flexibility which may render them fully apt to be used for major as well as minor projects, and the broadness of scope to make them suitable to serve both public and private owner/clients alike.

In to-day's political and economic scenario, and in the tradition of the countries of the American Continent, three regions are straightforwardly singled out with markedly different characteristics: Canada and the United States occupying the North of America, Brazil with its enormous South American extension, and the region which encompasses all of the other countries from Mexico at the North to Argentina and Chile on the extreme South.

This reality could possibly drive FEPAC to accept the individuality of each one of these regions, when considering future trends and decisions, and to think of them as "wings" of a single body. This is an important reflection for the present publication, since the emphasis on development weighs almost exclusively on Latin American countries, there being some exceptions in the case of Brazil (a reason why somewhere along this presentation we single out "Spanish America").

JFS

(2) Edited separately in a Supplement. Available only in Spanish



THE LARGEST contribution to the quality of life that we enjoy today is made by engineers. Clean, safe water, efficient transportation systems, flood hazard control, waste management, aseismic buildings, electric power generation and distribution schemes and so forth. Most of that, however, has been accomplished in virtual anonymity. We engineers –and only we- are to blame for this state of affairs. We have refused or neglected to take credit for these accomplishments. How do we recover?.

The first step. Do good work and then tell the world about it, making our stories exciting. Let the public visualise a world without engineering –“the ingenious ingredient”- so that our achievements are put in the proper perspective. A world without bridges, tall buildings, clean water, electricity, communication, rapid transportation. Then we should all visibly show pride in our profession by putting “Engr.” in front of our names like some of our colleagues in Europe and Latin America.

The second step. The compensation for our services has to be valued and performance based, not traded like a commodity. The best trained minds will not choose engineering consultancy if the compensation is not on a par with other learned professions, such as medicine.

Securing the future. Let us step out the shadows of anonymity and exercise leadership in the challenges facing the world in the 21st century. We must become authoritative voices to plead the case for sustainability and prudent resource utilization. Let’s quit talking to ourselves and communicate with those who can restore our image. But our voices will not be heard unless we step out of the crowd and up to the podium. **Will the invisible profession**

**please step
forward**

Eng. William D. Lewis,
FIDIC President
(1995/1997)

Layout of this presentation

It is FEPAC's intention to address all national associations through a condensed presentation of the domains of consulting engineering, concerning its institutions, the function of international lending agencies assisting development programs, and the characterization of all countries in terms of achieved level of evolution.

We thus present an objective panorama of to-day's situation in the consulting activity and of its future perspectives in the international arena, transformed of late to follow the planetary dream of globalization in a hasty and reckless manner which is devoid of any conscious evaluation, advisable caution and a sense of responsibility for the intensified socio-economic imbalance, having already altered not few habits, customs and procedures of our socio-political-professional existence, giving in to the capitalist-mercantile empire and the economic-financial domination of "businesses" by international mega-corporations.

In particular, Latinamerican consultancy suffers a not small quota of abandonment which impairs a capacity conquered along no less than forty years, deteriorates its technical cadres, and risks technological regression.

For all of these circumstances, before proposing procedures and standard documentation for their use by consulting firms and their potential clients, this publication begins with a presentation of historical references, displays comments relevant to international federations, and illustrates the roles and actions of international financial institutions, whose power, authority and resources rule the distribution of funds for the development of society the world over, and determines the performance of consultancy in the use of such funds within the domain of professional engineering and associated and complementary intellectual fields. Chapter 1, devoted to this initial presentation, winds up in subchapter 1.6 with a crude assertive statement on the obstacles. that the present political and economic-financial reality imposes on the present and future development of consultancy.⁽³⁾

A wider view with more emphatic incisive reflections focused towards the future of consultancy follows in Chapter 2, where two critical issues of enormous repercussion are raised: a) a concise text emphasizes the correct interpretation of the concepts of "technology" and "transfer of technology" both currently used with not negligible carelessness (2.1 and 2.2); b) subjects around the damage stemming from which FEPAC upholds a steady counter position for the defense and diffusion of Latinamerican consultancy's capability and prestige, are summed up in closing memorandum-like remarks (with obvious emphasis on Hispanoamerican countries) (2.3).

Chapter 3 is specifically devoted to consulting services, and briefly comments on types of services and sequential phases involved in engineering projects, which –on the basis of previously defined concepts– are followed by the proposal of standard bidding documents (Prequalification Standards and Conditions of Contract) to be used by clients in consulting services calls for bids.^(*) In a final sub-chapter (3.4) a

FEPAC Elementary Code of Professional Ethics is proposed, inviting all member associations (MAs) to abide by its long standing rules, much of which has been borrowed from FIDIC's experience and guidance.^(#)

An Appendix proposes the terms for carrying out a suggested survey for an improved updated evaluation of consulting firms from FEPAC's member countries, through their respective chambers, to be used in actions and efforts carried out by the Federation in international fora to pursue the assertion of consultancy.^(#)

^(*) These documents have been edited in a separate Supplement, and are available only in Spanish.

^(#) See Index

⁽³⁾ We celebrate the Brazilian campaign started in 1998 with the research published under the heading of "Consultancy rethought" that culminated with an important survey circulated as "Strategic Aliances in Consultancy" (made known by FEPAC simultaneously with the present document) in which constructive initiatives, and novel forms of contracts and management in vast fields of engineering professional capacity and related and complementary areas, these subjects -not dealt with within the scope of this publication- are a valuable extension of the analysis of questions considered herein aimed at expanding the spectrum of action of consultancy comprising even working links with commercial companies (a type of association denied to classical consultancy), contractors and suppliers). We must point out that Brazil has consolidated criteria for calling tenders and awarding contracts with stable legal support, by adopting a practice which differs from the one followed in other Latin American countries. This is mentioned in some paragraphs of the present document (namely in the Foreword and in Chapter 3.2) and cannot be excluded from the consideration of our "A present-day view of consultancy". It must be furthermore stated that Brazil has a remarkable lobbying capacity both with its government and with international financial organizations, rarely to be found in other Latinamerican countries.

1 A PRESENT-DAY VIEW OF CONSULTANCY

1 A PRESENT-DAY VIEW OF CONSULTANCY

1.1 A BIT OF HISTORY

The early empiric and imaginative ingenuity of the ancient world was gradually expanded by the progress of technology, the decisive drive of which, plus growing scientific support, gathered momentum with the onset of the industrial revolution half way along the 19th Century.

The development of specialization followed suit so that well into the 20th century such concepts as integration and teamwork began to define the domains of engineering, leading to to-day's multidisciplinary professional associations.

It is in the course of that evolution that the division of labor began to develop in parallel with the expansion of the different fields of specialization, a process which fostered the development of new channels of progress giving rise to associations of professionals self-defined as "consulting engineering firms", wisely identified as being independent of public administrative functions (though not always) and of industrial organizations.

Engineering consulting firms pooled their strength in national **chambers**, which in turn transferred their *raison d'être* and professional convictions to the most prestigious fora of **international federations**, thereby building solid links with political, social and economic-financial spheres of the international arena.

FIDIC (Fédération Internationale des Ingénieurs Conseils) created in 1913 by three European national associations of independent consulting engineers, emerged as dean federation of the consulting activity. Its novelty gave rise to an expansive wave of knowledge and interchange and fostered the spreading of its constitution and objectives.

Latin America associations were formed sometime around the sixties, the Latin American Federation of Consulting Engineers (FELAC) coming to life in 1972, to be later expanded to become the Panamerican Federation of Consulting Engineers (FEPAC) in 1995 by the incorporation of the Association of Consulting Engineers of Canada (ACEC), and the American Consulting Engineers Council (ACEC), founded in 1925 and 1910 respectively.

- **Today and tomorrow**

Excessive modesty regarding the disclosure of its significance and achievements *vis a vis* society, has weakened the classical order of consultancy, thereby imposing no few alterations on its status and performance, an attitude that has been made worse by the unfavorable changes introduced in political and professional terms due to the advent of globalizing and privatizing currents, which forced a major restructuring

of public administrations, and to the economic and financial predominance of private activity.

With a clear view of times to come, as if foreseeing new difficulties ahead well in advance of the onset of our present-day reality, Mr. William D. Lewis, FIDIC's president for the 1995-97 period, admonished all of us engineers on "the need to step forward" and to assert and strengthen our image for the whole of society to know who we are, what we do and what we stand for.

His deeply objective brilliant **message**, a lot of wisdom in just a few words, has been chosen to shed light on the first page of this presentation following the foreword.

1.2 ON THE ROLE OF CONSULTANCY

An article intended to explain the role of consultancy in the domain of engineering was written in Argentina in the early 1980's, in relation with the expectations arising out of the reestablishment of a democratic government. Its original title was "Consulting Engineering Firms from Private Enterprise" but was later published under the heading of "National Consultancy." The straightforward message was aimed at official technical bodies and somewhat sideways to contractors. To-days' competition from universities had not yet made their appearance, nor was there any presence of NGOs.

The said article, a transcription of basic paragraphs of which follows, expounds the function performed by consulting engineering firms as private enterprises in the development of infrastructure projects, underlying the absence of any conflict of interests or of any competition between their performance and the role of public technical organizations, contractors and universities.

That position being quite pertinent and worthy of merit, even within the administrative restructuring brought about in recent years in the majority of countries, the deepest present concern of the consulting activity lies with the reprehensible competition from **universities** and from the recently defined as **non governmental organizations**. Universities have an exclusive and unquestionable role of their own: teaching and research; therefore there should be no ground whatsoever for confusion vis-à-vis the professional practice of its graduates through consulting engineering organizations. As for NGOs, they can perform valuable commendable activities in various areas, but it would be devoid of any sense or argument to justify their trespassing into the engineering fields of consulting firms from private enterprise.

Similar concern is raised by the extremes of present day reality wherein governments, within the framework of privatization and concessions, tend to leave design, construction, operation and maintenance of projects to the decision of investors and concessionaires, thereby detaching themselves from their social and political responsibilities towards the community. Apropos of this situation, stemming from privatization and concession of State-owned assets and utilities, everything pertaining to the need of professional services for public organizations, as condensed in the above referred article is equally applicable in the domain of private activity, and it should therefore be legally claimed.

It is likewise to be expected that once this anti-state "furor" be over, and once the necessary balance will hopefully be reestablished, the State shall once again perform the untransferable roles of its "imperium", for which it shall naturally have to resort to consultancy.

These arguments are to be upheld in national and international fora to assert the intellectual professional values which FEPAC stands for.

The following paragraphs have been transcribed from the above referred article published in Argentina in 1984.

NATIONAL CONSULTANCY

PRESENTATION

The concepts transcribed in the present article refer to the performance of private professional groups in the study, design and construction of major public works, and although they basically reflect an experience acquired almost exclusively in the field of hydroelectric developments, its general nature makes them valid to be applied to the much wider scope of all types of infrastructure works and electromechanical plant.

Obviously, given the broad context of ideas which it covers, the article cannot but offer a simplified description of a group of important interrelated, complex, debatable issues.

Hence, alongside with the undeniable intention of being convincing, which this presentation does not hide, the reader will find the prime objective of inviting reflections on the various subjects and defining coherently each party's position (which includes the State as grand administrator) with a view on our professional performance, so as to opt for what might best suit a better integration of society, a stable balance for our institutions, and the most favorable conditions possible for the optimum development of us all, on our work and in our lives.

JFS

(1) Introduction

(1.1) ENGINEERING PRACTICE

Different orientations are to be found in the professional activity of engineers, each of which is identified by established boundaries and characterizes the specific idiosyncrasy of its practitioners, as will be clearly understood from the simple description that follows, listing four fields of engineering activity set out from the highest placed theoretical-scientific ceiling [1]) at one end to the most outstanding practical-technological profile [4]) at the other, with two important domains [2) and 3]) placed between them:

- 1) Research and teaching
- 2) Project design and construction supervision
- 3) Planning, management, operation and maintenance of works and services
- 4) Construction of works, manufacture and erection of plant.

Except for teaching, which in its present vague structure is open to the existence of different experiences, all the other fields entail the adoption of an exclusive manner of living and working.

The following list links the four respective exclusive fields wherein each activity is performed as previously defined:

- 1) Universities (state-owned or private)
- 2) Engineering firms (private activity)

3) State-owned services and administrations⁽⁴⁾

4) Contractors and manufactures (private activity)

(1.2) PRIVATE ENGINEERING FIRMS

(1.2.1) Preliminary definition

Argentine professional groups from private engineering and associated branches began to take shape about 20 years ago and reached maturity over the last 10 years with the integration and operation plus the highly qualified performance of well established firms, the potential, organization, and experience of which has allowed them to successfully cover a vast area of services, exclusively provided by foreign firms until a few years back.

Engineering firms are essentially teams of professionals fully devoted to the design and management of projects, with the exclusion of any other form of professional activity, no commercial links with contractors, manufacturers or suppliers, and no dependence from public organizations.

This activity of private professional associations embraces the whole of the construction industry, playing an outstanding meaningful role, particularly in

(4) In the year 2000 "and concessionaires or private owners" must be added.

major infrastructure and industrial projects, both public and private.

(1.2.2) Relationship with public administrations

Bearing in mind the above referred different orientations of engineers in the fields open to professional practice, and underlining the fact that consulting engineering broadly embraces all areas and stages of the constructions industry, with particular emphasis on their performance when they are entrusted with design and/or direction/ management and/or supervision, and/or inspection and control of operation and/or maintenance, in connection with public administrations' responsibilities regarding infrastructure development and expansion of public services:

- these firms have both the structure (organization) and the experience which allow them to fulfill an important-function complementary to those assigned to State organizations, by reason of the above stated broadness and flexibility of the specialized services that characterize the field of activity of consultancy, which covers the full range of government responsibilities linked to planning, management and operation of engineering works, electrical and mechanical plant and services.
- likewise due to the discontinuous nature of "in house" design work, and of construction supervision by State organizations, it works in all parties' favor to entrust these specialized activities to private consulting engineering firms, thereby avoiding to load the public budget with in house professional teams of various specialized fields which would unavoidably be kept idle for not insignificant periods of time in between successive commitments.
- experience has proved that private consulting firms will best perform their duties when dealing with state administrations and utilities which are themselves well organized, stable and highly qualified, thereby allowing to build up the necessary integration and a spirit of teamship, so that no clashes or idle conflicts of interest may interfere with either partys' freedom and responsibility to best perform their respective assignments, both working as one for the good of society.

Summing it all up, it is clearly seen that consulting engineering has a well defined role to play in complementing the functions of public administrations technical bodies

which they thereby help to enhance and consolidate, while in a broader sense protect strengthen and integrate the country's intellectual capacity gathered by consulting engineering (together with related and complementary professions), through the different forms of activity outlined on preceding paragraphs.

(1.2.3) Executive functions

Most particularly in the full role of project director-supervisor-inspector entrusted to these firms for major works they are referred to as "the Engineer" and they act as the third party, not commercially involved in the three-party integration with the two classical participants: "the Client (or the Owner)" and the "Contractor".

It must be underlined that the authority vested on "the Engineer" by "the Owner" may be so vast that "the Engineer's decision may be binding on both Owner and Contractor should these two contracting parties so decide (and it was *in this line of action that most important projects executed in Argentina around the seventies/eighties were successfully accomplished, in terms of quality of execution, construction, programme and final cost*).

(6) Conclusions

Professional services as provided by private engineering firms are a guarantee in the management of major public works, because of the triple advantage of their professional specialization, their unbiased criteria and their commercial independence.

Payment for these services does not generate additional costs, they make the most favorable, conscious and responsible use of the amounts traditionally allocated to "direction and management" allowed for in all estimates of construction costs.

It is imperative that professional services be entrusted to consulting engineering firms through impeccable unquestionably worded contracts thereby avoiding a hybrid undefined relationship, so as to make sure that "the Engineer" does constitute a solid guarantee in the sense of being fully qualified to ensure the satisfactory execution and completion of the works entrusted to him, in full compliance with the terms of technical quality, construction, programme and agreed cost set out in the Contract (Client/Contractor) documents.

Contrary to what happens to be irresponsibly judged and even spread, due to preconceptions amounting to an utter

lack of soundly based concepts, far from competing with public administrations' technical bodies, private consulting engineering firms prestigiously complement them in full harmony, strongly and authoritatively contributing to the consolidation, and strengthening of the State's technical and managerial functions.

1.3 FIDIC'S RECOMMENDATIONS FOR THE EMPLOYMENT OF CONSULTING SERVICES. FEPAC'S POSITION

FIDIC

FIDIC, the leading international federation of the consulting activity as practiced by private firms and associations, has the enormous credit of having structured the norms and recommendations that rule the contractual relations between clients and contractors and the rendering of services for the study, design, construction, supervision, and direction of works by consulting engineering firms.

In relation with the present situation of consultancy and with the orientation of this document, it is important to refer to the unique 1997 FIDIC brochure "Quality-Based Selection for the Procurement of Consulting Services –QBS–" which outlines the criteria and procedures for the employment of consulting firms through calls for bids and underlines the expertise, the advantages and the administrative and technical superiority of adjudications based on the professional quality of proposals.

This emphatic statement, supported by the general presentation of the subject in a special brochure -most unusual by FIDIC standards-, reacted in its day against an unexpected tendency emerged from international financial institutions for development, which imposes the consideration of cost in the evaluation of proposals as a basis for the adjudication of consulting engineering contracts.

Selected paragraphs from the FIDIC brochure follow:

- Its preface states:^(*)

"This brochure sets out to help all those responsible for the selection of consultants. It explains how to assess the ability of consulting firms and what method to use to select the best firm for the projects.

The phrase "quality-based selection" has been chosen because it best represents the process of selection of consulting firms on the basis of qualifications, experience, ability and integrity.

It recommends the use of the FIDIC's Client/Consultant Model Services Agreement – "The White Book" – which will establish a fair and sound relationship between client and consultant, and protects both during the course of the contract. It also discusses other methods of selection that are used by some owners, and points to the dangers that are inherent in their use."

^(*) Original English version

- Other paragraphs:^(*)

*“One factor, **qualifications**, far outweighs all other considerations in retaining consultants, especially price.” (The Institute for Municipal Engineering, a division of the American Public Works Association)*

“The method that best meets all factors is quality-based selection. That is, the client chooses the consultant on the basis of professional competence, managerial ability, availability of resources, professional independence, fairness of fee structure, professional integrity and quality assurance systems.”

“The goals of designer selection should not include minimising fees. Making fee part of the selection process will not save taxpayers money. Rather, the practice is likely to increase the ultimate costs of the public building system due to reduction in design quality ...” (Ward Commission)

“The Congress hereby declares it to be the policy of the federal government to publicly announce that the contracts for these services (design services) would be negotiated on the basis of demonstrated competence and qualifications ... at a fair and reasonable price.” (Brook’s Law)

“It is firmly believed that it is neither in the best interest of the client nor of the project itself that consultants be selected on the basis of a procurement system which includes a price comparison of their professional services. Once a price is introduced the selection process becomes biased in favour of lowest fee rather than quality.”

“The common law of business prohibits paying a little and getting a lot”. (John Ruskin from 1860)

FEPAC

Going back to the final lines of the second paragraph ...**and underlines the expertise, the advantages**... the following paragraphs will expound FEPAC’s position, adhering to FIDIC’s tradition and quoting from observations made –which are still upheld- to the 1997 version of the World Bank guidelines.

FEPAC has expressed to be in favor of the quality-based criterion (QBS) for the selection and evaluation of proposals submitted to calls for bids for engineering services, as against two other formulae which base the adjudication on cost (CBS) or on a quality-cost (QCBS) approach. FEPAC’s arguments follow:

- a) the fees for consulting services for project design and construction supervision are percentagewise not significant in relation to the project estimate;

^(*) Original English version

- b) Increased construction costs, liable to be caused by imperfect design and/or inexperienced supervision may largely surpass the overall cost of the engineering services required;
- c) inasmuch as quality must be the subject of careful objective, conclusive evaluation, cost may lead to negotiations and adjustment based on the rule of “comparing like with like”, thereby offering a wide array of possibilities of agreement should they be required; so that the Client may abide by his decision not to pay for the services being tendered any sum above his own estimate, thereby, and unless negotiations break down, the Owner will secure the selection of the best technical proposal (should negotiation with the first selected tenderer fail, the procedure is to be repeated with the runner up; and sometimes even the third or fourth on the line of outstanding technical quality). This procedure is supported by the two-envelopes bidding system: Number 1, for quality (background, staff, organization, programming, methodology), Number 2, for price (and economic and financial general aspects), which protects the Client against the potential consequences of being compelled -by the evaluation method (if cost-based)- to accept the least qualified bid, should it happen to be the lowest priced, thus staking the technical and economic safety of the project by the unwise choice of an evaluation criterion that upholds an absurd alleged economy.

Beyond the comments relative to QBS, CBS or QCBS, FEPAC has no additional criticism to raise regarding the application of other criteria described in World Bank Guidelines, except while standing by its objection to cost-based adjudication, whichever the case.

In conclusion, FEPAC holds as a general rule -particularly in the case of large and middle-sized projects- that the administrator-manager's responsibility when dealing with calls for consulting engineering services is simply and fully fulfilled by his wisdom to see to it that the contract be awarded to the proposal which combines the best professional quality and a cost not above his (the administrator's) anticipated estimate, thus avoiding to get entangled in decisions based on erroneous economic criteria in the pursuit of insignificant savings and guarantees of doubtful accomplishment.

1.4 ON THE WORLD BANK (IBRD) AND THE INTER-AMERICAN DEVELOPMENT BANK (IDB) IN THEIR RELATIONSHIP WITH THE CONSULTING ACTIVITY

Both international financial institutions have in their cadres, representatives of the American countries, as national delegates in the case of the IDB, and as regional delegates, in the case of the IBRD.

The loans for infrastructure development or institutional strengthening are awarded almost exclusively to national governments (or with their endorsement), in spite of which, and in the spirit of ongoing globalizing/privatizing tendencies, there seems to be an incipient orientation towards awarding loans to private enterprise.

Regarding engineering activities, these banks, besides awarding loans, establish guidelines for the selection and employment of consulting firms which have conceptually evolved gradually since the late sixties.

IBRD

IBRD's prologue of the revised January 1999 version, expounds the objectives of said procedure in the following terms:^(*)

i) "These guidelines 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) Bank's 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;⁽⁵⁾;

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.

ii) 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."

IDB

The 1995 version of IDB information brochure "Basic Procurement Policies and Procedures" defines the following position in the first paragraph of "General" under the heading of "Purpose and Objective":^(*)

^(*) Original English version

⁽⁵⁾ See Comments further on

^(*) Original English version

“This documents sets forth and explains the basic procurement policies and procedures of the Inter-American Development Bank (the “Bank”). It is intended to assist Borrowers, their contractors and associated suppliers when dealing with procurement related to Bank loans.

In turn, the employment of consulting services is ruled by different policies, listed in the said brochure under the heading "Business opportunities for Consulting Firms"; the basic paragraphs of its preface are here transcribed:

(*)

“The Inter-American Development Bank’s revised system for hiring consulting firms, adopted in November 1990, stresses speed, clarity and accountability - whether contracting is done by the Bank itself or its borrowing member countries or their agencies.

The Bank requires that borrower consultant selection criteria –for both prequalification and the final choice of firms –be more explicitly set out with point systems that show how each selection variable will be weighted. Bank country offices review and approve these criteria. When prequalified firms are invited to submit proposals, they are informed of the selection criteria and the names of other prequalifying firms.

Contracts for more than \$200,000 dollars are advertised in Development Business of the United Nations Development Forum. For direct Bank contracts, the Washington embassies of member countries are sent copies of these advertisements. Beneficiaries seeking to hire consulting firms must also advertise in national newspapers for expressions of interest, and inform all IDB member country embassies accredited to their country.

While the use of clear and more specific selection and evaluation criteria should help avoid disputes over contract awards, the Bank has also established a speedy system for evaluating disputes over consulting firms selection.”

“While consulting services normally represent only a small percentage of projects costs, the results of consulting work often have a great effect on project success. Therefore, the selection and contracting of consulting are important decision in project planning and execution.

The Inter-American Development Bank and its borrowers select consulting firms only on the basis of demonstrated competence and qualification for the types of professional services required. Contracts for these services are negotiated at fair and reasonable prices, and there is no competitive bidding on a price basis. The Bank requires that several proposals –usually three to six- be considered so that borrowers have a good basis for comparing firms.”

It is to be regretted that IBRD should have pushed borrowers to impose the participation of price in the adjudication of proposals [see c) above] in opposition to the convictions of FIDIC and FEPAC as described in Sub-chapter 1.3.

While FIDIC would apparently tend to opt for a conciliatory position, FEPAC shall continue to object the erroneous introduction of price, and shall insist on having the IBRD guidelines criterion concerning the employment of local firms in LDC countries broadened, and on admitting calls for bids with the exclusive participation of local firms of proven capacity, objecting likewise the insignificant sum of US\$200.000, totally devoid of sound arguments, imposed by IBRD as a ceiling, and similarly applied by BID. It must be pointed out that the two latter arguments are being studied by a special FIDIC commission with the participation of FEPAC delegates. [See Sub-chapter 1.6 "Repercussions of globalization", and, on Chapter 2, "Preliminary Comments" and Sub-chapter 2.1].

1.5 *INTERNATIONAL FINANCING INSTITUTIONS FOR DEVELOPMENT AND FEDERATIONS OF CONSULTING ASSOCIATIONS*

The world federations (FIDIC, FEPAC, EFCA, BCB) and the international financial institutions -IFI- (IBRD, IDB, EBRD, AfDB, CEC, EIB, ADB, CDB, NADB) hold an annual summit meeting in Washington (now wrongly limited to a biennial one though not for economic reasons), which constitute a highest level forum for presentations, informative interchanges and proposals of significance for the furtherance of participating institutions in the fulfillment of their respective responsibilities, to assert and strengthen the development targets designed by the socio-political and economic-financial professional dedication of all attending institutions.

These meetings contribute to update and improve manuals, guides, rules and general documentation relative to the financial function of IFIs, to the employment of consulting services, and to the award of contracts for design and construction. Improvement of the quality of life, protection of Nature, wise and careful use of natural resources and preservation of the environment threatened by the scourge of plural forms of pollution, all key issues and a permanent cause for concern, are not absent from these meetings.

The following page from a published brochure reproduces the list of the organizations which attended BIMILACI 1999 in May 20-21.

FEPAC brings to this high forum the representation of consulting firms of the whole of America, with a balanced picture of the expectations of the different regions concerning the promotion of progress and the meritorious presence of consultancy, hoping for an ever improved quality of life and welfare for the peoples, as well as greater autonomy for those institutions (consultancy among them) devoted to growth and development.

Since the meetings attract a large attendance from every continent, possibilities for debates are limited, but the wide intellectual interchange that takes place stimulates a most valuable later mail and communication. Letters sent to and from IBRD on account of comments to key issues dealt with during the May '99 meeting are inserted at the beginning of Chapter 1.6.

**Biennial Meeting of International Lending Agencies
and the Consulting Industry**

BIMILACI '99

May 20-21, 1999

LIST OF ORGANIZATIONS

BANKS

The World Bank (IBRD)
Host: May 20, 1999

Inter-American Development Bank (IDB)
Host: May 21, 1999

European Bank for Reconstruction and Development (EBRD)

African Development Bank (AfDB)

Commission of the European Communities (CEC)

European Investment Bank (EIB)

Asian Development Bank (ADB)

Caribbean Development Bank (CDB)

North American Development Bank (NADB)

CONSULTING ASSOCIATIONS

European Federation of Engineering Consultancy Associations (EFCA)

Federacion Pan-Americana de Asociaciones de Consultores (FEPAC)

Federation Internationale des Ingenieurs Conseils (FIDIC)

British Consultants Bureau (BCB)

1.6 OBSTACLES TO THE DEVELOPMENT OF CONSULTANCY

Several are the issues of deep concern which obstruct at present the normal development of the classical functions of consultancy and jeopardize its future continuity.

Main issues

Since the last BIMILACI held in May 1999 in Washington, as a benchmark, the concern expressed by the consulting activity regarding three capital issues has to be emphasized. They are presented in the following text of a note sent to IBRD and IDB representatives by a FEPAC delegate who had attended the BIMILACI sessions.^(*)

Buenos Aires, 5th July 1999

To: IBRD - Attn. Mr. Alfonso Sánchez
IDB - Attn. Mr. Jorge Claro de la Maza

From: JFS

PERSONAL

Dear friends:

I was very pleased to attend the BIMILACI in Washington on May 20 and 21, and I wish to thank and to congratulate the organizers of such an impressive and constructive event. Three main subjects captured my attention:

- *Corruption*
- *NGOs*
- *Certification of Consulting Firms*

The understandably brief presentations generously allowed at the meeting, plus the naturally concise contributions expected in the discussions, both limitations impaired in my case by my modest command over the English language, led me to the decision to say the least, but to prepare a post-meeting memorandum in which I could be more at ease to express my views. This is it.

- **Fighting corruption. A must.**

I would say that the analysis and treatment of corruption is on the right track and the subject will remain under consideration for some time. Taking advantage of an unscheduled lunch conversation with Mr. Alfonso Sánchez I contributed the following suggestions:

- a) *Prior to granting any loan for infrastructure projects, the Bank should satisfy itself that the project fits into a solid development program, that it is the best of a series of alternatives, that it has priority over other projects under consideration; and*

^(*) Original English version

b) *That the process of calling tenders, prequalifying and awarding contracts, both for Contractors and Consultants, has been satisfactory and deserves the Bank's approval.*

Later, all through the construction period, the Bank should trace the "true" final destination of the moneys disbursed from the borrowed sum, until final completion.

• **NGOs. Please, let's define them**

Regarding the advent of NGOs and their fast spreading as the invasion of a new type of strange institution that supposedly can do work in various fields of different professions (social, economic, technical) on a plain philanthropic basis, declaring themselves to be "non profit organizations", I am most concerned: do not these people have to eat, dress, support their families, etc., as anybody else?; or perhaps, are these human beings generous people totally disinterested on the material sides of our existence?, or, finally, do they perchance work without any payment but only in their spare time?.

If from any source money flows to them for doing the work through which they seem to be obtaining fairly broad publicity, they should at least pay taxes like everybody else (shouldn't they?).

All in all, unless a precise "niche of activity" is allocated to these institutions, to avoid any conflicts of interest, they will remain in my judgement as ill-defined unwelcome competitors.

• **On certification. Does anyone in the profession feel the need to be certified?⁽⁶⁾**

Now, coming to the intended compulsory certification of consulting firms, this again is developing into a most annoying unwelcome piece of news for many of us.

In the first place I wonder how and when this "imposition" came into being; second, I also wonder who will certify us, and on what grounds will the certifiers be qualified to evaluate and judge the many roles and activities performed by our profession.

I deny any judge alien to our profession the knowledge and wisdom required to embrace the immense broadness of complex activities which concur to design and build the extensive variety of engineering works (infrastructure, buildings, plants, and the like), in terms of being able to understand, and beyond it to rule on, technical capability, organization, ability to plan and program, sense of flexibility and full command over all aspects of design and supervision of construction, plus the coordination and control of all events.

⁽⁶⁾ To avoid confusion with a separate case of certification (on integrity) which had not been raised at the time, it must be clarified that this heading refers only to "quality certification".

As a consequence of my conviction, based on a not negligible experience spanning almost half a century, I -most immodestly- feel authorized to voice my concern about this "business" of certification, which I cannot define as but a new step forward from the forces of other professions which have been making evil progress, trespassing into "our property" to the detriment of our well acquired exclusive intellectual rights and freedom.

Do the old civilizations owe their amazing successes to certification?,

Did anyone need certification over the last two centuries?

*Is there anyone in our profession who is fully convinced that **there is a real need** for us to be certified?. And, should there be someone, or any number of colleagues: could we find out why, before agreeing blindly to further concessions?*

- To end with

Need I say more?

- However

In view of the seemingly unstoppable fast pace at which this worldly insistence is moving I am afraid that I will have to keep my inner convictions to myself, while admitting that certification could be accepted, but only subject to previous satisfactory clarification of the following basic points:

- 1. Why is certification required?*
- 2. Whom⁽⁷⁾ shall consulting engineering firms be certified by*
- 3. Which methodology will be applied for certifying consulting engineering firms? Scope of all aspects to be covered.*
- 4. Time term of validity of the certification.*
- 5. Any other relevant aspects such as, for instance, need of periodic updates or inspections.*

Yours,

Most cordially.

JFS

The note was answered by the Senior Procurement Specialist of the World Bank in a most courteous letter insofar attitude, but vague and elusive in scope:^(*)

"Thank you for your memo of July 5, 1999 in which you return to some of the main issues that were discussed in the course of BIMILACI. Although a letter is not sufficient to address them, I will just enclose a few comments to indicate the present Bank position in this regard.

(7) Institution, background, profession

(*) Original English version

Corruption: The Bank is engaged in fighting corruption as a development issue. The Bank is particularly concerned with all forms of corruption that may involve consultants during the process of selection as well as during the implementation of consultant assignments. As you probably know the Bank has the right of reviewing, and if needed object, all individual major decisions taken by our Borrowers during the process of selection and of use of consultants, such as short listing, evaluation of proposals, contract award. Sanctions apply in cases of fraud and corruption for both consultants and Borrowers based on the Bank Guidelines on the Selection and Use of Consultants. The Bank is also stepping up its efforts to discourage corruption during the early stages of project design by increasing the transparency of the selection process involving consultants and harshly sanctioning malpractice, including blacklisting of consultants.

I also share your concerns about the use of NGOs and agree with your points. Please note that the guidelines are clear in the respect: NGOs shall be treated on an equal footing with other consultants, and not benefit from a special treatment, nor be put at a disadvantage. The Bank shall do its utmost to ensure that borrowers abide by this policy of competitive fairness. The Bank is working at the development procurement practices that respond better to the role and objectives of NGOs, particularly local NGOs located in remote surroundings away from functioning markets, without causing prejudice to traditional consultants.

We also agree with you that we have to take certification with much caution before we make it as a condition to bid, or allocate additional points to those firms that are certified. At this stage it is not Bank policy to require any certification to compete on Bank-financed projects. Nevertheless we are collaborating with FIDIC in the investigation of this issue, which as you may know, will be further discussed in the course of the FIDIC annual conference in The Hague.

Sincerely

(GEC)

August 2, 1999

Other concerns

Together with the preceding issues, there are two other cases of great concern for FEPAC:

- **Evolution of FIDIC**

The largely concessive attitude that would seem to be making unwelcome progress at FIDIC by weakening the role of consultancy, as regards recent contract practices (turnkey, BOT, DBOT, BOOT, EPC, PPP, etc.) in which the classical image of the "Engineer" endowed with ample powers of decision (inspection, supervision, management) binding on both the Contractor and the Client on major construction projects, risks to be downgraded to the vague position of "owner's representative" with practically no powers delegated on him.

Under the circumstances, a FEPAC Director, a member of a FIDIC task force for the updating of its classical manuals on Conditions of Contract to bring them in line with modern trends, particularly for the case of Turnkey and EPC contracts, expressed his concern (in a letter dated February '99 sent to RYUTG coordinators) about the concessions FIDIC seemed to be ready to make, mainly by weakening the image and the role of the "Engineer" (an "institution" which was created and made prestigious by FIDIC throughout its history), in the following terms:

"A deep concern"^(*)

"I fear that FIDIC risks to step into alien territory, where his best advice would appear not to be welcome -as being uncalled for?- and in which there seems not to be a dignified role (if any, short of a subdued subordinated one) for the practice of engineering through consulting firms, should both contracting parties start from the (unadvisable) conviction of not needing an Engineer (FIDIC wise).

In such cases I would expect the contracting parties, bent on a two-party agreement, to set the rules by themselves, since, whichever specifications and or conditions they might decide to abide by (plus the agreed exclusion of a not commercially-committed third party -the Engineer-), it will not in any way work to the benefit of the consulting engineering prestige (least of all "boost it").

So, in spite of being in agreement with some of the arguments put forward by Contractors' representatives:

- *Why should FIDIC worry so much, stake its reputation, waste valuable time, money and brains, to make feasible a Contractors' EPC Turnkey approach which deviates from long-established sensible principles, only to go back to an insidious past of unending owner/contractor disputes?.*

And a final reflection:

Should EPC Turnkey projects expand and prevail on an almost exclusive two-party type of contract, we might soon face a "market" in which there will no longer be a place for consulting engineering firms, nor a justification for national or regional chambers; and then, unavoidably, what will become of FIDIC's (and allow me to include FEPAC's) meritorious and soundly ambitious existence?.

Does globalization and privatization, with all their newly born acronyms for engineering contracts, hold this in store for us?

(*) Original English version

As a closing remark, this is precisely what worries us most in our Southern latitude.⁽⁸⁾

A letter of a similar tenor, although somewhat downtoned and with a resigned conceptual approach, had been sent two years previously, also in connection with the preparation of a new version of the classical FIDIC Books on Conditions of Contract, to make them compatible with expanding new types of contracts (a novelty that was not alien to the global privatizing current). It is most fitting to reproduce the letter/memorandum of March '97 addressed to the RYUTG leader, sent by the Latin-American member of the group, contributing an objective evaluation of the variants introduced in contractual agreements and of FIDIC's attitude, followed by burning expectations for a return of the engineering activity to its classical order wherein the consultancy would regain its leading role in the social and political plans for the sustained development and a permanent improvement of living conditions for the whole of society:

"REFLECTIONS ON FIDIC'S RED AND YELLOW BOOKS UPDATE"^(*)

Dear Peter

I consider that FIDIC's decision to update its R&Y books, and your executive work to see it through, are to be commended.

Beyond all the drafting and updating of clauses, and the unavoidable detailed analysis of alternative wordings, extension, balance, sequence, consistency and priorities, what is actually being addressed is a new political and (socio-) economic-financial reality which has tremendous repercussions on the very essence and "raison d'être" of our Federation.

It is brave of FIDIC not to hide away from the new reality. Whichever our social and political leaning or preference the fact remains that our Federation (i.e. the whole of the consulting engineering community) is faced with a new approach for the accomplishment of large and middle size engineering works, in which the key role traditionally assigned to design and construction management by a commercially independent party (the "Engineer") seems now being diluted in a cloud of power brokers and decision makers who may go as far as giving undisputed priority to financial returns rather than to the overall optimization of a project through engineering excellence and wisest use of natural resources.

In this "scenario" (a definition loved by innovators) design work may find no few difficulties, and most of the tasks involved in project management (detailed engineering, detailed inspection, construction supervision, overall planning,

⁽⁸⁾ At the FIDIC Conference in Edmonton in 1998, the consulting community was surprised by an unexpected novelty (though relatively harmless, yet annoying), a declaration, as decided by the vote of the majority, to amplify the concept of "services of the consulting engineer" through the intendedly more comprehensive one of "Technology based intellectual services", followed by a new supposedly of the consulting activity as "industry". Those of us who express ourselves in Spanish, refuse to support the erroneous use of the word "industry" and shall continue to talk about "professional activity". On the other hand, we find that the definition of "technology based intellectual services" is devoid of any objectivity, since there are other professional areas which apparently FIDIC would be seeking to incorporate (Law for one), where technology has absolutely no (or very little) bearing. We could rightly speak of "liberal professions" and it is most valid to consider them for their intellectual nature.

We do find pertinent, to underline the intellectual nature of the activities individualised in Spanish as "liberal (university) professions", which has to be kept alive and independent.

^(*) Original English version

control and coordination, contracts management, dealing with claims, dispute settlement) which used to keep well trained teams of engineers and technicians at construction sites for years, might no longer be held in high consideration. It so seems that in the "globalized-privatized" world the builder-owner-operator may tend to (wrongly) decide for himself, as it is his own money at stake, and he might even feel relieved at the prospect of being able to get rid of that "old nuisance" -the (independent) Engineer-.

It would seem that FIDIC has foreseen these somewhat unexpected prospects and has understood that the Federation's goals have to be made compatible with the requirements of the upsurging political-economic-financial "wave", for consulting-engineering to continue to play a role, however modest, in project design, construction supervision and management. Thereby the drafting of updated "market oriented" conditions of Contract to suit the new governmental-entrepreneurial forms of contract such as BOT, BOOT, DBOT and its likely derivatives.

In this context, with a watered down, minimized, not independent and not necessarily impartial, coupled with adjudicators and even absent "Engineer", the detailed definition or streamlining of any one term, clause, expression or shades of meaning of texts which reflect a traditionally glorious experience, are far less important, or even needed, than the various other all pervading contractual aspects on the basis of which investors and financiers can get the best guarantees of minimum capital investment, minimum "up front" disbursement, low risk and high returns for their money. (There is nothing wrong anyway in RYUTG's commitment to improve what can be improved of what might be left of existing documents). Thus, risk assessment, economic and financial expertise, legal advice, insurance protection and overall smart brokerage, occupy now the stage which for decades has been the showcase of consulting engineering.

Summing it all up with a simple metaphor, engineers, who traditionally drove the locomotive, are now frantically (some with religious resignation and high hopes in their hearts) running behind the fast train, looking for "terms and conditions" to board it again and -why not ?- regain the locomotive in years to come.

And that is also why, in spite of all the passions, valuable humble wisdom and good advice displayed by RYUTG's engineers, the wisest and more "realistic" contributions would seem to be those from the brilliant members and advisors - all distinguished professionals from other fields- who dealt with liabilities, risks (technical and financial) legal matters, insurance. They, together with the bright team leader-drafter-coordinator, are perhaps the ones who most solidly kept their feet on the ground, looking at reality in the face and not letting themselves be deluded by dreams and recollections of a grand time past. Their approach has to be adhered to while we look ahead towards regaining an undisputed dignified place for us engineers in the projects of the future, and while we strive for the recovery of the consulting engineering community's leading role in society's plans for sustained development and ever improving living standards everywhere.

- **Repercussions of the globalization and privatization processes**

The above referred new forms of contract, as defined by their pertinent acronyms, are the product of fast moving changes of global amplitude characteristic of the industrial and commercial expansion, the socio-political and economic-financial repercussion of which has generated the globalization-privatization-corruption circuit and has diluted governmental

authority in countries on their way towards development (LDC's by IBRD designation) following the State-private activity-economic/financial corporate ownership cycle.

Such a reality has a restrictive effect on the activity and progress of local consultancy which is thus confined to a sudden conjunction of decidedly unfavourable conditions, in which the limited participation of consultancy generally admitted by new terms of contract (the investor/contractor being the party that sets the prevailing conditions) and the reduced latitude allowed by IFIs (BIRF as the leader) to local firms in engineering projects (through their arbitrary ranking of all countries outside the self described "first world" of DCs as LDCs).

The absence (by omission?) of consulting firms in the evaluations and negotiations leading to the privatization of public works and services, and the ensuing tasks of operation and maintenance, remain as a regrettable arbitrary disposal of public assets.

There are however those who react at this unjust situation. Thus, within FIDIC (not implying any contradiction with some surprising attitudes queried elsewhere), there is a specific task force (on Capacity Building) preparing a report which will most likely call for the definition of no less than three levels of LDCs: those closer to the DCs, the ones farthest, and the intermediate ones; a reasonable criterion and a sensible evaluation liable to be favorably accepted by IFIs.

In order to objectively show the degree of subordination and dependency to which Engineering may fall with reference to other professions, it should suffice to know the structure of authority and responsibility that most attracts investors to carry out the works they finance. Investors are obviously first and foremost (they are the main financing source) and they are followed by Contractors -and most often by Suppliers- (who enter the financing frame by accepting "equities"); there follows a retinue of advisors, namely economic- financial, legal-juridical, insurance, not to mention mediators (brokers). Engineering provides the design.

The aforementioned invites reflections and raises the dread that in future works thus conducted serious problems might be expected, to the prejudice of society, should performance rules and responsibility linked to the key phases of engineering along the conception, execution, operation and maintenance of the works be overlooked.

It is likely that in the area of the privatized public services, supposedly supervised by state agencies ("entes reguladores"), the quality of services and their maintenance might be neglected due to lack of the necessary supervision normally entrusted to third parties not commercially involved, this is precisely a key role to be entrusted to consulting engineering while the profession has been absent (uninvited) from hasty and unwise (without consultation) contractual agreements.

2 TOWARDS THE FUTURE

2 TOWARDS THE FUTURE

Preliminary comment

Consultancy in Latin American countries celebrated the expansion of their federation –FELAC- upon becoming the Panamerican federation –FEPAC–, the whole american continent being thus integrated by the membership of ACEC Canada and ACEC USA; the Mexican-USA frontier dividing two regions of quite different history and existence.

Even though Latin America does have a solidly established engineering activity (as regards the consulting capacity, many Latin American countries are progressive LDCs), the social and economic situation is far from the prosperity and progress of Canada and the United States. In both countries, on the other hand, as is the case with Central European nations, the consulting activity generally counts with important support from their governments and solid links with the industry; they also have a valuable tradition of cooperation with IFIs; so that they benefit from significant advantages born from strong relations which are most uncommon in Latin American countries, with the sole exception of Brazil,⁽⁹⁾ a situation which has been underlined in the Foreword (FEPAC in three Americas).

Given these circumstances, comments, observations, and proposals presented herein are almost entirely and exclusively pointed towards the consolidation and strengthening of Latin American consulting activity by supporting their growth and prosperity while warning them about obstacles and risks to be overcome.

In this context, we should likewise mention that although reference to IFIs of various continents has been made in the initial pages, the financing of works in the American continent is almost exclusively circumscribed to the action of IDB and IBRD, both sited in Washington (plus occasional European and Asiatic –Japan- loans).

The texts that follow under 2.1 to 2.3 make reference to two important matters relative to the weakening and subordination of Latinamerican consultancy, and are an extension of the situation described in paragraph 1.6 ("Obstacles to the development of the consulting activity"); they pursue the double aim of emphasizing the meaning of technology and its transfer, and objecting the intended imposition of arbitrary certifications to engineering consultancy firms, thereby paving the road of progress towards a future of dignity and growth.

2.1 *NOTE ON "TECHNOLOGY" AND "TRANSFER OF TECHNOLOGY"*

Technology and transfer of technology are terms all too often carelessly used (a frenchman would say "pour épater le bourgeois" i.e. to charm the middle-class man), while it must be recognised that these words have a

⁽⁹⁾ Source: "Cuadernos ABCE", N° 1 (3ª ed. 1997), N° 2 (1994) and N° 3 (1996)

precise meaning in our professional environment, being frequently applied as a statement of value when defining the level of progress attained by consultancy in LDCs through the development of local firms.

There is at present a FIDIC working group, initially designed as Task Force on Transfer of Technology (TFTT), later changed to Task Force on Capacity Building (TFCB) -euphemisms are more pleasant to the ear-, to which one of FEPAC's representatives submitted (in January '99) some notes on "technology" and "transfer of technology" (herewith transcribed), hoping that the correct sense and the intrinsic value of these words shall be taken into account when LDC's firms participate in IFI (IBRD "up front") financed calls for consulting engineering services. [Additional comments are to be found in the following sub-clause -2.2-]

"Before we indulge in probably lengthy discussions centered on our subject (the "transfer of technology") I consider it advisable to reach the necessary understanding (and hopefully agreement) on the meaning of a few related concepts:^(*)

- a: what actually is technology?
- b: why and how does it help mankind
- c: how and when does it become a tool for the development of "less developed countries"

In order to invite this preliminary approach I am herewith offering what claims to be no more than a clumsy hasty version of a passage of a presentation at a round table meeting in Bs. As. more than ten years ago:⁽¹⁰⁾

"We could consider "engineering" in its broadest sense (lato sensu) as an intellectual and practical activity embracing Science, Engineering (proper) and Industry. Technology is a separate matter".

From the highest intellectual level *Science* deals with research; it discovers and reveals new concepts; new uses, new applications and behaviors of matter, new principles, new physical and chemical laws, thereby expanding the realm of knowledge and the scope of man's coexistence with Nature. Engineering and Industry profit from this broadening of new choices and new tools offered by Sciences' offspring.

Engineering conceives plural new designs improving the quality and enhancing the importance of its creations for the good of society.

The *Industry* puts engineering designs and ideas into practice through manufacture and construction, improved "know how", systematization and streamlining of procedures.

The transit from Engineering to Industry cannot materialize without the contribution of *Technology*. Technology provides knowledge on materials, information on patterns of matter, tools, systems and procedures, which are fed into the engineers' intellectual creativity and imagination both in the design office (Engineering) and in the workshop (Industry). It can be seen that while we have

(*) Original English version

(10) Round table "Engineering and technology as export promoters". UPADI, April 1985.

Science, Engineering and the Industry as clearly determined areas of activity, while there isn't a specific exclusive one for Technology.

Technology appears therefore as the result of the integrated efforts and interaction of the three large areas of Engineering "lato sensu" (as defined in the initial paragraph in Italics).

From this point of view it could be stated that it is absolutely impossible for any one country "to absorb" and least of all "to transform", "create" and "export" technology, unless it has managed to attain the needed scientific, engineering and industrial skills and capabilities.

From the integration and interaction (involving no negligible number of "feed back cycles") of the three great areas in a vast variety of activities and goals, through thoughtful planning, it will follow that Science will study, analyze and produce new developments related to principles and concepts bearing on selected local national or regional subjects, on the basis of which Engineering will carry out designs that will provide suitable solutions to unsolved problems, or improved approaches to known practices, which in turn will materialize in new developments and better products, with the resources made available to the Industry from the ever expanding fields of scientific (Science) and technical (Engineering) knowledge.

The scope of activity and cumulated knowledge of all three large areas will thereby be gradually broadened. It is only under these conditions, having acquired the capacity to absorb, transform, create and export technology, that the "less developed countries"⁽¹¹⁾ will be able to achieve their decisive "leap" towards growth and prosperity, which will result in improved living conditions for their peoples and a dignified place among the World's nations."

(11) In these days (year 2000) somewhat carelessly addressed as "LDCs"

2.2 LDCs, TECHNOLOGY AND CONSULTANCY

By virtue of what was expounded in 2.1 above, in relation with technology and its transfer, FEPAC's delegate upheld the following position when the latter subject was raised in a FIDIC task force: *a positive transfer of technology in countries qualified as LDCs (and for that matter the "training" of professionals) can only be achieved through local -however incipient in many cases- consulting firms which have reached the capacity to absorb and spread new teachings and experiences.*

Where (in any given country) such (consulting) firms do not exist, the training professionals as well as the transfer of technology could make sense and become a reality only after a long evolving process dependent on all around growth and development.

In order to contribute to its progress and to strengthen already well established local consultancy, LDCs support the rule that in IFI financed calls for engineering services foreign firms which would wish to participate should enter into an association with their local counterparts.

For the case of IBRD financing where the participation of firms from abroad could be admitted without local association, FEPAC holds that by force of IBRD guidelines for the evaluation of proposals (and by reason of the above statements), these firms score cannot be above 80 points (on a 100 basis), the 20 points being deducted accounting for the maximum score assigned to training of professionals (10) and transfer of technology (10); both items are deemed to take effect only through the capability of existing local firms to be joined as partners.

2.3 FEPAC'S STAND

FEPAC's disagreement with the arbitrary global designation of all countries outside the "first world" as LDCs is made obvious in the preceding paragraphs.

Economic-political transformations and generalizations would promote the suppression of nations' borders and the domination of world engineering by "DCs", thus creating an uncomfortable unjust situation for consultancy in the arbitrarily rated as LDCs, which would be further aggravated should the imposition of coercive obligations to submit to unwanted and unnecessary certifications -alien to the respectable tradition of the practice of consultancy in most Latinamerican countries-succeed.

The certifications that apparently head towards becoming requirable by banks and through them, by countries, refer to the "quality" and "professional integrity" of consultants, whether firms or corporations.

Quality

"Quality" has to do with organization, managerial ability and technical capacity. These concepts are in the first place an essential part of the professional practice and are not applicable to commerce or industry (*"stricto sensu"*); in the second place, particularly organization wise and on grounds of technical capacity, although far from being of an esoteric nature, these concepts are not applicable to practitioners of other professions; both views are besides characterized by possessing much of to-day's considered most valuable "strategic aspects". Considering the all round merits rightly attributable to each consulting firm and their unobjectable record of "self government", these reasons should provide sufficient undisputable evidence to do away with any attempt at disturbing such harmony by imposing unnecessary and unwelcome quality certifier intruders.

Professional integrity

Integrity as a word is but an euphemism which has had an awkward start in our environment, even though it contributes the elegance which resonant "corruption" could not possess.

The so called "integrity certification", should it be applied with the astounding enthusiasm likely to be expected from the World Bank (IBRD) and the Inter American Development Bank (IDB), and more surprisingly still, by the International Federation of Consulting Engineers (FIDIC) [!!], becomes an incestuous and unsincere intrusion in the private life of most respectable professional institutions (be it understood: engineering consultants and neighboring and complementary professions; not commercial and industrial international corporations).

Everything seems to have been set loose by a World Bank publication, prefaced by its present president Mr. James D. Wolfensohn, edited in September 1997, under the heading "Helping Countries Combat Corruption. The role of the World Bank"; a booklet that makes interesting reading and would essentially appear to disclose the Bank's own problems of –we dare say- internal discipline, and (what needs no previous announcement) its deep concern for corruption (of "public officials") in borrowing countries, an issue which is exposed in the first lines of Chapter 1 "Key Messages".

"The purpose of this report is to provide a framework within which the World Bank can approach corruption. Such a framework is needed to guide Bank activities at four levels:(*)"*

(*) Original English version

- Preventing fraud and corruption within Bank-financed projects
- Helping countries that request Bank support in their efforts to reduce corruption
- Taking corruption more explicitly into account in country assistance strategies, country lending considerations, the policy dialogue, analytical work, and the choice and design of projects.
- Adding voice and support to international efforts to reduce corruption.

The report concludes on Chapter 9 “Concluding Remarks”:^(*)

“..., institutions are central in the fight against corruption. Getting economic policy right, enforcing laws, maintaining financial management systems, and practicing sound procurement across the public sector require well-functioning institutions. Seen in this way, corruption is as much a symptom as a cause of malaise. The Bank needs to deepen its understanding of how institutions evolve and of what external agencies can do to help countries develop strong institutions. It needs to place more emphasis on high-quality public sector management and governance work. This has implications for staff skills and for the resources the Bank devotes to this area.

Finally, the Bank should not think of itself as working alone in this area. If countries are to make progress in combating corruption, it will come about only through national efforts that external agents like the Bank can support with policy advice and financial resources. In providing this support, the Bank needs to develop partnerships with other agencies and NGOs that are active in this area.”⁽¹²⁾

Final Comment

Unfortunately, FIDIC does not seem to share our concern. And it is a Task Force of theirs that has produced the standing version of "The Engineering Consultants Action Plan Against Corruption - Integrity Management System - Towards an International Standard on Integrity Accountability" published in August '99. (FIDIC would likewise be considering with ISO's participation adhering to standards for the Quality Certification of consulting firms, thereby shifting from a previous relatively recent stand not to consider such requirement compulsory.⁽¹³⁾ These novelties would surprisingly be coming into existence against long established criteria of tradition and autonomy in consultancy which FEPAC reveres.

^(*) Original English version

⁽¹²⁾ • The final reference to NGOs makes us all the more worried.

• Regarding the Bank's concern for the course of corruption, the reader should ponder the objectivity of the letter that opens Chapter 1.6, page 21, particularly on the subject of "Flighting corruption. A must".

⁽¹³⁾ A Guide for the Interpretation and Use of (Standard) ISO 9001, 1994 Standards for the Consulting Engineering Sector.

While “Quality Certifications” appears as a groundless requirement, “Integrity Management” and its “Certification” in the terms of the above referred document, which would have the blessings of leading international financing institutions –supporters of economic development and consultancy-, emerges as a domineering idea of oppression and submission (unless compulsory rules be done away with the inclusion of FEPAC’s logotype in the version being circulated, should be reconsidered); IBRD, IDB and FIDIC cannot dream nor sincerely believe that a decisive step is thus really being taken to suppress corruption worldwide. It is naïve to think that facing the powerful financial strongholds of banks and the political power of “DCs”, it is the economically insignificant consulting firms (particularly those of “LDCs”) the ones to keep an eye on as being suspected of ruling corruption. On the contrary, all three institutions should support the “promotion” of qualified LDCs having highly experienced consulting firms credited with a sound organization and the availability of state-of-the-art technology, which are likewise well prepared to collaborate with the less advanced countries and contribute to their development.
