SHOOVERNAIPS FOR SATIONAL CAPITAL LEREIT OF OF DELIII DIRECTORATE OF TRAINING AND TECHNICALEDUCATION AUNIMANA RAMAIARG: PITAAFPURA: DELIII 110 088 No f 1(802)(2003-8B/ The Principal. Delhi College of Engineering Bawana Road, Delhi. 11 10 1 Sulv. No. 108 and Guldelines for undertaking Industrial Consultancy and Research and Development Projects Sir. I am directed to refer to your proposal on the above suspect submarted 2 "To this Department during the month of January, 2004 The above proposal was examined by the planning finance Department. I am further directed to inform you that Finance Department has noteed to the terms and conditions submitted by DCT regarding Horms and Guidelies: for undertaking Industrial Consultings and Research and Development Projects, (copy enclosed 1 C to 30/C). Yours faithfully DEPUTY DIRECTOR(SB)

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Government of National Capital Territory of Delhi DELHI COLLEGE OF ENGINEERING

BAWANA ROAD, DELHI-110042

SUBJECT: NORMS AND GUIDELINES FOR UNDERTAKING INDUSTRIAL CONSULTANCY AND RESEARCH & DEVELOPMENT PROJECTS.

Delhi College of Engineering, was established in 1941 by the then Government of India to provide quality technical education at degree and Post graduate degree levels as also to support the growth and advancement of industries in the country. The college during its last 62 years of functioning has provided a formidable support to the industrial development of the country by providing over 12000 quality engineers. The college alumni have distinguished themselves in industries and organizations at National as well as International levels. These include Shri Vinod Dham, the Chipman of the world who has designed and developed the Pentium Chip which has revolutionized the modern computer architecture. The long list of distinguished alumni further includes Shri K.L. Chug, Former Chairman and Managing Director, ITC Ltd., Shri A.N. Singh, Shri Janak Bhasin and Shri Krishan Swaroop, the three successive Chairmen of Central Electricity Authorities, Govt. of India, Dr. Krishan Kumar, Director Engineering, Maruti Udyog Ltd., Dr. Surya Kant, Sr. Vice-President, TATA Consultancy Services, Country Head, Seimens India and Shri Anil Sardana, CEO, NDPL just to name a few.

The faculty of the Institute possesses high qualifications and expertise in areas of their specialization and has contributed significantly to research and development and have undertaken industrial consultancies. The facilities in the college have been significantly enhanced as the college has shifted to its new campus at Bawana Road, Delhi in 1996. The college currently offers of Undergraduate and 11 Postgraduate programmes covering a wide arena of engineering disciplines which includes Electronics and Communication, Computer Science & Engineering, Information Technology, Mechanical & Production Engineering, Electrical Engineering, Con rol & Instrumentation, Polymer & Chemical Technology, Civil & Environmental Engineering.

In order to ensure the growth of academic excellence and to create and sustain a research culture commensurate with the needs of the industries it is important for the institute to establish effective linkages with the industries. In this respect, there is an orgent need for augmenting the R & D and consultancy base at DCE. The interaction between Industries and the Institute can be in the form of (a) Industrial Consultancy (b) Sponsored Research & Development (c) Transfer of know-how and (d) Inter-institutional collaboration in selected areas of mutual interest.



Industrial Consultancy aims at solving Industrial problems of production design, process improvement, construction, manufacturing with the facult expertise and support infrastructure available at the Institute. Sponsored Research aims at extending the frontiers of knowledge with emphasis on R & D in the areas of relevance to the national technology missions. Transfer of know-how is the process through which products and services developed by the Institute are made available to Industries for commercial exploitation. While the members of faculty shall function as consultants in all the areas mentioned above, they should get a proper share in the consultancy fees as per rules of the Institute. This will provide suitable incentive to the consulting faculty and other staff engaged in the consultancy and R&D works undertaken by them. In the case of Sponsored Research Project, additional benefits accrue in the form of equipments and trained manpower which is acquired and developed through such research project. Such projects also provide an effective means of further enriching the research competence of the faculty and provide for an environment which attracts the talented faculty to join the institute. In today's technology intensive education environment the competence and caliber of the faculty, their contribution to the enrichment of research and development and extension services offered to the industries largely account for the standing of the institute.

With the above objectives, it is proposed to provide a fillip to the R & D and industrial consultancy at Delhi College of Engineering. This will enhance the avenues for resource generation at DCE and shall provide effective means of utilization of the infrastructure and faculty competence to support the industries. The proposed norms, rules & regulations for undertaking Industrial Consultancy and R & D Projects have been framed keeping the norms prevailing in NSIT and premier institutions such as IIT Delhi.

Submitted for kind approval.

(PROF. P.B. SHARMA)
Principal

DELHI COLLEGE OF ENGINEERING GOVERNMENT OF N.C.T. OF DELHI

NORMS, KUUES & REGULATIONS FOR UNDERTAKING INDUSTRIAL CONSULTANCY AND R&D PROJECTS

Members of the academic staff of the Institute including the Principal can undertake consultancy work. Rules for undertaking Industrial Consultancy and R&D projects are given in *Appendix I*. Salient features of the same as also methods and procedures laid down for undertaking such jobs are given herein:

All consultancy jobs carried out by an individual or by the group of academic and technical staff, irrespective of the quantum of Institute's facilities, equipment used, shall be regarded institutional consultancies. However, for procedural purposes these jobs are divided into the following two categories:

A. INSTITUTIONAL CONSULTANCY

B. SPONSORED R & D PROJECTS

1. INSTITUTIONAL CONSULTANCY

This category comprises those jobs wherein specified and identified problems are tackled through investigational processes entrusted by outside parties to the Principal of the Institute/Head of the Department/Centre/School or the concerned member of the faculty. Such jobs will also include verification of structural designs, design consultancy, software development, prototype development, process development, field survey & report writing, expert advise & report evaluation, continuing education/training programme for the industry, testing & certification work undertaken by the faculty/department from government and private industries and organizations.

1.1 SPONSORED R & D PROJECTS

This category shall include the research and development projects undertaken by the institute faculty which are sponsored by government/private organizations and industries. Such projects will be conducted as per the terms and conditions of the sponsoring organizations and upon the approval by the college Committee for Rosearch & Development, CRD. The intellectual property rights for the technology, know-how, product/prototype developed as a part of the sponsored R & D projects will be jointly held by DCE and the concerned sponsoring organization. The institute faculty involved in the development of the intellectual property will share the royalty received from patents as per the norms given in *Annexure-II*.

2. CONSULTANCY PROPOSAL FORMULATION

The institute faculty can directly be contacted by outside agencies for undertaking consultancy work in their area of specialization. In such cases, the members of the faculty shall formulate the proposal and submit the same in the prescribed format to the concerned HOD who in turn will forward the same to the college committee for Research and Development. In the event of an outside agency approaching the Institute for any consultancy job, the same will be referred to the Dean, Industrial Research who shall in turn contact the Concerned Head. The Head shall assign the job to an individual or a group of individuals in the Division/Department/Centre/School after satisfying that the faculty assigned for the work possesses necessary competence and that the support facilities are available in the department. The proposal for undertaking industrial consultancy shall be formulated by the faculty member(s) and will be submitted to the Head of the Department concerned in the prescribed format. The proposal will then be referred by the Head of the department to the Dean, Industrial Research for being considered by the Committee for Research and Development (CRD). The CRD shall consist of

1.	Dean, IRD	:Chairman
2.	Dean, Academics	:Member
	Two Heads of Dept. nominated by the Principal	:Member
	One Outside expert having expert knowledge	:Member
	Accounts Officer	:Member
(1.	Administrative Officer	:Member Secretary

The Principal shall approve the proposal for undertaking the consultancy work is point the recommendation of the CRD However in emergent cases where the consultancy work is to be executed in a short span of less than three months, the principal may approve the proposal. No ceiling limit has been prescribed for undertaking consultancy work provided (a) consultancy work does not interfere with the normal teaching/research work in the Institute and other duties of the staff mamber(s) concerned and (b) the total time to be spared by the consultant staff member(s) on all consultancy jobs in hand at a particular time should not exceed more than 10 hours in a week.



FORMAT FOR THE PROPOSAL

The proposal for the job shall contain the following:

- I. Title of the consultancy job
- II. Name and address of the client organization
- III. Brief description of the work to be done
- IV. Laboratory equipment/computer/central facilities of the Institute which would be required for the execution of the job.
- V. Name(s) of the staff member expected to be involved in the job. (In case the staff members from other Davison/Department/Centre is/are required to be involved, concurrence of the concerned Head would be needed)
- VI The approximate period within which the job is expected to be completed.
- VII The charges for the job along with their costing.

The charges shall include the following two broad categories:

- A). Expenses to be incurred and
- B). Institute Charges
- C) Fees
- A Expenses means Expenditure incurred in the course of operation of the consultancy work consisting of items (i) to (ix) mentioned herein:

A(i)	Cost of Labour	Payment of overtime allowances/honorarium to non-academic staff involved in the job and also to meet the cost of additional staff to be recruited specifically for the purpose
(ii)	Cost of material Amount needed for purchase of consumables require for the job.	
(iii)	Computer Charges	Amount needed for hiring/using computer from the Institute or outside
(iv)	Charges for use: of the Central	

	facilities		
.(v)	TA/DA Amount spent on visits within Delhi and/or outsi Delhi in connection with the job.		
(vi)	Contingencies Miscellaneous expenditure		
(vii)	Administrative & Overhead Charges	@ 5% of the total consultancy charges i.e. Expenses plus Fees (defined at 2 below for technical and scientific advice) for the execution of the job in hand.	
(viii)	Charges for use of Institute equipment		
2	Fees:	Amount for technical and scientific advice which is to be apportioned between the Institute and the consultant staff member(s) in the ratio of 30/70.	

Expenses, Institute Charges plus fees shall be the total consultancy amount, which the Client organization shall be required to pay to the institute. All payments for the consultancy work will be made through a cross cheque/demand draft in the name of the Principal, Delhi College of Engineering-IRD Account.

A sample budged proposal, is given below:

Type-I: CONSULTANCY INVOLVING USES OF INSTITUTE EQUIPMENTS

(e.g. Testing & development, testing and certification, process development, product development, field survey and measurements etc.)

Total charges proposed for the consultancy work Rs. 50,000.00 (excluding Service Tax @ 8% of the total charges)

A) Expenses

(i) Cost of Labour	Rs. 3000.00	
(ii) Cost of material	Rs. 5000.00	
(iii) TA/DA for internal travel	Rs. 5000.00	
(iv) Contingencies	Rs. 5000.00	

B) Institute Charges

i) Administrative overhead charges

@ 5% of Rs. 50,000.00

Rs. 2500.00

ii) Institute charges for use of

Institute equipments & facilities (computers, workshops,

Rs. 7,500.00

Laboratory) @ 15% of Rs. 50,000/-

C) Fees for Scientific & technical advice

Rs. 22,000.00

TOTAL

Rs. 50,000.00

Add Service Tax @ 8% of the Total Charge

The Consultant Staff Member(s) shall be paid 70% of fee at C above, i.e. Rs. 14,500/- as his/her/their share.

Type-II FOR CONSULTANCY JOBS NOT INVOLVING USE OF INSTITUTE EQUIPMENTS

(e.g. structural design verifications, scientific advice on industrial problems etc.)

Total charges proposed for the consultancy work

Rs. 50,000.00

(excluding Service Tax @ 8% of the total charges)

A) Expenses

i) Cost of Labour

Rs. 2500.00

ii) Cost of material

Rs. 5000.00

iii) TA/DA for internal travel

Rs. 5000.00

iv) Contingencies

Rs. 5000.00

B) Institute Charges

i) Administrative overhead charges

@ 5% of Rs. 50,000.00

Rs. 2500.00

ii) Institute charges for the use of

Institute equipments & facilities (computers, workshops, Nil

Laboratory) @ 15% of Rs. 50,000/-

Fees for Scientific & technical advice C)

Rs. 30,000.00

TOTAL

Rs. 50,000.00

Add Service Tax @ 8% of the Total Charges

The Consultant Staff Member(s) shall be paid 60% of fee at B above, i.e. Rs. 18,000/- as his/her/their share, the remaining 40% will be retained as Institute Share of Consultancy fees in the IRD account.

(A format for making out the proposal for consultancy is given in Appendix-III).

2.2 PROCEDURE FOR PROCESSING A PROPOSAL FOR ACCEPTANCE

- 2.2.1 Acceptance of all consultancy jobs by the institute faculty would require the approval of the Principal, the Head of Institution. However, for expedient disposal, the powers to approve acceptance of consultancy jobs may be delegated by the Principal to the Dean, Industrial Research wherever necessary.
- 2.2.2 The Client organization may make a request for consultancy job to an individual faculty or to the Dean, Industrial Research or to the Head of the department. If the work has been received and initiated by the Head the staff members of the requisite specialization shall be identified by the concerned Head and the work may be carried out by them as a team or it may be distributed amongst them. If, the project is received by an individual, it is up to him/her to associate some of his/her colleagues with him/her. The leader of the team shall be the Principal Investigator. The Principal Investigator shall correspond with the prospective client organization in accordance with consultancy rules and procedures.
- 2.2.3 A request for the approval of the consultancy shall be made in the prescribed format, as given in Appendix II. This proforma shall be filled in triplicate by the Principal Investigator and submitted to the concerned HOD along with a copy of the letter received from the client organization. The HOD shall consider the viability of the proposal and if satisfied would forward the same to the to Dean, Industrial Research for further consideration. The Dean, Industrial Research shall examine the proposal and if satisfied will put up before the Committee for Research and Development. After receipt of the approval of the competent authority, the Administrative Officer shall convey to the client organization the acceptance of the consultancy job by the institute and will execute the

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agreement with the client organization once it is vetted by the Principal Investigator and the concerned HOD.

The Institute's decision for accepting the consultancy job will be conveyed by the Admn. Officer to the client organizations shall clearly indicate:-

- a) the name of the Principal Investigator whom they should contact for technical matters relating to the job and the consultancy job reference number for future references.
- b) The charges which the client organization is required to deposit with the Institute along with guidelines for the purpose.
- c) Copy of the agreement to be signed by the client organization in respect of the consultancy job.

Upon the receipt of the full payment for the consultancy work and signed agreement by the client organization the final approval for the consultancy work will be issued by the administrative officer. Copies of the same will be endorse to all concerned.

2.3 OPERATION OF CONSULTANCY JOBS

Once the terms and conditions have been accepted by the client organization and charges deposited with the Institute, the concerned Head and the Principal Investigator shall be responsible for the successful completion of the consultancy job. They would ensure that the time schedule as stipulated in the approved proposal is adhered to and the quality of the services are kept at high standards.

During he course of work, if need be, temporary advance to meet expenses on contingencies, purchase of materials, local conveyance etc. can be drawn against proper requisition to the Accounts Section through the concerned HOD against proper requisition to the Accounts Section through the staff of the Institut The expenditure on the cost of labour shall be disbursed to the staff of the Institut in the form of OTA/honorarium on the basis of the proposal submitted by the Principal Investigator through the concerned HOD. Prior approval of the Principal shall be necessary in cases, when payment is to be made to outside parties or persons are to be engaged on contract

Duration of the project shall be counted from the date of final acceptance of the consultancy job (i.e. from the date of signing the agreement and receipt of ful payment from client organization).

If the constancy proposal has been agreed to be executed in phases the phase wise duration will be indicated in the proposal and the completion of the project will be accepted phase wise on submission of phase wise completion reports. In such cases, the phase wise break up of expenditure including the Consultancy Fee should be incorporated in the project proposal.

-individuals

The fee to the Principal Investigator and his consulting team members wind be distributed upon successful completion of the project phase. For this purpose, acceptance of the phase wise competition report by the client organization would be necessary.

2.4 USE OF CENTRAL FACILITIES

The use of institutional facilities, including laboratories, library, computed centre and workshop will be permitted for the successful completion of the consultancy job undertaken by the institute faculty. The institute shall charge 15% of the total consultancy charges for this purpose from each consultancy project. In case, the consultancy is executed in phases, the same will be charged from phase wise total charges received from the client organization. The institute charges accrued from this head will be deposited in the Institute account for IRD and will be utilized for maintenance and repairs of the equipments in the laboratories and for other academic development purposes such as, upgrdation and modernization of laboratory facilities, renovation of lecture theatres and for procurement of standards, codes and other relevant literature in the institute library.

2.5 OVERHEAD CHARGES

Administrative and overhead charges (a) 5% of the gross fee (i.e Expense, plus fee for scientific and technical advice) for meeting the cost of secretarial and administrative assistance provided by the institute. In addition the Principal Investigator shall pay upto 1% of the total consultancy charges to the department staff for secretarial assistance from the funds of the consultancy. This component should be included in the cost of labour in the break up for expenditure.

The portion of administrative overhead charges of the gross consultance charges shall be credited to the college accounts for IRD projects. At the end of June & December each year, 50% of the funds accrued from overhead charges shall be paid to the administrative and supporting staff engaged in the operation of the consultancy and sponsored R & D projects. The payment for any additional ministerial staff engaged on contract for IRD work will also be made from this account

2.6 HOSPITALITY CHARGES

The expenses on hospitality shall not exceed 3% of the gross consultancy charges and may be claimed out of the contingency charges in the consultancy project.

2.7 T.A/D.A FOR TRAVEL

The Principal Investigator shall have the power to sanction the journey for the consultancy jobs in respect of any person involved in the project including

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himself. TA/DA shall be paid as per Institute Rules. Leave admissible to an individual shall be granted as per leave rules of the Institute.

2.8 The façulty members to be associated with a consultancy job shall be specifically designated and identified at the time of making the consultancy project proposal. Laboratory staff may, however, be added with prior approval of the Principal Investigator at the time of the actual execution of the consultancy work.

2.9 PURCHASES FOR CONSULTANCY WORK

Purchase of material and equipment not exceeding Rs. 50,000/- shall be made through the department purchase committee on spot quotation basis so that the time bound nature of the consultancy work can be effectively handled by the Principal Investigator.

For purchases costing more than Rs. 50,000/- but less than Rs. 2,00,000/- the purchases will be made through limited tendered inquiries, as per the institutivales.

For purchases costing more than Rs. 2,00,000/- the purchase shall be made through open tender as per the institute rules.

The inventory of items purchased for consultancy work will be maintained both by the Principal Investigator as well as the department stores. The equipments purchased for consultancy work should be deposited in the department stores once the consultancy work is completed. The same may however, be got issued by the Principal Investigator if they are required for another consultancy work.

2.10 CONSULTANCY REPORT

After the consultancy job has been completed, the Principal Investigato and his team shall prepare the consultancy report. The report shall contain a brief description of the work carried out in conformity with the assigned scope of the consultancy work. Major facilities used should be clearly indicated. Test procedure and investigation methodology should be clearly outlined. The out come of the consultancy work should be reported. Any test codes, standards utilized for the purpose of experimentation, testing and certification should be clearly indicated in the report. References to any published work should be clearly indicated and the same must be acknowledged. Intellectual property generated as a part of the consultancy should be clearly documented and the same should be submitted separately for patent wherever possible.

2.11 FEES FOR CONSULTANCY & ITS DISTRIBUTION

After the satisfactory completion of the job and submission of the consultancy report, the institute shall allow upto 4 weeks to the client organization

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acceptance of the consultancy report. The client organization shall submit its acceptance of the consultancy report during this period failing which it will be assumed that the report is acceptable to the client organization. On acceptance of the consultancy report by the client organization, the fee for technical and scientific advice shall be apportioned between the consultant members of faculty and the Institute in the ratio of 70:30, i.e. 70% to the Principal Investigator and his team as per the approved distribution and 30% to the institute for the projects in which institute equipments and facilities are used. For consultancy work in which institute facilities are not used, the consultancy fees shall be apportioned in the ratio of 60:40, i.e. 60% to the consultant faculty and 40% to the institute. The proportion of institute fee shall be crepitated to the institute account for IRD, which will be utilized for further strengthening of the research and development activities of the institution.

The formal proposal for distribution of the consultancy fee has to be presented by the Principal Investigator in the specified form given in Appendix-II. The Principal Investigator shall be accountable to the client organization and shall be answerable for any of their doubts/queries even after the distribution of fees has taken place.

3. SPONSORED RESEARCH

Sponsored research is an important component of a PG institution such as Delhi College of Engineering. Such projects aim at developing technologies and know-how which in turn strengthen the science and Technology base in the country. These projects concern R&D in the thrust areas of the country and are often aligned with the national technology missions. Sponsoring agencies such as DST, DRDO,CSIR, MNES, AICTE, Ministry of IT, MOEF and other government and government undertaking organizations such as IOCL, IREDA etc sponsor R&D projects in leading technology institution. These projects besides creating a research culture in educational institutions help develop research facilities in the department laboratories which attracts high quality research scholars the join the institute academic department for doctorate and post doctoral research. The creation of the research culture strengthens the academic environment in the department and enaches laboratory facilities which in turn improve the quality of education offered by the institute.

Faculty members of the academic department can undertake sponsor d R&D projects, which are funded partly or fully by the sponsoring organization with the approval of the institute authorities.

Such sponsored projects bring to the faculty involved indirect benefits in the form of additional research facilities, research manpower, equipments, travel grants for interaction with their counterparts in India and abroad and help generate intellectual property in the form of research publications, research monographs & patents. In today's technology intensive technical education and research environment sponsored R&D need to be encouraged in each academic department

tens to mobilize external resource: from aponeoung organications to strengthen tentuce generation through research and development

The procedure for the proposal, acceptance and operation of sponsored second projects, at the Institute is given below:

3. PROJECT PROPOSAL FORMULATION

Faculty Members either individually or in groups, who are interested in urdertaking sponsored projects shall formulate project proposal for sponsored R&D for submission to the sponsoring organization. The format for the proposal will be as per the format prescribed by the sponsoring organization. However makes where the format is not prescribed the proposal will follow the following format.

- i. Title of the project.
- Academic department submitting the proposal
- iii. Name of the Principal Investigator and other investigators (members of the faculty) along with their bio data who would be involved in the project besides the Principal Investigator.
- iv. Brief description of the objectives to be achieved
- Brief description of the scientific/technical work to be done for achieving the objectives
- M. Relevance of the project to the development of the country
- vii Relevance of the project to the on going research activities of the Institute
- viii Duration of the project
- 13. Infrastructure already available at the Institute for the execution of the project
- x. Additional infrastructure needed for the project and the amount of grant needed for the purpose and
- xi. The agency to be approached for sponsorship of the project.

12 BUDGET ESTIMATES FOR THE PROJECT

The budget estimates for the project shall be under the following heads:-

321 STAFFSALARY:

- a) Grant needed for research and supporting staff, to be employed in the project on contract (Specify the man power required along with essential qualifications and experience and consolidated salary p.m.)
- b) Payment of OTA/Honorarium to the Institute's academic & non-academic staff including the investigators of the project work in additional to their normal duties.

3.2.2. STAFF BENEFITS

The grant needed for meeting the expenditure for payment to the project staff members such benefit as LTC, Medical Reimbursement etc.. The provision for service benefits to project staff should be worked out at the rate of 50% of the staff salary.

3.2.3 MACHINES & EQUIPMENTS

Major items of machines & equipments required for the successful completion of the research proposal should be clearly indicated along with their cost estimates.

3.2.4 SUPPLIES AND MATERIALS

This item represents the grant needed for day-to-day recurring expenses of the project such as cost of laboratory supplies, chemicals, stationery and other non-consumable/consumable materials.

3.2.5 TA/DA

The amount needed for meeting the expenditure on travel by the investigators and project staff should be included under this head.

3.2.6 CONTINGENCIES

The grant needed for meeting the contingent expenses for the operation of the project. This should not exceed 15% of the toal cost of the R&D project.

3.2.7 BUILDINGS

The grant needed for meeting the expenditure on providing extra laboratory space for the project staff if required should be included in the project.

3.2.8 SERVICE CHARGES

These charges are levied by the Institute to meet the cost of the staff provided by the Institute for the administrative and counting work in connection with the project. These will be 5% of the total project cost. However wherever a project is sponsored by the government/ government undertaking the service charges will be waived off.

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The total cost of the R&D project will be the sum of the above budgetary heads

3.3 FORWARDING OF THE PROJECT PROPOSAL

The project proposal will be formulated by the Principal Investigator in consultation with his team of investigators and will be submitted to the head of academic department. The concerned HOD having satisfied with the project proposal shall forward the proposal to the Dean , IRD. The Dean shall put up all such proposals to the institute committee for R&D, CRD for its recommendations. The head of the institution shall approve the proposal upon the recommendations of CRD. However in exceptional cases where the proposal is to be submitted in a short timeframe to meet the deadlines the principal may approve the proposal directly and bring it to the notice of the CRD at the next meeting.

3.4 CONSIDERATION OF THE PROJECT PROPOSAL BY THE C.R.D.

The C.R.D. Committee shall consider the proposals received by the Dean , IRD from various academic department and will give its recommendations on the suitability , relevance & viability of the proposal. The recommendation of the committee will be submitted to the Principal for further decision on the approval of the project proposal.

3.5 OPERATION OF THE PROJECT

Once the project proposal has been approved and the sponsoring organization has agreed to provide the necessary funds, the operation of the project shall be the responsibility of the Principal Investigator. The PI will ensure that the objectives of the proposal are fulfilled and the grant received is utilized for the purpose for which it was granted. The PI will make every effort to complete the project within the stipulated time frame. However wherever it is necessary to adhere to the time frame the approval of the sponsoring authority will be obtained by the PI.

3.6 RECRUITMENT OF STAFF

The recruitment of the staff for the sponsored project will be made on contract for a period not exceeding the duration of the project.

3.7 PURCHASES

Purchases of machinery, equipments and supplies shall be made by the Principal Investigator in accordance with the purchase rules of purchase for industrial consultancy as outlined in Para 2.2.12.

3.8 T.A/D.A.

The expenditure on TA/DA for travel of the Principal Investigator and his team will be made out of the funds of the sponsored project as per the rules of the Institute.

3.9 TEMPORARY ADVANCES/PERMANENT IMPREST

In order to meet day to day expenditure on the project, the Principal Investigator will be authorized to draw with, the approval of the competent authority. temporary advance/permanent imprest from the funds of the project.

3.10 ADMINISTRATIVE OVERHEADS

The administrative overhead charges included in the budget will be credited to the funds of the Institute as contribution of the project towards cost of administrative and accounting staff provided by the Institute for looking after the work of the sponsored Research Projects.

3.11 PAYMENT OF OTA/HONORARIUM

This shall be sanctioned by the Principal as per rules of the Institute on the recommendations of Principal Investigator for payment to academic/non-academic staff of the Institute engaged in the project in addition to their normal duties.

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3.12 PROGRESS REPORT

It shall be the responsibility of the Principal Investigator to keep the sponsoring organization informed about the progress made. The accounts Officer shall send to the Principal Investigator and the sponsoring organization quarterly statement of the receipts and expenditure account for every project.

3.13 AUDITING OF FUNDS

The account of the sponsored research project will be audited by the same agenwhich audits the accounts of the institute.

3.14. PATENTS/TRANSFER OF KNOW-HOW

Some of the R&D Programmes undertaken by the faculty members of the Institute are expected to lead to evolution of know-how, designs, instruments, devices, service and processes which can be commercially exploited either with or without registratic under the Patent's Act. Such commercial exploitation can be of considerable technoceonomic benefit to the country. The Institute, therefore, shall encourage the transfer of such designs to Organizations which can effectively utilize the same for commercial exploitation and in turn would give appropriate quantum of funds to the Institute to support R&D activities fully or partially. The case of registration of a patent under Paten's Act will be considered prior to its commercial exploitation at the discretion of the concerned individual/individuals who develop the know-how etc.

The registration of patents for the invention/know-how developed by the staff while working in the Institute and the transfer of the know-how for commercial exploitation shall be regulated in accordance with the Rules for Commercial exploitation, as detailed in Appendix-IV.

Appendix

DELHI COLLEGE OF ENGINEERING GOVERNMENT OF N.C.T. OF DELHI

CONSULTANCY RULES

Introduction

- The Institute offers expertise and a host of specialized facilities which very few institutions or industrial organizations can match. The interaction between academia and industry is mainly through Consultancy and Sponsored Research Project and is of mutual benefit.
- Industrial consultancy offers recognition to the Institute and its staff for rendering a highly valuable service of a specialized nature in the scientific and technological
- Consultancy assignments enrich the experience and knowledge of the members of the faculty and staff in the professional sphere and are an opportunity of maintaining live contact with the current problems of industries for which institutions are training students and carrying out research work. The consultancy assignments besides resource generation to the institute offer financial rewards to the consulting faculty. Such projects bridge the gap between an academic institution and the industry.
- Consultancy assignments undertaken by the faculty offer an opportunity for the iv. students to see the relevance of their course work and laboratory exercises to their

1. EXTENT OF APPLICATION

- These rules shall be called the "Delhi College of Engineering, Delhi, Consultancy Rules". They shall come into force with effect from the date of adoption to be decided by
- Notwithstanding anything to the contrary these rules shall apply to every person. in the whole time employment of Delhi College of Engineering, Delhi.
- Unless otherwise specified, singular shall mean plural and masculine shall mean feminine according to the context in these rules.

2. THE RULES

The Principal and the members of Academic Staff are permitted to undertake consultancy works to such an extent as will not interfere with the discharge of their normal duties.

- 2.1 All consultancy work, whether carried out by an individual or a group, irrespective of the quantum of facilities of the Institute availed, shall be accepted only with the prior permission of the Principal.
- 2.2 The members of the faculty desirous to work as consultants shall obtained prior permission of the Principal for undertaking the consultancy work and shall also obtain approval of the detailed project costs. While seeking the sanction, the consultants will indicate the specified nature of the job and time period involved. All requests for undertaking such jobs/Projects will be routed through the concerned Head of the Department in format prescribed for the purpose.

3. REQUEST FOR CONSULTANCY JOB

- 3.1 A client organization may make a request for consultancy job to an individual faculty or to the Dean, Industrial Research/or to a Division/Department/Centre/School/Institute. If the request (proposal) has been received and initiated by the Institute, the Principal will designate the Division/Department/Centre/School that will do the work depending upon the experience and facilities available for such a work. The Dean, Industrial Research or the concerned Head will then assign the job to an individual/group of individuals competent to undertake the work.
- 3.2 The Principal Investigator shall finalize the scope of the work, cost of the consultancy and the terms and conditions for undertaking the job after bilateral discussions with the client organization.

4. DETAILED COSTING OF THE PROJECT

4.1 Detailed costing of the project shall be prepared by the Principal Investigator under the following heads: -

4.1.1 COST OF LABOUR

This comprises the estimated OTA/Honoraria to be paid to the non-academic/ministerial staff involved in the Project and salaries of specialized man power hired/ recruited specifically for the Project. If a person, engaged in Project work, is not eligible for O.T.A. under the Over Time Allowance Rules of the Institute, he shall be paid honorarium.

4.1.2 COST OF MATERIAL

Estimated cost of material to be specifically procured for the Project may be mentioned.

4.1.3 TA/DA FOR VISITS

A suitable provision of an estimated amount for TA/DA shall be made on the basis of the rates settled with the Clint Organization. If no rates are settled, payment shall be made a per Institute Rules.

4.1.4 CONTINGENCIES

An estimated amount for any contingent expenses may be included in the budget of the proposed consultancy job.

4.1.5 ADMINISTRATIVE AND OVERHEAD CHARGES

A fixed amount of 5% of the gross consultancy charges (i.e. Expenses plus Fees for scientific and technical advices) will be levied for payment of honorarium/OTA to administrative staff and staff in the office handling consultancy work.

4.1.6 OVERHEADS FOR USE OF INSTITUTE EQUIPMENT

This includes charges for use of facilities, depreciation, utilities and handling charges etc. and would be levied for all equipments including computers and central facilities such as computer centre, workshop, library and institute laboratories. For the purpose of estimating this cost, a fixed amount of 15% of the gross consultancy charges (i.e. Expenses plus Fees for technical and scientific advice) shall be levied. Any damage caused to the equipment will be repaired out of the funds under this head. No charges under this head shall be included if the Institute equipments are not used in the consultancy work.

4.1.7 FEE FOR SCIENTIFIC AND TECHNICAL ADVICE

A suitable amount shall be included in the consultancy project budget as the fee for scientific and technical advice. The fee under this head will be shared between the consultants and the institute in the following manner:

(i) For consultancy work involving use of institute equipments: 70:30

(e.g. Testing & development, testing and certification, process development, product development, field survey and measurements etc.)

(ii) For consultancy work not involving institute equipments :60:40

(e.g. structural design verifications, scientific advice on industrial problems etc.)

- 4.2 The charges listed under 4.1.1, 4.1.2, 4.1.3 & 4.1.4 are for cost of labour, for cost of material, for payment of TA/DA and contingency on the basis of actual expenditure and shall be disbursed as such. The Principal will authorize expenditure/payment under these heads from the funds of the consultancy project.
- 4.3 On the completion of the project, the charges under "Overheads to the Institute for use of Institute equipment" shall be credited to the Institute IRD account by authorization of the Principal. The amount so realized can be used for any

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developmental purpose to strengthen the consultancy and R & D facilities at the institute.

4.4 The total charges for consultancy job shall be payable in advance by the client organization by an account-payee cheque/DD in the name of "Principal, Delhi College of Engineering-IRD Account" the same will be deposited in the account once the consultancy work has been approved for being undertaken by the institute. In the event, of consultancy work not found fit for approval, the cheque/DD received from the client organization will be returned in original.

Approval of consultancy work 5.

The consultancy work will be approved by the Principal on recommendation of the Institute committee for IRD, however, in cases where the work is to be completed in a short time frame of less than three months, the Principal will have the powers of approving the consultancy work provided the same has been recommended by the Head of the Department concerned.

Consultancy Report

After the satisfactory completion of the job and submission of the consultance report, the institute shall allow upto 4 weeks to the client organization to respond to the consultancy report. The client organization shall submit its acceptance of the consultancy report during this period failing which it will be assumed that the report is acceptable to the client organization. On acceptance of the consultancy report by the client organization, the fee for technical and scientific advice shall be apportioned between the consultant members of faculty and the Institute in the ratio of 70:30, i.e. 70% to the Principal Investigator and his team as per the approved distribution and 30% to the institute for the projects in which institute equipments and facilities are used. For consultancy work in which institute facilities are not used, the consultancy fees shall be apportioned in the ratio of 60:40. i.e. 60% to the consultant faculty and 40% to the institute. The proportion of institute fee shall be credited to the institute account for IRD, which will be utilized for further strengthening of the research and development activities of the institution.

7. Consultancy Amount to the Faculty

There is no ceiling on the amount of consultancy fee to be paid to the Principal Investigators and their team so long as the fee for scientific advice is apportioned as in Para 6. The only proviso is that the undertaking of consultancy work shall not interfere with the normal duties of the individual consultant(s). It is expected that normally nor more than ten hours per week will be devoted by the individual consulting faculty to all such works. The distribution of Consultancy fee to various consultants is to be prepared by the Principal Investigator in the specified form, given in Appendix III.

8. Payment of OTA/Honorarium to Administrative Staff

The office staff of the Central Administrative Office dealing with the correspondence and accounting work of Consultancy Scheme shall be paid OTA/or honoraria from the money received under "Administrative Overhead Charges" only if the work done by them is in addition to their own normal duties. The quantum of amount to be paid to an individual shall be decided by the Principal on the recommendation of the Principal Investigator and the concerned Head of Academic Department.

9. IPR and Patents arising out of Consultancy Work

In case, the consultancy work leads to a patent, the Institute rules will apply and the royalty accrued from such inventions shall be shared equally between the Institute, sponsoring organization and the Consultant(s).

9.1 Copies of all reports submitted to sponsoring organization shall be submitted through the Department/Centre/School. In case the information in the report is considered 'classified' by the Principal Investigator, or the concerned sponsoring organization, a brief note to this effect may be endersed. The report has to be, however, made available as soon as the information is "declassified".

10. Correspondence with the Client Organization

The Principal-investigator/ the concerned Head shall deal directly with the sponsoring organization in all matters regarding any particular Institutional Consultancy Project, after the job has been accepted by the Institute.

11. Work exempted from Consultancy Rules

These rules shall not apply to any fee received for examination work such as paper setting, evaluation, superintendence, invigilation, fee for attending Selection Committee Meetings, honorarium, fee for report writing and publications, lectures etc. All fees for such academic work will be paid directly to the faculty concerned without any share accruing to the Institute.

The permission of the Principal through the concerned Head is to be obtained by the concerned faculty before undertaking such assignments except those which are confidential/secret in nature such as, paper setting for examination, attending UPSC selection committees etc. Absence from duty for work of this nature where payment of a fee is involved shall be on the basis of leave of the kind due and may be obtained in the usual manner.

12. REMOVAL OF DOUBTS

In the event of any doubt with regard to the interpretation of any of the provisions of these rules, the matter shall be referred to the Pr. Secretary/Secretary, Department of Training and Technical Education, Govt. of Delhi, whose decision shall be final.

Appendix II

FORMAT FOR FORMULATING PROPOSAL FOR CONSULTANCY JOB DELIII COLLEGE OF ENGINEERING

1. Title

- Client Organization
 (Please enclose copy of the request from the Client Organization)
- Brief Description of the job (if required use separate sheets)
- 4. Institute Equipment (excluding Computer and Central facilities) required to be used for the job (The extent of use also may be indicated).
- Names and signatures of the faculty who would be involved in the job, with the Principal Investigator.
- 6. Whether use of Institute computer will be involved. If so, for how many hours? (approximate)
- Whether use of central facilities would be needed. If so, of what type and for what period?
- 8. Time needed for completion of the job.
- 9. Institutional charges for the job and their break-up:

A. Expenses:

- (i) Cost of labour
- (ii) Cost of material
- (iii) TA/DA
- (iv) Contingencies
- B Institute charges

(i)

Overheads for use of Institute

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APPENDIX- II

RULES FOR REGISTRATION OF PATENTS FOR INVENTION/KNOW-HOW DEVELOPED AT THE INSTITUTE AND THEIR COMMERCIAL EXPLOITATION

The Registration of Patent and transfer of know-how for commercial exploitation shall be governed by the following rules:

- 1. Employees of the Institute who develop know-how/design/instrument/device process/product and want to get patent(s) for the sale and/or transfer them for commercial exploitation shall be required to make an application for the purpose to the Principal through the concerned Head of the Department where they are working and Dean, Industrial Research.
- 2. The following information shall be supplied by the applicant along with his application: -
- (i) Specifications and other details of the know-how and area of its commercial exploitation.
- (ii) Name of the R&D team members who have developed the know-how/design/ instrument/device/process/product, separately designating the Principal Investigator.
- (iii) Whether he proposes to get patent(s) for the know-how in the first instance and then transfer the same for commercial exploitation or to effect the transfer without obtaining any patent.
- The decision of the Principal Investigator in the above matter shall be treated as final.
- (iv) Recommendations as to whether the commercial exploitation may be arranged through National Research Development Corporation (NRDC) or directly.
- (v) List of Industries/Organizations (along with their full addresses) which are likely to be interested in taking up the know-how, etc.
- (vi) Suggestions regarding the type of agreement to be made with interested Organizations for commercial exploitation. If exclusive agreement is recommended, reasons for the same may be recorded.
- (vii) A declaration that the complete know-how documents are ready.
- 3. While forwarding the application, the concerned Head will clarify the following points: -
- (i) Whether the know-how is connected with the official duties of the applicant(s).

- The extent to which the applicant has used the facilities provided by the institutes for developing the know-how.
- Whether the applicant(s) has/have specifically been appointed for Leveloping the know-how.
- On receipt of the application along with the above information, the Principal shall refer the matter to the CRD or constitute a special Committee, if necessary, to examine the request of the applicant.
- The above Committee shall examine the application and shall make specific recommendations with full justification on the following issues: -
- *Whether the invention should be patented and/or published and, if so in whose name;
- *Whether it should not be patented;
- *Whether the inventor may be permitted to take the patent(s) in his own name; (b) (c)
- * Only in the event, the Principal Investigator has requested for a patent in addition to its commercial exploitation.
- Prospects of its commercial exploitation; (d)
- Whether the transfer of know-how should be direct or through NRDC;
- Recommended name(s) and addresses of the organization(s) which may be (e) approached by the institute for commercial exploitation;
- The general terms for transfer such as exclusive/non-exclusive license, period of license, minimum premium/ royalty etc.;
- (h)Whether any other member of the R&D team should be paid any share from the earning of the know-how in case he/she was specifically engaged in the development of the know-how;
- (j)Any other recommendations.
- The recommendations of the above Committee shall be examined by the Dean IRD who will make a recommendation to the Principal for a final decision.
- After the Principal has given his decision in the matter the concerned Head shall implement the same. For commercial exploitation, he shall approach the listed organizations for the transfer of the know how for commercial exploitation and get the agreed terms approved from the Dean, IRD/ Principal. The transfer deed will be signed by him on behalf of the Institute after obtaining the approval of the Principal. He will also arrange for realization of premium/royalties as per the transfer agreement. Expenses on the registration of patent shall be met from the Industrial Liaison Fund in the first instance to be subsequently reimbursed from premium/royalty received.

- If any applicant considers it necessary to obtain immediate protection for safeguarding the interest of the inventor he may apply for a provisional patent at his own cost and risk and simultaneously apply for permission of the Institute as per the prescribed procedure. In case the Institute decides to get the patent in the name of the Institute, the expenses incurred by the applicant for obtaining the provisional patent shall be reimbursed to him by the Institute.
- The member of R&D team shall not disclose the know-how to any
- The amount of lump sum premium/royalties received by the Institute shall be apportioned between the R&D team and the Institute as under: -
- The expenses incurred/to be incurred by the Institute on the registration of patent shall be charged to receipts.
- The net balance will be apportioned as under: -(ii)

occifically appointed	development of the know-how.
*50%	As may be decided by the Principal.
R&D Team i) Share of the 50% Institute	-(10-
	nent of this know-

- Distribution of this amount among the members of the members of the R&D Team shall be decided by the Principal Investigator. NOTE:*
- The share of the Institute will be credited to 'Industrial Liaison Fund'. The accumulations under the 'Industrial Liaison Fund' from these receipts shall be utilized as under:
 - 50% to be used by the Institute for meeting the expenses of the consultancy and patent cell and for promotion of know-how and developmental work.
- 50% to go to the Division/Department/Centre/School from which know-how originated for promoting Consultancy/Development of know-how, as may be recommended by Principal Investigator. If the money carmarked for the division/Department/Centre/School is not utilized within one year, this amount shall be In case of the Institute. disposal at the share for Division/Department/Centre/School is involved, the Division/Department/Centre/School shall be decided by the Principal on the recommendation of the Principal Investigator.
- 5% of the amount credited to the 'Industrial Liaison Fund' will be treated as 'Administrative Overhead Charges' and utilized for hiring staff for handling such work and/or for payment of honoraria to the Administrative Staff dealing with the Consultancy/Patents/Transfer of know-how work at the discretion of the Principal

- If the development of know-how is not a part of the official duties of the applicant and no facility of the Institute has been utilized by him/her for its development, he/she may apply to the Institute for permission to transfer the know-how to outside organizations on his own. The Principal shall constitute a specific Committee to examine the application and recommend whether the request of the applicant be acceded to. If, on the recommendations of the Committee, the applicant is permitted by the Principal to transfer the know-how on his own, he will be the sole beneficiary of all earnings from such a transfer and no portion thereof shall be payable by him to the Institute.
- If a know-how has emerged as a result of an Institutional Consultancy, the Licence for such a know-how/patent will be jointly held by the institute and the organization sponsoring the consultancy. The Institute shall share its royalty share with the Principal Investigator and his team on a 50-50% basis.
- 15. A probable time schedule for processing such applications will be as under:
- (i) Forwarding of application by the concerned Head.

Within 2 days of the receipt of application.

(ii) Appointment of Committee by the Director.

Within ten days of the receipt receipt of application from the concerned Head.

(iii) Consideration by the Committee.

Within 14 days of the issue of notification about the constitution of Committee.

Total processing time may not exceed 45 days from the date of forwarding of application by the concerned Head to the communication of the final decision of the Director.

16. All sanctions for patents and/or transfer of technical know-how accorded by the Principal during a financial year shall be reported at the year-end to the Government of NCT of Delhi for information.