

The Gazette  of Pakistan

EXTRAORDINARY
PUBLISHED BY AUTHORITY

ISLAMABAD, SUNDAY, AUGUST 24, 1986

PART II

Statutory Notifications (S.R.O.)

GOVERNMENT OF PAKISTAN

MINISTRY OF WATER AND POWER

NOTIFICATION

Islamabad, the 24th August, 1986

S. R. O. 809(I)/86.— In exercise of the powers conferred by section 25 of the Pakistan Engineering Council Act, 1975 (V of 1976), the Executive Committee, with the previous sanction of the Federal Government, is pleased to make the following bye-laws, namely:

1. Short title and commencement.— (1) These bye-laws may be called the Pakistan Engineering Council (Conduct and Practice of Consulting Engineers) Bye-laws, 1986.

(2) They shall come into force at once.

2. Definitions.— In these bye-laws, unless there is anything repugnant in the subject or context,-

(a) “allied professional” includes –

- (i) architect or town planner as defined in the Pakistan Council of Architects and Town Planners Ordinance, 1983 (IX of 1983):
 - (ii) geologist holding a University Degree in Geology:
 - (iii) hydrologist holding a University Degree in Hydrology:
 - (iv) agronomist holding a University Degree in Agriculture (Agronomy):
 - (v) qualified economist, financial analyst, computer scientist, system analyst, land surveyor, quantity surveyor holding a university degree in the relevant discipline.
- (aa) “consulting engineer” means any person, partnership, corporate body or any other legal entity which independently performs study, prepares reports, makes design, supervises project implementation, construction, fabrication or similar advisory activities in the engineering disciplines and is registered or licensed as such by the Council;
 - (ab) “Council” means the Pakistan Engineering Council;
 - (b) “employer” means an individual person, firm, corporate body, public authority or any other agency who wishes to engage the services of a consulting engineer for rendering professional services on engineering and allied works;
 - (ba) “foreign consulting engineer” means the enterprise incorporated or registered as a consulting engineer outside Pakistan;
 - (bb) “Pakistani consulting engineer” means an enterprise registered as such by the Council;
 - (c) “project” means the engineering and allied work described in the scope of professional services to be rendered by the consulting engineer for the employer;
 - (d) “quality based selection” means the method of evaluating the proposals in which the consulting engineers

participating in the proposals are ranked solely on the basis of their technical proposal;

- (e) “quality and cost based selection” means the method of evaluating proposals in which the consulting engineers participating in the proposals are ranked in order of weighted evaluation awarding minimum eighty per cent for technical proposal and upto twenty per cent for financial proposal.

Explanation. – In case of mega or complicated projects, preference may be given to quality based selection;

- (f) “negotiations” means joint deliberations between employer and the consulting engineers for making adjustment in the given proposals, if needed, in respect of technical services, financial terms and legal contracts based on terms of reference, methodology, work plan, activity, staff schedule, etc.
- (g) “supervision” with its grammatical variations and cognate expressions means detailed and resident supervision of the construction or fabrication of engineering works by a consulting engineer; and
- (h) “top supervision” with its grammatical variations and cognate expression means supervision as and when needed from a consulting engineer to assist or advise some other supervisory authority as required by the client. Consulting engineer rendering such top supervision is barred from verifying the contractor’s payment. Liability for such top supervision shall be mutually agreed between the parties except those in bye-laws 5.

3. Ownership.– (1) An individual practicing as a consulting engineer or a sole proprietor of a firm of consulting engineers shall be a professional engineer with a minimum of five years of professional experience with Masters degree or minimum of ten years of professional experience after graduation.

(2) On the demise of the individual or sole proprietor of a firm of consulting engineers or his becoming incapable of rendering professional service due to incapacitation and circumstances beyond his control, his successors may be permitted to complete on-going projects only, but such

permission shall not exceed the time required to complete the on-going projects.

(3) A minimum of fifty-one per cent of the shares or interest of a consulting engineer which is a partnership or a private limited company shall be owned by professional engineers having a minimum professional experience in their respective disciplines of five years with Masters or ten years after graduation and the remaining shares or interest shall be held by professional engineers not fulfilling the requirement as aforesaid, or allied professionals who shall have a minimum professional experience in their respective disciplines of fifteen years after graduation:

Provided that these conditions shall not apply to companies or partnerships in which the Government has any shares or interest, to the extent of such shares or interest, and any share or interest which is not owned by the Government must be owned by professional engineers or allied professionals in the proportions as aforesaid.

(4) The managing partner of a partnership firm of consulting engineers and the chief executive of a consulting engineers company shall be professional engineers with a minimum professional experience in their respective disciplines of five years with Masters or ten years after graduation, and all the other partners of a partnership firm of consulting engineers and all directors and executives other than one finance executive of a consulting engineers company shall be either professional engineers with a minimum of five years professional experience with Masters or ten years professional experience after graduation or allied professionals with a minimum professional experience of fifteen years after graduation in their respective disciplines.

(5) The individual consulting engineer, the sole proprietor of a proprietorship firm of consulting engineers and at least seventy-five per cent of all partners of a partnership firm of consulting engineers, and of all directors, including the chief executive of a consulting engineers company shall work solely for the consulting engineering profession.

(6) Professional engineers engaged in Government service or public organizations may undertake private practice if they are allowed by their respective departments.

(7) The individual consulting engineer or the sole proprietor of a proprietorship firm of consulting engineers shall give an undertaking to the Council that he is an independent consulting engineer and has no interest in construction and conflicting commercial, industrial and business activities which are likely to influence his professional independence and neutrality.

(8) Any change in the constitution of the firm or company of consulting engineers shall meet the above requirements at all times, except for a reorganization period which in the case of the demise of a partner shall not exceed the completion period of projects committed and in hand.

4. General regulations.– (1) No consulting engineer shall conduct himself in a manner, nor act in any capacity, nor hold any appointment, which, in the opinion of the Council, prejudices his position as an independent consulting engineer.

(2) Every consulting engineer shall be responsible to the Council for the professional conduct of any person, firm or body with whom he is associated by partnership or otherwise in connection with his practice and on receipt of an intimation from the Council that the person with whom he is associated is acting in a manner which would disqualify him from practicing as a consulting engineer, he shall forthwith terminate his connection with such person, firm or body.

(3) Every consulting engineer shall act in all professional matters strictly in a fiduciary capacity with regard to any employer for whom he may act and his charges to such employer shall constitute his only remuneration in connection with such work.

(4) No consulting engineer shall give or accept any trade commission, discount, allowance or indirect profit in connection with any professional work on which he is engaged.

(5) No individual consulting engineer or sole proprietor, a partner, Managing Director, Director or an Executive of a consulting engineers firm or company shall have financial interest in any firm or company carrying on any commercial, manufacturing or construction business dealing with the field of work to which his, or its, practice relates.

(6) No consulting engineer shall receive directly or indirectly any royalty gratuity or commission on any patented or protected article of process used on or for the purpose of the work in respect of which he is acting for an employer unless and until such royalty, gratuity or commission has been notified in writing to that employer.

(7) A consulting engineer shall place orders explicitly on behalf of his employer and not on his own behalf.

(8) Except at the written request of his employer, no consulting engineer shall be the medium of payments to any contractor or business firm other than by the issue of certificate recommending payment by his employer.

(9) A consulting engineer shall not act so as to injure or attempt to injure, whether directly or indirectly, the professional reputation, prospects or business of another consulting engineer provided that this clause shall not be taken as prohibiting expression of technical opinion in good faith without malice on behalf of his employer before a tribunal or in a commissioned report or of lodging a fully substantiated complaint against the professional conduct of another consulting engineer to the Council.

(10) A consulting engineer shall not, directly or indirectly, attempt to supplant another consulting engineer, nor shall he intervene or attempt to intervene in or in connection with professional work of any kind which to his knowledge has already been entrusted to another consulting engineer.

(11) No consulting engineer shall knowingly accept professional work in connection with which another consulting engineer has been appointed to act, except in collaboration with, or with the consent of, such consulting engineer, unless he has been formally notified in writing by the employer—

- (i) of the termination of the services of the previous consulting engineer, or
- (ii) of his appointment as a general or review consulting engineer, and he has informed in writing the existing consulting engineer and the Council of such acceptance.

(12) A consulting engineer shall avoid all acts or practices likely to discredit the dignity or honour of the profession and for that purpose he shall not advertise his professional services in a manner derogatory to the dignity of the profession but he may utilize the following means of identification:-

- (i) professional cards and listing in recognized and dignified publications and classified section of the telephone directories;
- (ii) sign boards at the site of his office or projects for which he renders services; and
- (iii) brochures, business cards, letter heads and other factual representations of experience, facilities, personnel and capacity to render services.

(13) No consulting engineer shall solicit professional work either directly or indirectly through an agent nor shall he pay any commission to any person who may introduce any employer to him.

(14) Two or more consulting engineers partially or wholly owned or directed by common individuals, regardless of the extent of their shares or interest, are not eligible to offer or compete for the same project. Only one such consulting engineer shall be eligible to offer his services for a project:

Provided that such consulting engineers may be permitted to form a joint venture to offer services as one venture.

(15) A consulting engineer shall not seek selection by an employer purely on the basis of competitive bidding of professional charges.

(16) No consulting engineer may team up or form a consortium with a construction company or process or equipment contractor, except in cases where an employer may invite turn key proposal for a project, or where a construction company employs a consulting engineer for exclusive consulting engineering services either internally or jointly towards a third party against a clearly defined remuneration for services to be rendered with no interest in the commercial or business interests of the construction company.

(17) The consulting engineer and his employer shall use the standard definitions and any other such terms as and when introduced, amended or revised by the Council from time to time.

(18) Normally the copy-right of all documents prepared by a consulting engineer rests with the consulting engineer unless otherwise stipulated in the agreement between the employer and the consulting engineer.

(18A) A consulting engineer shall continue to acquire the latest knowledge of discipline through continuing professional development as prescribed by the Council.

(19) The consulting engineer shall have the right, subject to the employer's approval, which shall not be withheld unduly, to publish descriptive articles with or without illustrations, relevant to the references either on his own account or in conjunction with other parties concerned.

5. Professional liability.– (1) The consulting engineer is liable for the consequence of errors and omissions on his part or on the part of his employees in so far as the design of a project is concerned to the extent and with the limitations mentioned in this bye-law.

(2) If the employer suffers any losses or damages as a result of proven faults, errors or omissions in the design of a project, the consulting engineer shall make good such losses or damages, subject to the condition that the maximum liability as aforesaid shall not exceed twice the total remuneration of the consulting engineer for the design phase in accordance with the terms of the agreement between the consulting engineer and the employer.

(3) The liability of a consulting engineer stated in clause (1) expires after one year from the stipulated date of completion of construction or installation of the relevant unit of the project as provided for in the agreement with the employer or after three years from the date of final completion of the designs whichever is earlier, and the employer shall have the option to have the consulting engineer's liability extended beyond the period stated herein provided that such indemnity or security for the extended period shall be procured at the cost of the employer.

(4) The consulting engineer may, to protect himself, insure himself against his liabilities, but this is not obligatory. If the employer demands his indemnification and insists on submission of such securities or insurance to cover the consulting engineers' liability *vis a vis* employer up to the limit specified in clause (2), the consulting engineer shall procure the necessary cover before commencing the services and the cost of procuring such cover shall be borne by the consulting engineer up to a limit of one per cent of the total remuneration of the consulting engineer for the design phase for every year of keeping such cover effective, however, in case the insurance cover requires extension by the employer beyond three years of the design, it shall be done after obtaining consent of the consulting engineer and the cost thereof shall be borne by the employer.

(5) The consulting engineer shall, at the request of the employer, indemnify the employer against any or all risks arising out of the furnishing of professional services by the consulting engineer to the employer, not covered by the provisions of clause (1) and exceeding the limits set forth in clause (2), provided the actual cost of procuring such indemnity as well as costs exceeding the limits set forth in clause (4) shall be borne by the employer.

(6) Notwithstanding anything contained in these regulations, the consulting engineer shall have liability for all losses or damages suffered by the employer on account of any misconduct by the consulting engineer or any of his employees in the discharge of their responsibilities under the agreement with the employer.

(7) The consulting engineer has no liability whatsoever for any part of the project not designed by him or under his responsibility.

(8) The consulting engineer has no liability whatsoever for any costs for which the liability rests with the contractor or the supplier.

(9) No consulting engineer shall engage any person, who is a paid employee of another consulting engineer, to perform any part-time work in his offices or to perform any piece of work or work on contract, unless and until he has obtained permission in writing of the consulting engineer who is the employer of such person.

(10) No consulting engineer shall make offer of employment to employees of his employer and if he is approached by employees of his employer regarding employment with him, he shall make certain that he has his employer's consent before entering into any negotiations with such employees:

Provided that no such negotiations shall take place in respect of the project in which the consulting engineer and the employer are already working together.

(11) Consulting engineer practicing outside Pakistan or in Pakistan on foreign projects shall order their conduct according to these bye-laws as far as they are applicable and practicable and according to the rules of the professional conduct, code of ethics of any national society or body in that part of the world as well as in accordance with government regulations and the local practice and procedures in those countries.

6. Selection process.– (1) All consulting engineering services in Pakistan shall be entrusted only to consulting engineers duly registered as such with the Council.

(2) Foreign firms of consulting engineers shall get themselves registered as consulting engineers for specified projects which need expertise and specialized knowledge not available with Pakistani consulting engineers, shall join an association or joint venture with a Pakistani consulting engineer and in such an association or joint venture, the services to be rendered by the foreign firm of consulting engineer shall be limited to the expertise and knowledge not available with any Pakistani consulting engineer:

Provided that this clause shall not apply to foreign consulting engineers who pay a visit to Pakistan under transfer of technology agreements on short assignments for which prior approval of Council for specified project thereof is obtained by the employer concerned.

(3) The employer will adopt an equitable method of selection of a consulting engineer for a particular project similar to the selection procedure detailed in bye-law 7 and will ensure that the following basic requirements are met, namely:-

- (a) All work is entrusted only to Pakistani consulting engineers are associated with Pakistani consulting engineers only to the extent of expertise and specialized knowledge not available in Pakistan.
- (b) Specific technical know-how including previous experience required for the project is available with the consulting engineer which can be verified from a record of his past experience, the curricula vitae of the staff on the rolls of the consulting engineer and information on manpower committed to project already in hand.
- (c) The persons on the rolls of the consulting engineer and to be employed on the project have the experience to perform the requisite services.
- (d) The selection of the consulting engineer is based on his professional competency and not only on the price quoted by him.
- (e) Previous performances of the consulting engineer as evidenced by the performance reports given by previous employers are satisfactory.
- (f) A provision may be made in the agreement with the consulting engineer for settlement of any differences by arbitration under the Arbitration Act, 1940, before recourse to any other legal action under the law of the country.
- (g) The professional charges/fees of the consulting engineers are determined by any of the various bases prescribed in Appendix A to these bye-laws, and if any doubt or difference of opinion arises in respect of any provision of that Appendix, the matter shall be referred to the Council for clarification.
- (h) Selection of consulting engineers is done through open and fair competition and no preference is give to any consulting engineer for reason of his being in the public or the private sector.

7. Selection procedure.– (1) The employer will publicly notify the scope of work of a project for which he needs the services of a consulting engineer, and will invite prequalification applications from consulting engineers registered with the Council:

Provided that this clause shall not apply to the technical assistance programmes and be governed by the terms of the agreement with foreign government or agency.

(2) Based on the information received from the consulting engineers as to their qualifications, experience, availability of the requisite personnel specialized in the field of work required for the project and other pertinent aspects, the employer shall prequalify consulting engineers for the project and shall invite these prequalified consulting engineers to submit their technical and financial proposals in separate sealed envelopes by a certain date. While inviting proposals the employer shall specify either quality based selection or quality and cost based selection depending on the complexity of the project and shall afford full and equal opportunity to all the invited consulting engineers to inspect the site, make enquiries and investigations that they consider pertinent for the project and make available any data that would help the consulting engineers in preparing their proposals.

(3) On receipt of the proposals, the employer shall appoint a suitably qualified committee to evaluate the technical proposals of all the contestants. The committee shall evaluate each technical proposal as regards the understanding of project needs, methodology, work plan, time schedule, experience and qualifications of personnel to be assigned, present work load and other pertinent aspects in relation to the services required of the consulting engineer. The committee shall rank the consulting engineers' technical ability in order of their quality based evaluation of the proposals for the particular project.

(4) In case of quality and cost based selection, the employer shall then open the financial proposals of three top ranked consulting engineers in the presence of such consulting engineers who care to be present and shall publicly announce the prices and terms of all proposals. The consulting engineers shall be ranked on the basis of weighted evaluation and the top ranked bidder shall be awarded the work.

(5) In case of quality based selection only the financial proposal of the technically top ranking consultant shall be opened in the presence of his representative and he shall be invited to negotiate a contract with the employer. If no agreement is reached, the negotiations shall stand terminated and the consulting engineer shall be intimated in writing to this effect by explaining the points of disagreement. A similar negotiation shall then follow with the second ranking consultant and failing accord the third ranking consulting engineer shall be invited for negotiations in the same manner.

(6) In the events no agreement is reached with any of the top ranking three consulting engineers, the employer will have the option to follow the procedure described in clause (4) and (5) for the remaining contestants.

(7) For an engineering consultancy service contract, the relevant standard form of contract document prepared by the Council shall be adopted.

8. Registration and Penalties.— (1) For initial registration in accordance with these bye-laws and subsequent annual renewals, the consulting engineer shall submit application to the Council on the form prescribed at Appendix-B. The application for renewal shall be submitted to the Council from the 1st day of December of every year based on consulting engineers' status as on 31st of November of the same year. The Council, after scrutinizing the application and obtaining any further information or clarifications from the consulting engineer as it may deem necessary, may register or renew the registration of the consulting engineer for the following year on form at Appendix 'C' or refuse registration or renewal if the information supplied by the consulting engineer, in the opinion of the Council, does not meet the requirements of these bye-laws. After applying for renewal, the consulting engineer may continue to practice for ongoing works only. The Council shall give a decision on registration within one month of receipt of application for initial registration or renewal of the registration, otherwise the previous licence shall remain valid.

(2) A consulting engineer shall inform the Council of any event taking place following his registration or renewal thereof, which render him ineligible for continuation of registration in accordance with these bye-laws. On receipt of such information, the Council may decide to continue the validity of registration

until the date of next renewal or suspend or cancel the registration as it may deem fit.

(3) Any infringement of these bye-laws by a consulting engineer shall render him liable to punitive action by the Council as it may deem fit. Such action may amount to suspension for a period of time or removal of the name of the consulting engineer from the Register of Consulting Engineers.

(4) Submission of information to the Council by a consulting engineer which is found to be false or intentionally misrepresented shall be considered as misconduct and such consulting engineer shall be liable to be punished in accordance with the provision of the Act.

(5) Any person who practices the profession of consulting engineering in Pakistan without valid registration by the Council and any person who abets or helps such unauthorized practice or any person or organization who infringes or helps in the infringement of these bye-laws shall be liable to be punished in accordance with the provision of the Act.

9. Procedure for Registration of Foreign Consultants.–

(1) Foreign consultants before starting any assignments in Pakistan shall get themselves registered with Council and a certificate on Form No. 4B, shall be issued to the Foreign consultants on payment of requisite fee, to enable them to operate in Pakistan.

(2) On fulfillment of the conditions set out in clause (2) of bye-law 6 and submission of the relevant documents listed below alongwith requisite processing fee, the Foreign consultants if interested in bidding or negotiation for any project shall get themselves registered for that specific project and obtain a certificate on Form PEC 4C in Appendix-E.–

- (i) registration certificate of the Pakistani consultants and pre-registration certificate of the foreign consultants;
- (ii) joint venture or association agreement of the parties, specifying shares of each party and name of the lead consultants; and

- (iii) brief description and scope of work for which the association or joint venture intends to participate in bidding.

(3) In case of transfer of technology agreements, foreign consultants shall supply to the Council a copy of the approval obtained from the employer.

(4) Foreign consultants shall have to get their pre-registration renewed as long as they intend or require to operate in Pakistan. However, for participating in bidding or negotiation for each specific project, they shall have to get a separate registration certificate for each project.

10. Application of Building Code of Pakistan (Seismic Provisions - 2007).– (1) The provisions of the Building Code of Pakistan (Seismic Provisions-2007) shall apply for engineering design of buildings, building like structures and related components.

(2) Construction of buildings in violation of the Building Code shall be considered as violation of professional engineering work as specified under clause (xxv) of section 2 of the Pakistan Engineering Council Act, 1975 (V of 1976).

(3) The provisions of the Building Code shall be revised by the Council after every five years or earlier if so required by circumstances.

11. Application of Building Code of Pakistan (Energy Provisions-2011).– (1) The provisions of the Building Code of Pakistan (Energy Provisions-2011) shall apply for engineering design of buildings and building clusters that have a total connected load of 100 Kilo Watts or greater, or a contract demand of 125 KVA or greater, or a conditioned area of 900 m² or greater, or un-conditioned buildings of covered area of 1,200 m² or more.

(1)

(2) The scope of the energy provisions is applicable to the following to provide minimum energy-efficient requirements for the design and construction of: –

- (a) new building and their systems;
- (b) new portions of existing buildings and their systems, if the conditioned area or connected load exceeds the limit prescribed under sub-bye-law (1);

(c) new systems and new equipments in existing buildings; and

(d) increase in the electricity load beyond the limit mentioned in sub-bye-law (1).

(3) Construction and retrofitting of buildings or building clusters in violation of the Building Code of Pakistan (Energy Provisions- 2011) shall be considered as violation of professional engineering work as specified under clause (xxv) of section 2 of the Pakistan Engineering Council Act 1975 (V of 1976).

(4) The provisions of the Building Code shall be revised by the Pakistan Engineering Council initially after one year of implementation and thereafter every three years.

APPENDIX 'A'**BASIS OF COMPUTATION OF PROFESSIONAL CHARGES AND FEES FOR CONSULTING ENGINEERING SERVICES**

The computations of professional charges or remuneration of consultancy services is dependent on the type of services required by the employer for a particular project. These shall, however, be computed on one of the following bases or by suitably combining two or more of these methods.

1. Per diem

This method of remuneration is particular suited to an individual consulting engineer for services utilized on work involving intermittent services. The consulting engineer should be compensated for all the time devoted to the work including traveling time. In addition to the remuneration based on per diem he is reimbursed for actual expenses for traveling, subsistence and other out of pocket expenses while away from his head office. For certain projects, compensation based on hourly rates is an equitable arrangement. Such hourly rates are applied also to the time for travel involved, plus reimbursement of travel and other out of pocket expenses.

2. Retainer

Employment of consulting engineer on a retainer basis is suited to such services which involved protracted work when the employer wants to be assured of the availability of services of a certain consulting engineer. It is also used for assignments for which services of consulting engineer are not required on full time basis, or for large projects for maintenance and management operations. The remuneration based on the retainer varies with the character and value of the services, as also on the standing of the consulting engineer in his profession. Remuneration may be based on a fixed monthly sum or on other mutually agreeable basis, with per diem or hourly rates in addition for the time spent at the request of the employer.

Quite often the retainer fee paid to a consulting engineer is a token amount only to legalise the long term willingness on his part to work for an employer whenever called upon to do so without protracted prequalification procedures, especially on short and limited assignments. Actual compensation for

consulting engineering assignments is separately settled on the merit of specific services to be performed.

3. Cost plus fixed fee

Professional charges of consulting engineer based on the reimbursement of the actual costs of all salaries, overheads and direct non salary costs plus a fixed fee, are a satisfactory and equitable method of compensation for the engineering consultancy services particularly on assignments where it is not possible to state the exact scope of work at the time of appointment of the consulting engineer nor can be the actual time for which such services are required be accurately defined. The remuneration includes:

- (a) Salary Costs : As defined below.
- (b) Overhead Costs : As defined below.
- (c) Direct Non Salary Costs : As defined below.
- (d) Fixed Fee :

The consulting engineer is paid a fixed fee for interest on invested capital, readiness to serve and project. This fixed payment varies with the scope of consulting engineering services involved and may vary with factors like duration of services performed, number of persons employed and their composition.

The Costs are defined below :

(a) *Salary Cost.* – Salary Costs are defined as the costs of salaries of the partners and associates, principals, engineers, technicians, draftsmen, stenographers, survey men, clerks, etc. for the time directly chargeable to the project.

These “Salary Costs” shall include the following pays, allowances, benefits and facilities by whatever name called, paid or payable to the employee or on his behalf, in accordance with the service rules of the consulting engineer for the employees: –

- (i) Pay, Technical Pay, Charge pay or allowance.
- (ii) Pay during vacation/earned leave salary.
- (iii) Pay during holidays.

- (iv) Dearness allowances/local compensatory allowances.
- (v) Conveyance allowance or conveyance facility.
- (vi) House rent allowance or free house, furnished or unfurnished including telephone facility.
- (vii) House maintenance allowance, pay of chowkidar, mali, etc.
- (viii) Free electricity, gas or water.
- (ix) Entertainment allowance.
- (x) Medical expenses/allowance.
- (xi) Government levies, e.g., old age benefit contribution, as payable to EOBI and Education Cess etc.
- (xii) Provident fund and gratuity (consulting engineer's contribution).
- (xiii) Group Insurance premia.
- (xiv) Leave fare assistance.
- (xv) Any other special allowances or benefits, actually paid or payable to an employee and mutually agreed between consulting engineer and employer and required as per any labour or other laws in force.

The salary costs billed at any time shall be those admissible to employees of the Consulting Engineer in accordance with applicable rules as amended from time to time by the consulting engineer, provided that the employer shall have the right to check that any salary cost increases are in accordance with the personnel policies of the consulting engineer.

(b) *Overhead Costs.*— Consulting engineer's overhead costs include the following indirect costs, which are not directly applicable to specific engagements and projects:-

- (i) Provisions for office space including light, heat, air-conditioning and similar items for working space, depreciation and amortization allowances or rental for furniture, drafting equipment and engineering instruments, office and drafting supplies and office transport including operation and maintenance, local phone calls, local transport, and all such costs not identifiable to specific projects.
- (ii) Taxes and insurances other than those included as salary cost, including property tax on premises, social securities, group insurance, medical cover, professional liability insurance cover, if any, in accordance with bye-laws-5(4).
- (iii) Library and periodical expenses, and other means of keeping abreast of advances in engineering, such as attendance at technical and professional meetings/seminars and staff training cost, membership costs of professional bodies and similar expenses.
- (iv) Executive, administrative, accounting, legal, stenographic and clerical salaries (unproductive non-technical salary costs) and expenses, other than identifiable salaries included in Salary Costs and expenses included in reimbursable Non Salary Costs.
- (v) Salaries or imputed salaries of partners and principals, to the extent that they perform general executive and administrative services as distinguished from technical or advisory services directly applicable to particular projects. These services and expenses, essential to the conduct of the business, include preliminary arrangements for new projects or assignments.
- (vi) Bank interest or project payable on Islamic Banking System on borrowed capital.

- (vii) Business development expenses, including salaries of principals and promotional and salary costs of employees so engaged; and any costs during prequalification and pre-agreement stages of the project.
- (viii) Entertainment expenses.
- (ix) Provision for loss of productive time of technical employees between assignments, and for the time of principals and employees on public interest assignments.
- (x) Non identifiable communication expenses.
- (xi) Staff recruiting and lay off costs.
- (xii) Any other items normally included as part of overhead costs according to generally accepted practices of consulting engineers.

Overhead costs shall be evaluated as percentage of the Salary Costs, this percentage being based on the report of a commercial audit of the consulting engineer's recorded expenditure for the previous year. The employer shall have the right to request for the report of the commercial auditor.

(c) *Direct Non Salary Costs.* – Direct Non-Salary Costs are such incurred non-salary costs which are directly allocatable to specific engagements and projects. These costs include but are not limited to the following : –

- (i) Provisions for office, light, heat and similar items for working space, costs or rental for furniture, drafting equipment and engineering instruments and automobile expenses identifiable to specific projects for which special facilities other than head office of the firm are arranged.
- (ii) Provision for labour, or work charge establishment.
- (iii) Daily and traveling allowances/expenses of employees, partners and principals when away from home office on business connected with the project.

- (iv) Identifiable communication expenses, such as long distance telephone, telegraph, cable, telex, express charges, and postage other than general correspondence.
- (v) Services directly applicable to the project, such as special legal and accounting expenses, computer rental and programming costs, special consultants, borings, laboratory charges, perspectives, renderings, photos, model costs, commercial printing and binding and similar costs which are not applicable to the overhead costs, professional liability insurance cover in accordance with by-law 5(5).
- (vi) Identifiable drafting supplies and office supplies and expenses charged to the employer's work, as distinguished from such supplies and expenses applicable to several projects.
- (vii) Identifiable reproduction costs applicable to the work such as blue printing, Photostatting, mimeographing, printing, binding, etc.

These expenses which seldom can be determined in advance with any degree of accuracy, are reimbursed by the employer at actual invoice cost, plus a service charge.

4. Hourly rates

For the work done for less than one month, the salary shall be on the basis of hourly rates. The hourly rates shall be calculated by dividing the monthly Salary Costs as stated above by the assumed number of working hours per month (depending on system of working adopted by the consulting engineer). For remuneration of consulting engineer based on Hourly rates, the rate determined as above shall be increased by an agreed multiplier to cover overheads and fees. Direct Non-Salary Costs will be reimbursed based on 3(c) above.

5. Fixed man month rates or fixed hourly rates

This is a variation of Cost plus Fixed Fee in that the total cost i.e. the Salary Cost, the Overheads, and the Fee are all fixed and merged into a fixed man Month Rate or a fixed hourly Rate for a particular technical employee or a category or grade of

employee. Direct non-Salary Costs are always in addition and charged on the basis of actual plus a service charge.

6. Fixed lump sum payment

On projects where the scope of services can be fairly estimated and well defined an all inclusive fixed lump sum payment (including the Salary Cost, the Overheads, the Fee and the Direct Non-Salary Costs) for each of the following services can also be agreed between the employer and the consulting engineer:-

- (a) Surveys and investigations.
- (b) Feasibility studies and master planning.
- (c) Preliminary and detailed designs and drawings.
- (d) Top Supervision of construction or Detailed Supervision of construction.

In such cases where the scope of work is not fully known and certain data and investigation leads to further work which could not be foreseen in the initial stages it is difficult to fix the amount of fixed remuneration in advance. In such cases future criteria for fixing remuneration for changed or extended work may be agreed to.

Lump sum remuneration may be accepted on certain types of projects expressed as payment for a certain unit. This is, however, not possible in all types of projects. In most cases, such calculations are based on estimated Man Month Costs of various categories of technical staff and Direct non-Salary Costs.

7. Percentage of construction cost

(1) *Design phase*.- This method of an all inclusive professional charge for the consulting engineer (including the Salary Costs, the Overheads, the Fee and the Direct Non-Salary Costs) is used for assignments comprising mainly the design of various works, preparation of drawings, specifications and other contract documents. Whereas general graphs co-relating the engineering cost with construction cost of the project have been developed, the engineering cost may vary with the complexity, size and character of the engineering consultancy services required for the project. This method of compensation is suitable when the exact size and scope of project is not fully established at the time of engagement of the consulting engineer.

(2) *Supervision of Construction.*- For most engineering construction the consulting engineer's compensation for site supervision is generally paid in terms of the fixed Man Month rates by fixing the duration of the project and strength and composition of the supervisory team of the consulting engineer. Provision of a liaison office to be maintained at head quarters of the employer is to be clearly indicated and either to be absorbed in the overhead or to be separately compensated at the wish of the employer. This is applicable in the resident type of supervision. As an alternative but not generally, fixed percentage fee is also paid to the consulting engineer for this phase of the work, subject to limitations clearly fixed for the duration of the contract and the man month requirements with categories of the supervisory staff of the consulting engineer.

(3) *Construction cost.*- The Construction cost of the project or any part thereof includes:-

- (a) The cost to the employer of the project, however incurred, including any payments (before deduction of any liquidated damages or penalties payable by the contractor to the employer) made by the employer to the contractor by way of bonus, escalation, or in settlement of claims.
- (b) A fair valuation of any labour, materials, manufactured goods, machinery or other facilities provided by the employer and of the full benefit accruing to the contractor from the use of construction plant and equipment belonging to the employer which the employer has required to be used in the execution of the project.
- (c) The market value, as if purchased new, of any second hand materials, manufactured goods and machinery incorporated in the project.

The Construction cost does not include : –

- (a) Administration expenses incurred by the employer.
- (b) Costs incurred by the employer under the agreement with the consulting engineer.
- (c) Interest on capital during construction, and the cost of raising moneys required for carrying out the construction of the works.

(d) Cost of land and way leaves.

The Construction cost is deemed as the estimated cost of the project based on current market rates in the event remuneration of the consulting engineer is finally paid on completion of the Design phase.

8. Time over runs

Quite often consulting engineer's services for inspection or construction supervision are required for extended time periods beyond those contemplated at the time of his engagement. To provide for the contingency of the over runs of time beyond the control of the consulting engineer, the time periods based on which the consulting engineer's remuneration by the Fixed Lump Sum Payment or Percentage of Construction Cost basis have been arrived at should be clearly specified and a provision should be made for compensation to the consulting engineer for time over runs beyond the specified period at an agreed price using any of the methods as specified above.

9. Repetitive structures

When projects include a number of substantially identical units, such as series of buildings, warehouses, etc., it is feasible to reduce the part of the basic compensation applicable to the multiple units. This should not be confused with the occurrence of repetitive elements within one structure, which is quite a common occurrence in structures.

Repetition may result in savings in engineering cost depending upon the number of repetitions. Consulting engineer's compensation should take an account of number of repetitions in determining remuneration beforehand. No reduction in compensation for supervision of construction phase is applicable to repetitive type of structures.

APPENDIX 'B'
Form PEC-1A



PAKISTAN ENGINEERING COUNCIL

APPLICATION FORM FOR REGISTRATION OF
PAKISTANI CONSULTING ENGINEERS AND
PRE-REGISTRATION OF FOREIGN CONSULTING
ENGINEERS

(YEAR ____)

1. NAME OF FIRM/COMPANY

| | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |

1.1 ORIGIN

| | |
|-----------|---------|
| PAKISTANI | FOREIGN |
| | |

2. TYPE OF OWNERSHIP
(TICK ONE ONLY)

| | |
|-------------------------|-----|
| INDIVIDUAL | 021 |
| SOLE PROPRIETOR | 022 |
| PARTNERSHIP | 023 |
| PRIVATE LIMITED COMPANY | 024 |

3. MAILING ADDRESS

| | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |

3.1 PERMANENT ADDRESS OF HEAD OFFICE

| | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |

3.1.1 PHONE

3.1.2 FAX

3.1.3 E-MAIL

| | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

4. MAIN DISCIPLINES IN WHICH THE CONSULTING ENGINEER OFFERS CONSULTING SERVICES. (Write applicable codes from Annex-A of the Instructions.)

.....

5. SERVICES WHICH THE CONSULTING ENGINEER OFFERS (Select from among the list of service code numbers from Annex-B of the Instructions.)

.....

6. PROJECT TYPES WHICH THE CONSULTING ENGINEER UNDERTAKES OR WISHES TO UNDERTAKE (Select from among the list of project profile codes in Annex-C i.e. 1201 to 1236)

.....

7. OWNERSHIP

| Names and residential addresses of Individual Owner, Proprietor, Partners or Shareholders | Professional Qualifications | Experience after basic professional qualification (Years) | Percentages shares in Partnership or No. of shares in Company | PEC or other Regulatory body Registration Number (if any) | Discipline (Select one from 01 to 99) |
|---|-----------------------------|---|---|---|---------------------------------------|
| 1- | | | | | |
| 2- | | | | | |
| 3- | | | | | |
| 4- | | | | | |
| 5- | | | | | |

8. PARTICULARS OF DIRECTORS OF CONSULTING ENGINEERING COMPANY

| Names and residential addresses of chief executive & directors of applicant, if a Consulting Engineer Company | Professional Qualification | Experience after basic professional qualification | PEC or other Regulatory Body Registration Number (if any) | Discipline (select one from 01 to 99) |
|---|----------------------------|---|---|---------------------------------------|
| 1- | | | | |
| 2- | | | | |
| 3- | | | | |

| | | | | |
|-----|--|--|--|--|
| 4- | | | | |
| 5- | | | | |
| 6- | | | | |
| 7- | | | | |
| 8- | | | | |
| 9- | | | | |
| 10- | | | | |

9. LIST OF FULL TIME KEY PERSONNEL

| Names of personnel (including partners, directors, executives and others) | Professional Qualifications | Experience after basic professional qualification | PEC or other Regulatory body Registration Number (if any) | Discipline (Select one from 01 to 99) | Project Profile codes (select the number of code(s) for each person from 1201 to 1236) |
|---|-----------------------------|---|---|---------------------------------------|--|
| 1- | | | | | |
| 2- | | | | | |
| 3- | | | | | |
| 4- | | | | | |
| 5- | | | | | |
| 6- | | | | | |
| 7- | | | | | |
| 8- | | | | | |
| 9- | | | | | |
| 10- | | | | | |

10. ASSOCIATE PAKISTANI CONSULTING ENGINEERS WITH WHOM THE CONSULTING ENGINEER HAS PERMANENT ARRANGEMENT FOR SPECIALIZED SERVICES

| Name and addresses of associate consultants | PEC registration number as consulting engineer | Other regulatory bodies registration number (if any) | Specialization (select one from 1201 to 1236) |
|---|--|--|---|
| 1- | | | |
| 2- | | | |
| 3- | | | |
| 4- | | | |
| 5- | | | |
| 6- | | | |
| 7- | | | |
| 8- | | | |
| 9- | | | |
| 10- | | | |

11. UNDERTAKING

It is hereby certified that the above are true statements of facts and we take full responsibility for the correctness and accuracy of the information supplied herein to the best of our knowledge and belief. This is also to certify that the owner/partners/directors other than those listed under para 9 are working solely for the consulting engineering professional. This further to certify that we are an independent consulting engineer and have no interest in any construction and conflicting commercial industrial and business activities which are likely to influence our professional independence and neutrality. We also undertake to fully abide by the Pakistan Engineering Council (Conduct and Practice of Consulting Engineers) Bye-laws, 1986.

COMPANY/FIRM SEAL

(SIGNATURE OF
CHIEF EXECUTIVE)

NAME _____

[For official use only]

DECISION OF ENROLMENT COMMITTEE

CHAIRMAN
ENROLMENT COMMITTEE

| | |
|---|----------------------------------|
| File No. <input type="text"/> | Licence No. <input type="text"/> |
| Date Received <input type="text"/> | |
| Date Approved <input type="text"/> | |
| Prescribed fee of Rs. has been received and credited vide Receipt No. dated Bank Draft No. dated amount Rs. Licence No. issued dated Licence valid upto | |

Signature of Scrutinizing Staff

Signature of Section Incharge

Registrar

**INSTRUCTIONS FOR FILLING IN REGISTRATION/
RENEWAL FORMS AS CONSULTING ENGINEER
UNDER PAKISTAN ENGINEERING COUNCIL
(CONDUCT AND PRACTICE OF CONSULTING
ENGINEERS) BYE-LAWS, 1986**

General

These instructions will be used by the applicant to fill-up the Application Form and should not be attached therewith. Relevant affidavits and signed curriculum vitae should be prepared separately in accordance with the format provided herein and attached with the application. Additional sheet(s), when required, against an item of the Form can be attached.

Consulting engineer can seek renewal for up to three (3) years upon submission of requisite fee.

Item 1

Please write the name of your firm or company by which name you would like it to be registered. Please indicate whether you are a Pakistani firm or a foreign firm. Tick only that is applicable.

A word of caution to foreign consulting engineers. Foreign consulting engineers can only be registered on project to project basis. For each project the foreign consulting engineer, according to the requirement of the Council, will have to satisfy the Council that the expertise and specialized knowledge to be furnished by it on the project is not available with any Pakistani consulting engineer. The foreign consulting engineers must also attach the joint venture/association agreement with a Pakistani consulting engineer. Simultaneously, the foreign consulting engineer must also apply for registration of each engineer expert who is brought into Pakistan and who performs any engineering work in Pakistan.

Item 2

(2)

Please indicate the type of ownership by striking out the inapplicable status. Registration/Renewal fee for each category is given below:

- | | |
|--|-----------------------|
| a. Individual | Rs. 10,000/- per year |
| b. Sole-proprietor | Rs. 10,000/- per year |
| c. Partnership Firm | Rs. 20,000/- per year |
| d. Private Limited Company | Rs. 30,000/- per year |
| e. Public Limited Company | Rs. 50,000/- per year |
| f. Pre Registration of Foreign Consulting Engineers (Irrespective of type of ownership) | US \$ 1,000/- |
| g. Processing Fee for Registration of Foreign Consulting Engineer. (Project Specific Registration) | US \$ 1,000/- |

Item 3

Please give addresses of your main office and permanent branches as on the date of application.

Item 4

13 main engineering disciplines and 12 allied disciplines are listed in Annex-A to the application form. Most of the specializations shall be covered by these disciplines such as Structural engineering, Highway engineering, Bridge engineer, Transportation engineering falls under the discipline of Civil engineering and Power engineering etc fall under Electrical engineer. If you wish to include any discipline other than the twenty-five stated disciplines, please indicate such disciplines(s) on a separate page after circling serial 50 and/or 99 as the case may be.

Item 5

Service codes are listed in Annex-B to the application. Please encircle the relevant codes and write their serial numbers under this item. Please note that this statement must be matched by availability of full time technical personnel on you rolls as indicated under item 9.

Item 6

Please encircle relevant codes from among the list of project profile codes given at Annexure-C and write their serial number under this item. Please note that this statement must be matched with the information given under item 9.

Item 7

Professional qualifications are the degrees awarded to the individuals in any of the engineering or allied disciplines. If any of the owners/shareholders does not have any professional qualification, please write 'nil' against his name under this column. Experience after basic qualification means the experience of the individual professional after he has acquired the professional qualification mentioned in the previous column. Only relevant experience as a professional in his discipline must be mentioned. Time spent in any work other than professional work of his discipline must be excluded.

PEC or PCATP registration numbers in the case of those owners/shareholders who are professional engineers or architects/town-planners must be mentioned under the relevant column. In the last column under 'disciplines' only mention the relevant disciplines from Annex-A to these Instructions.

Item 8

This item applies to consulting engineer companies only. Please repeat the names of those shareholders who are directors of the company. All other information has the same meaning as explained under item 7.

Item 9

Please give relevant information in respect of all key personnel in the organization of the consulting engineer, the full time presence of whom makes the applicant capable of undertaking certain type of projects, and the qualifications and experience of such personnel are used by the consulting engineer to apply for undertaking certain types of projects. In the last column Project Profile Codes shall be selected from Annex-C of these Instructions.

It is compulsory that for each such individual listed under this item the consulting engineer must submit a brief CB of the person in the form attached. In addition, the consulting engineer must also submit an affidavit on the form attached signed by each such individual. It will not be necessary to submit such affidavit every year if such person continues as full time employee/partner, director of the consulting engineer at the time of applicant for license renewal next year. However, affidavit must be submitted for each individual at the time of first application under these bye-laws, and for all new key personnel.

Item 10

Please provide the name(s) of only these specialized consultants with whom written arrangement for hiring services have already been made.

Item 11

Chief Executive should sign the undertaking with company seal.

To be submitted on stamp paper
of appropriate value

AFFIDAVIT

I , adult, resident of do hereby
solemnly affirm on oath as under:-

1. That I am registered as a and a
certificate of registration bearing No.
dated..... has been issued by the Pakistan
Engineering Council which has been renewed upto
.....
2. That I am presently employed on regular/full time
basis with since and
presently hold the position of I further
state that I am not employed on any other
assignment with any other private firm, government
agency, office or bureau of any other consulting
engineer.
3. That I, undertake to intimate the Pakistan
Engineering Council about my disassociation with
the above mentioned employer within thirty (30)
days of the same.
4. That I have enclosed my application and curriculum
vitae duly signed by me.
5. That I have not ever incurred any disqualification in
any manner under the Pakistan Engineering Council
Act and Bye-laws. (if in the past any disqualification
was incurred please mention material detail).

That the contents of the above mentioned affidavit are
true to the best of my knowledge, belief and information
received and nothing material has been concealed
therefrom.

DEPONENT

I. D. CARD NO. _____

DATE: _____

PLACE: _____

To be notarized.

**CURRICULUM VITAE OF PROFESSIONALS WORKING
FULL TIME FOR AN APPLICANT FOR CONSULTING
ENGINEER LICENSE**

Name _____ Age _____ Sex _____
 Res. Address: _____
 Tel No. _____ Birth Date _____ Nationality _____
 National I.D. Card No. _____ PEC/PCATP
 Registration No. _____

| EDUCATION | NAME OF SCHOOL/ COLLEGE/ UNIVERSITY | INCLUSIVE DATES OF ATTENDANCE | HONOURS/ DIVISIONS RECEIVED |
|-----------|--|-------------------------------------|-----------------------------------|
|-----------|--|-------------------------------------|-----------------------------------|

Secondary

Higher
Secondary

College/
University

Post Graduate

Diploma

Masters

Ph.D/D.Sc.

**RECORD OF IN-SERVICE TRAINING, STUDY AND
SCHOLARSHIP GRANTS**

| TRAINING COURSE | PERIOD OF TRAINING | CONDUCTED BY |
|-----------------|--------------------|--------------|
|-----------------|--------------------|--------------|

**EMPLOYMENT RECORD (AFTER PROFESSIONAL
QUALIFICATION)**

| INCLUSIVE DATE FROM TO | NAME AND ADDRESS OF ORGANIZATION | TYPE OF ORGANIZ ATION | DESIGNAT ION OR POSITION | LENGTH OF SERVICE YR-MO |
|------------------------------|--|-----------------------------|--------------------------------|----------------------------------|
|------------------------------|--|-----------------------------|--------------------------------|----------------------------------|

Total length of service _____

I certify that the above information is true to the best of my knowledge and belief and that I have expert knowledge and specialization in the following types of projects. (List not more than three).

Project code

Project Profile

12.....

12.....

12.....

Signature of Professional Engineer/
Allied Professional

ANNEX-A

MAIN DISCIPLINES

| | Engineering disciplines | | Allied disciplines |
|----|--------------------------------|----|---------------------------|
| 01 | Civil | 51 | Architecture |
| 02 | Mechanical | 52 | Regional Planning |
| 03 | Electrical | 53 | Urban Planning |
| 04 | Chemical | 54 | Geology |
| 05 | Aeronautical | 55 | Economics |
| 06 | Mining | 56 | Hydrology |
| 07 | Agriculture | 57 | Agronomy & Agriculture |
| 08 | Metallurgical | 58 | Financial Analysis |
| 09 | electronics | 59 | Computer Sciences |
| 10 | Petrogas | 60 | System Analysis |
| 11 | Industrial | 61 | Soil Science |
| 12 | Marine | 62 | Business Administration |
| 13 | Computer Engineering | | ----- |

| | | | |
|----|--|----|--|
| 50 | <p>-----</p> <p>-----</p> <p>Other engineering (Specify) Total Engineering Professions</p> | 99 | <p>-----</p> <p>-----</p> <p>Other allied Professions (Specify) Total Allied Professions</p> |
|----|--|----|--|

ANNEX-B**SERVICE CODES****PROJECT SURVEYS AND STUDIES**

- 0501 Aerial surveys
- 0502 Geological surveys
- 0503 Geophysical surveys
- 0504 Hydrological surveys
- 0505 Hydrographic surveys
- 0506 Soil surveys
- 0507 Topographic surveys
- 0508 Resources surveys
- 0509 Sub soil surveys & investigations
- 0510 Planning studies
- 0511 Feasibility studies
- 0512 Market studies
- 0513 Economic studies
- 0514 Financial studies
- 0515 Tariff studies
- 0516 Technical studies
- 0517 Operations studies
- 0518 Environmental studies
- 0519 Implementation study

PROJECT DESIGN AND EXECUTION

- 0531 Architectural design
- 0532 Structural design
- 0533 Urban design
- 0534 Industrial design
- 0535 Hydraulic studies & engineering
- 0536 Soil mechanic and foundation engineering
- 0537 Engineering design
- 0538 Earthquake engineering
- 0539 Power engineering
- 0540 Mechanical design
- 0541 Process design
- 0542 Design review
- 0543 Quantity surveying, cost estimating
- 0544 Estimation, preparation of contract documents
& bid evaluation
- 0545 Procurement services
- 0546 Supervision/inspection of construction
- 0547 Supervision/inspection of equipment installation
- 0548 Project management (management on behalf of owner)
- 0549 Technical assistance and advisory services
- 0550 Start up operations

PRODUCTION, MARKETING AND DISTRIBUTION

- 0561 Product & production technology
- 0562 Production management
- 0563 Process evaluation & selection
- 0564 Quality control
- 0565 Marketing & distribution
- 0566 Packaging and storage
- 0567 Warehousing & inventory control

0568 Physical distribution & shipping

OPERATION AND MAINTENANCE

0571 Operations and maintenance

0572 Maintenance planning

0573 Plant rehabilitation

0574 Factory rehabilitation

0575 Civil works rehabilitation

INFORMATION SYSTEMS

0581 Information system & computer processing

0582 Computer technology

MANAGEMENT SYSTEMS

0591 Institutional strengthening

0592 Management advisory services

0593 Management studies

0594 organizational development studies

0595 Manpower requirement

0596 Training and transfer of technology

ANNEX-C

PROJECT PROFILE CODES

1201 Public Buildings & Offices (ii) Commercial Buildings & Offices (iii) Residential Buildings & houses (iv) Hotels & motels (v) Hospitals, medical facilities, laboratories, medical research (vi) Educational facilities & complexes (vii) Recreation and sports facilities, stadiums (viii) Libraries, museums, galleries.

1202 Industrial economics, Policy and planning (ii) Industrial projects development and appraisal.

- 1203 Urban developments, housing estates (ii) Industrial estates, Industrial complexes (iii) Urban roads and surfaces drainage.
- 1204 Urban sewerage and water supply (ii) Solid wastes collection and disposal (iii) Water treatment plants (iv) Sewage treatment plants.
- 1205 Irrigation system, hydraulic structure (ii) Dams, Reservoirs, Tunnels (iii) Salinity control and Land reclamation, Agricultural drainage (iv) Dikes, Levees, Embankments (v) Ground water development and Irrigation (vi) Water resources appraisal/use.
- 1206 Water Transmission lines.
- 1207 Hydroelectric power stations.
- 1208 Thermal power stations (ii) Power transmission and distribution systems.
- 1209 Nuclear plants, Nuclear research.
- 1210 Renewable energy sources and systems.
- 1211 Coal mining, Processing, Gasification.
- 1212 Petro chemicals, Refineries.
- 1213 Oil and gas pipelines (ii) Oil & gas development, storage, Transmission and distribution systems.
- 1214 Railways and railway bridges.
- 1215 Tunnels, Sub-ways, Rapid transit (ii) Highways, bridges, tunnels (iii) Transportation systems services.
- 1216 Airports.
- 1217 Ports, Harbours, Marine terminals (ii) Shipyards, Dockyards, Ship breaking yard (iii) Breakwaters, Revetments, Beach protection.
- 1218 Material handling systems, Conveyors, Sorters (ii) Dry materials storage and Reclaim systems (iii) Liquid storage and Reclaim systems.

- 1219 Communication systems, Radar navigation aids (ii) Telephone, Telex (iii) Broadcasting systems (Radio & TV).
- 1220 Energy Planning conservation and development.
- 1221 Mining and mineral exploration and development.
- 1222 Land resources appraisal/use.
- 1223 Agro industries/Food processing.
- 1224 Forestry.
- 1225 Fisheries.
- 1226 Rural Development and Social infrastructure.
- 1227 Farm mechanization, Seeds processing.
- 1228 Botanical gardens.
- 1229 Zoological gardens.
- 1230 Livestock development and Animal husbandry.
- 1231 Landscaping and Horticulture.
- 1232 Health systems, Planning, Evaluation and Research (ii) Environmental Planning and Protection.
- 1233 Manpower development (ii) Population planning (iii) Social welfare and community development.
- 1234 Chemicals, Ceramics, Mineral products industry (ii) Engineering industry (iii) Electrical and electronic industry (iv) Transport equipment industry (v) Cement industry (vi) Textile industry (vii) Basic metal industries, Metal products (viii) Fertilizers industry (ix) Chemical plants.
- 1235 Surveying, valuation and loss assessment.
- 1236 Pre-shipment inspections.

**PERMISSIBLE NUMBER OF PROJECT PROFILE
CODES TO PROFESSIONAL ENGINEERS SERVING
FOR CONSULTING ENGINEERING FIRMS**

| | | |
|-------|--------------------------------|-----------------------------|
| (i) | Fresh Graduates | 1 No Project Profile Codes* |
| (ii) | 3 years experience | 2 No Project Profile Codes* |
| (iii) | 5 years experience | 3 No Project Profile Codes |
| (iv) | 10 years experience | 5 No Project Profile Codes |
| (v) | 15 years experience | 7 No Project Profile Codes |
| (vi) | 20 years & above experience | 8 No Project Profile Codes |

* Not as an Individual consulting engineer.

APPENDIX 'C'

Serial No.
FORM PEC -4A

Registration No.



Date of Registration:

PAKISTAN ENGINEERING COUNCIL

CERTIFICATE OF REGISTRATION OF
PAKISTANI CONSULTING ENGINEER
(Under Pakistan Engineering Council Act 1976)

This is to certify that M/s.

Addresshave been
registered as Consulting Engineers at Serial No. of the
Register of Pakistan Engineering Council with following
particulars:-

Type of Ownership (021, 022, 023, 024)

Field of Specialization:
(Project Profile Code Nos.)

Registrar
Pakistan Engineering Council

Date of Issue

- Notes: 1. The Certificate of Registration shall expire on 31st December 20..... and can be renewed on payment of required fee before 31st January for the next year.
2. Description of project profile codes are shown on the reverse.

Reverse Side of Form PEC-4A

PROJECT PROFILE CODES

| | |
|--|---|
| 1201 Public Buildings & Offices (ii) Commercial Buildings & Offices (iii) Residential Buildings & houses (iv) Hotels & motels (v) Hospitals, medical facilities, laboratories, medical research (vi) Educational facilities & complexes (vii) Recreation and sports facilities, stadiums (viii) Libraries, museums, galleries. | 1218 Material handling systems, Conveyors, Sorters (ii) Dry materials storage and Reclaim systems (iii) Liquid storage and Reclaim systems. |
| 1202 Industrial economics, Policy and planning (ii) Industrial projects development and appraisal. | 1219 Communication systems, Radar navigation aids (ii) Telephone, Telex (iii) Broadcasting systems (Radio & TV) |
| 1203 Urban developments, housing estates (ii) Industrial estates, Industrial complexes (iii) Urban roads and | 1220 Energy Planning conservation and development |

| | | | |
|------|--|------|--|
| | surfaces drainage. | | |
| 1204 | Urban sewerage and water supply (ii) Solid wastes collection and disposal (iii) Water treatment plants (iv) Sewage treatment plants. | 1221 | Mining and mineral exploration and development |
| 1205 | Irrigation system, hydraulic structure (ii) Dams, Reservoirs, Tunnels (iii) Salinity control and Land reclamation, Agricultural drainage (iv) Dikes, Levees, Embankments (v) Ground water development and Irrigation (vi) Water resources appraisal/use. | 1222 | Land resources appraisal/use |
| | | 1223 | Agro industries/Food processing. |
| 1206 | Water Transmission lines. | 1224 | Forestry |
| 1207 | Hydroelectric power stations | 1225 | Fisheries |
| 1208 | Thermal power stations (ii) Power transmission and distribution systems. | 1226 | Rural Development and Social infrastructure |
| 1209 | Nuclear plants, Nuclear research. | 1227 | Farm mechanization, Seeds processing |
| 1210 | Renewable energy sources and systems. | 1228 | Botanical gardens |

| | | | |
|------|---|------|--|
| 1211 | Coal mining, Processing, Gasification | 1229 | Zoological gardens |
| 1212 | Petro chemicals, Refineries. | 1230 | Livestock development and Animal husbandry |
| 1213 | Oil and gas pipelines (ii) Oil & gas development, storage, Transmission and distribution systems. | 1231 | Landscaping and Horticulture |
| 1214 | Railways and railway bridges | 1232 | Health systems, Planning, Evaluation and Research (ii) Environmental Planning and Protection |
| 1215 | Tunnels, Sub-ways, Rapid transit (ii) Highways, bridges, tunnels (iii) Transportation systems services. | 1233 | Manpower development (ii) Population planning (iii) Social welfare and community development. |
| 1216 | Airports | 1234 | Chemicals, Ceramics, Mineral products industry (ii) Engineering industry (iii) Electrical and electronic industry (iv) Transport equipment industry (v) Cement industry (vi) Textile industry (vii) Basic metal industries, Metal products (viii) Fertilizers industry (ix) Chemical plants. |

| | |
|---|--|
| 1217 Ports, Harbours, Marine terminals (ii) Shipyards, Dockyards, Ship breaking yard (iii) Breakwaters, Revetments, Beach protection | 1235 Surveying, valuation and loss assessment. |
| | 1236 Pre-shipment inspections |
| | <u>CODES FOR TYPE OF OWNERSHIP</u> |
| | 021 – Individual 022 – Sole Proprietor 023 – Partnership 024 – Private Limited Company |

APPENDIX ‘D’

Serial No.
FORM PEC -4B

Registration No.

NOT VALID FOR BIDDING



Date of Registration:

PAKISTAN ENGINEERING COUNCIL

CERTIFICATE OF PRE-REGISTRATION OF
 FOREIGN CONSULTING ENGINEER
 (Under Pakistan Engineering Council Act 1976)

This is to certify that M/s.

Addresshave been re-registered as
 Foreign Consulting Engineers at Serial No. of the Register
 of Pakistan Engineering Council with following particulars:-

Type of Ownership (021, 022, 023, 024)

Field of Specialization:
 (Project Profile Code Nos.)

Registrar
 Pakistan Engineering Council

Date of Issue

- Notes: 1. The Pre-Registration entitles the Foreign consulting engineer to operate their office in Pakistan. To undertake consultancy services, the Foreign consultants are required to get registered as joint venture or on their own in accordance with clause 6(2) and 9 of Bye-laws 1986 (SRO 809(1)/86).
2. The Certificate of Pre-Registration shall expire on 31st December 20..... and can be renewed on payment of required fee before 31st January for the next year.
3. Description of project profile codes are shown on reverse.

Reverse Side of Form PEC-4B

PROJECT PROFILE CODES

| | |
|---|---|
| 1201 Public Buildings & Offices (ii) Commercial Buildings & Offices (iii) Residential Buildings & houses (iv) Hotels & motels (v) Hospitals, medical facilities, laboratories, medical research (vi) Educational facilities & complexes (vii) Recreation and sports facilities, stadiums (viii) Libraries, museums, galleries. | 1218 Material handling systems, Conveyors, Sorters (ii) Dry materials storage and Reclaim systems (iii) Liquid storage and Reclaim systems. |
|---|---|

| | | | |
|------|--|------|--|
| 1202 | Industrial economics, Policy and planning (ii) Industrial projects development and appraisal. | 1219 | Communication systems, Radar navigation aids (ii) Telephone, Telex (iii) Broadcasting systems (Radio & TV) |
| 1203 | Urban developments, housing estates (ii) Industrial estates, Industrial complexes (iii) Urban roads and surfaces drainage. | 1220 | Energy Planning conservation and development |
| 1204 | Urban sewerage and water supply (ii) Solid wastes collection and disposal (iii) Water treatment plants (iv) Sewage treatment plants. | 1221 | Mining and mineral exploration and development |
| 1205 | Irrigation system, hydraulic structure (ii) Dams, Reservoirs, Tunnels (iii) Salinity control and Land reclamation, Agricultural drainage (iv) Dikes, Levees, Embankments (v) Ground water development and Irrigation (vi) Water resources appraisal/use. | 1222 | Land resources appraisal/use |
| | | 1223 | Agro industries/ Food processing |
| 1206 | Water Transmission lines | 1224 | Forestry |

| | | | |
|------|---|------|---|
| 1207 | Hydroelectric power stations | 1225 | Fisheries |
| 1208 | Thermal power stations (ii) Power transmission and distribution systems. | 1226 | Rural Development and Social infrastructure |
| 1209 | Nuclear plants, Nuclear research. | 1227 | Farm mechanization, Seeds processing |
| 1210 | Renewable energy sources and systems. | 1228 | Botanical gardens |
| 1211 | Coal mining, Processing, Gasification | 1229 | Zoological gardens |
| 1212 | Petro chemicals, Refineries. | 1230 | Livestock development and Animal husbandry |
| 1213 | Oil and gas pipelines (ii) Oil & gas development, storage, Transmission and distribution systems. | 1231 | Landscaping and Horticulture |
| 1214 | Railways and railway bridges | 1232 | Health systems, Planning, Evaluation and Research (ii) Environmental Planning and Protection |
| 1215 | Tunnels, Sub-ways, Rapid transit (ii) Highways, bridges, tunnels (iii) Transportation systems services. | 1233 | Manpower development (ii) Population planning (iii) Social welfare and community development. |

1216 Airports

1217 Ports, Harbours,
Marine terminals (ii)
Shipyards,
Dockyards, Ship
breaking yard (ii)
Breakwaters,
Revetments, Beach
protection

1234 Chemicals,
Ceramics, Mineral
products industry (ii)
Engineering industry
(iii) Electrical and
electronic industry
(iv) Transport
equipment industry
(v) Cement industry
(vi) Textile industry
(vii) Basic metal
industries, Metal
products (viii)
Fertilizers industry
(ix) Chemical plants.

1235 Surveying, valuation
and loss assessment.

1236 Pre-shipment
inspections

CODES FOR TYPE OF
OWNERSHIP

021 – Individual
022 – Sole Proprietor
023 – Partnership
024 – Private Limited
Company

APPENDIX 'E'Serial No.
FORM PEC -4C

Registration No.



Date of Registration:

PAKISTAN ENGINEERING COUNCIL

**CERTIFICATE OF REGISTRATION OF
FOREIGN CONSULTING ENGINEER
(Under Pakistan Engineering Council Act 1976)**

This is to certify that M/s.
Addresshave been registered as
Foreign Consulting Engineers at Serial No. of the Register
of Pakistan Engineering Council with following particulars:-

1. Name of Joint Venture partner(s)
2. Name of the Lead Partner in the Joint Venture
3. Name of the Project for which Registration sought

Registrar
Pakistan Engineering Council

Date of Issue

Notes: 1. This certificate is valid only for the project named here above. The Consulting Engineers are required to obtain fresh certificate for any other project even if the joint venture partner (s) remains unaltered.

Reverse Side of Form PEC-4C**PROJECT PROFILE CODES**

| | |
|--|---|
| 1201 Public Buildings & Offices (ii) Commercial Buildings & Offices | 1218 Material handling systems, Conveyors, Sorters (ii) Dry materials storage |
|--|---|

| | | |
|------|---|--|
| | (iii) Residential Buildings & houses (iv) Hotels & motels (v) Hospitals, medical facilities, laboratories, medical research (vi) Educational facilities & complexes (vii) Recreation and sports facilities, stadiums (viii) Libraries, museums, galleries. | and Reclaim systems (iii) Liquid storage and Reclaim systems. |
| 1202 | Industrial economics, Policy and planning (ii) Industrial projects development and appraisal. | 1219 Communication systems, Radar navigation aids (ii) Telephone, Telex (iii) Broadcasting systems (Radio & TV) |
| 1203 | Urban developments, housing estates (ii) Industrial estates, Industrial complexes (iii) Urban roads and surfaces drainage. | 1220 Energy Planning conservation and development |
| 1204 | Urban sewerage and water supply (ii) Solid wastes collection and disposal (iii) Water treatment plants (iv) Sewage treatment plants. | 1221 Mining and mineral exploration and development |
| 1205 | Irrigation system, hydraulic structure (ii) Dams, Reservoirs, Tunnels (iii) Salinity control and Land reclamation, Agricultural drainage (iv) Dikes, Levees, | 1222 Land resources appraisal/use |

| | | |
|------|---|--|
| | Embankments (v) Ground water development and Irrigation (vi) Water resources appraisal/ use | |
| | | 1223 Agro industries/ Food processing |
| 1206 | Water Transmission lines | 1224 Forestry |
| 1207 | Hydroelectric power stations | 1225 Fisheries |
| 1208 | Thermal power stations (ii) Power transmission and distribution systems. | 1226 Rural Development and Social infrastructure |
| 1209 | Nuclear plants, Nuclear research. | 1227 Farm mechanization, Seeds processing |
| 1210 | Renewable energy sources and systems. | 1228 Botanical gardens |
| 1211 | Coal mining, Processing, Gasification | 1229 Zoological gardens |
| 1212 | Petro chemicals, Refineries. | 1230 Livestock development and Animal husbandry |
| 1213 | Oil and gas pipelines (ii) Oil & gas development, storage, Transmission and distribution systems. | 1231 Landscaping and Horticulture |
| 1214 | Railways and railway bridges | 1232 Health systems, Planning, Evaluation and Research (ii) Environmental Planning and Protection |

- | | | | |
|------|--|------|--|
| 1215 | Tunnels, Sub-ways, Rapid transit (ii) Highways, bridges, tunnels (iii) Transportation systems services. | 1233 | Manpower development (ii) Population planning (iii) Social welfare and community development. |
| 1216 | Airports | 1234 | Chemicals, Ceramics, Mineral products industry (ii) Engineering industry (iii) Electrical and electronic industry (iv) Transport equipment industry (v) Cement industry (vi) Textile industry (vii) Basic metal industries, Metal products (viii) Fertilizers industry (ix) Chemical plants. |
| 1217 | Ports, Harbours, Marine terminals (ii) Shipyards, Dockyards, Ship breaking yard (iii) Breakwaters, Revetments, Beach protection | 1235 | Surveying, valuation and loss assessment. |
| | | 1236 | Pre-shipment inspections |

CODES FOR TYPE OF
OWNERSHIP

- 021 – Individual
- 022 – Sole Proprietor
- 023 – Partnership
- 024 – Private Limited
Company

APPENDIX 'F'

PAKISTAN ENGINEERING COUNCIL

FORM PEC-6

APPLICATION FORM FOR RENEWAL
OF CONSULTING ENGINEERS

| | |
|--------------|-------------------------------|
| FOR THE YEAR | ORIGIN (PAKISTANI/FOREIGN) |
| | |

| | |
|----------------------------------|--|
| Registration No. | |
| Date of Original Registration | |

1. NAME OF FIRM/COMPANY

| | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | |

2. TYPE OF OWNERSHIP
(TICK ONE ONLY)

| | |
|----------------------------|-----|
| INDIVIDUAL | 021 |
| SOLE PROPRIETOR | 022 |
| PARTNERSHIP | 023 |
| PRIVATE LIMITED COMPANY | 024 |

3. MAILING ADDRESS

| | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | |

- 4. PHONE
- 4.1 FAX
- 4.2 E-MAIL

| | | | | | |
|--|--|--|--|--|--|
| | | | | | |
| | | | | | |
| | | | | | |

5. COMPANAY/FIRM
(Seal)

SIGNATURE OF CHIEF
EXECUTIVE
NAME _____

Note: For any change in the basic documents please attach necessary details.

FOR OFFICIAL USE ONLY

| | | | | | | | | | | |
|---------------|--|--|--|--|--|--|--|--|--|--|
| File No. | | | | | | | | | | |
| Date Received | | | | | | | | | | |
| Date Approved | | | | | | | | | | |
| Licence No. | | | | | | | | | | |

Prescribed fee of Rs. has been received and credited vide
 Receipt No. dated Bank Draft No.
 dated amount Rs. Licence No. issued
 dated Licence valid upto

Account Assistant Account Officer Dy Registrar

Registrar?