## **Technology Transfer Committee**

One of the major aims of research is to develop processes, devices, molecules and materials as applications which can be useful for the society. The knowledge of the developed processes or devices or material for wider distribution is transferred to another group or company or industry for commercialization as it requires mass application or production. The Technology Transfer Committee is proposed to smoothen the process of technology developed by faculty, staff, and students of the university through scientific and technological research to the market and society.

#### Functions/Responsibilities of the Committee

- Collaborating with other universities, research institutions and industry to facilitate technology transfer and commercialization efforts.
- Developing plans to market and license intellectual property owned by universities to industry partners, which involves the process of negotiating licensing agreements and determining royalty terms.
- Ensuring compliance with relevant laws and regulations governing intellectual property and technology transfer.
- Monitoring and tracking the progress of technology transfer.
- Establishing policies and procedures for the management and protection of intellectual property generated by the university.

### Steps Involved in Technology Transfer

- 1. The faculty member desirous of licensing/transferring the developed technology or license the technology to a private party/company `may submit to the office of the Research Development Cell (RDC), a proposal consisting of technology document/Pamphlet/flyer describing the technology details, short scientific background, application and advantages of the technology and patenting details, if any.
- 2. The proposal submitted by Inventor of the technology will be evaluated by the committee for novelty and the commercial potential of the invention.
  - A few subject matter experts may also be called for a brief discussion on the novelty of the discovery and for the assessment of marketability.
  - b. The concerned PI/ faculty member should be asked to make a presentation to establish before the committee the feasibility of technology and to decide whether it is ready for transfer.
- 3. The Committee may advertise on the DU website inviting letters of interest from suitable parties, giving the details and applications and patenting status of the technology. The advertisement should have non-disclosing details of technology, advantages, Bench marking, IPR status, contact person's email etc.
- 4. The PI/ faculty members should refrain from disclosing the details of the technology to the interested party or discuss expected tech-transfer fee.
- 5. Expected maximum and minimum value of the technology should be predecided as detailed above and kept confidential.
- 6. Non-disclosure agreement may be signed with the private party prior to discussions and negotiations.

- 7. In case a company approaches the concerned faculty member, he/she should direct them to submit the letter of intent to the office of the Research Development Cell (RDC).
- 8. Once the PI or University authorities receive the letters of Interest, the interested parties/companies can be asked to present their strengths in commercializing the technology before the translational committee.
- 9. Shortlisting of the interested companies as per the decision of the committee.
- 10.Negotiation for upfront amount, milestone payments and royalties.
- 11.Signing of Agreement and transfer of the technology document/ prototype with related data.
- 12.Receipt of payment from the licensee/collaborator.
- 13.In case, after the presentation of the technology to the Committee, it is felt by the committee, that a technology needs to be upgraded further and is not mature for transfer, co-development under specific terms of MoA with the interested party may be recommended to be forged in collaboration mode where the university and the interested party shall develop the technology further (various terms of agreement, funding, deliverables and IP rights should be incorporated in the MoA).
- 14. The said committee may also suggest the mode of technology transfer whether co-development or licensing or any other preferred mode.
- 15. The University may license the knowhow in process or product mode in accordance to above guidelines.
- 16.University may provide consultations to the licensee, if so required, for finalization of commercial product as per pre-fixed consultancy fee.
- 17. Marketing, advertisement and launching of product by the company.

### **Modes of Technology Transfer**

- 1. Up-scaling and Commercialization
- 2. Technology development in collaborative research mode (Codevelopment)
- 3. Sponsored Research
- 4. Public-Private Partnership (PPP)
- 5. Consultancy'
- 6. Through Technology Transfer Agencies (TTA) such as NRDC, BCIL,BIRAC or Business consultant etc.
- 7. Technology incubators and Spin-offs

**Licensing of knowledgebase** shall mean granting licensee the right to use knowledgebase along with the patents covering the technological know-how for making and selling the resulting project(s) either for commercial purpose or as otherwise agreed to.

#### **Method of Licensing**

Licensing of the unencumbered or encumbered technological knowledgebase involving licensing can be affected through specific contractual arrangements with no liabilities on DU.

#### Valuation of the know-how/technology (Pricing):

There is no rigid formula for determining the price of a given knowledgebase and thus estimates vary from case to case. The price would depend upon direct and indirect inputs for the development and the estimates of opportunity value and "what the market can bear". The estimates of following factors shall be placed for the consideration of the committee to arrive at the price of knowledgebase:

- 1. Cost of development (direct inputs).
- 2. Cost of associated with knowledgebase demonstration.

- 3. Estimate of net benefit to be derived by the licensee.
- 4. Size and number of potential licensees.
- 5. Comparative cost of competing knowledgebase in the market, wherever applicable/available.
- 6. Opportunity value.

The cost estimate gives an idea of the cost of development of the technology, but the University may not be able to procure this value in the market as market forces and commercial feasibility determine price.

# Terms and conditions to be kept in mind for framing the technology transfer agreement:

- 1. Nature and duration of the License: The non-exclusive technology transfer should be preferred but in case the private party insists, technology may be transferred exclusive basis at a higher rate for fixed time duration.
- Indemnity/Liability: Any liability to the licensor in connection with licensed know-how/IP\* shall be up to a ceiling of the sum received from the client. (\* These refer to special conditions such as failure of licensed know how and/or false claims for the licensed knowhow).

The licensee shall indemnify Delhi University (Licensor) against any harm or suit brought about by the third party relating to technical knowhow or the products developed by the Licensee.

- 3. The cost of the developed know how is to be calculated based on direct expenses, intellectual fee and service tax etc. incurred by the University. Direct expenses comprise manpower costs, cost of consumables & chemicals, infrastructural services, equipment usage cost and contingencies.
- 4. Intellectual fee would comprise a percentage (in a range of 30-50%) of total expenses incurred by the university and would also include a component

of patent protection & maintenance costs per country where the company wishes to commercialize the know-how. The patent charges to be decided on mutual negotiations and agreement.

# 5. Other important provisions to be kept in mind for the tech-transfer agreement:

- i. Technology details with deliverables by the University.
- ii. Patenting details: Bibliographic details, active or lapsed patents, patent granted or patent pending.
- iii. In case the technology in unprotected then above clause would not be applicable.
- iv. Status of the technology: If it is encumbered or unencumbered.
- v. Duties of the Licensee (for ex. Taking the knowhow to the product level, regulatory compliances, advertisement and publicity, devising marketing strategy etc.
- vi. Nature of license: Non-exclusive or Exclusive (Justification for exclusive licensing required) and term of the license.
- vii. Time period required by the licensee to take the product to market should be specified.
- viii. Details of license fee payment to be made by the licensee should be specified, if it is lump sum payment or milestone-based payment schedule.
  - ix. Terms of royalty payment to be specified.
  - x. Duration of validity of agreement should be concomitant with the duration of the license.
  - xi. Provision of allowing periodic inspection by university team should be specified.
- xii. If the licensee, if yes requires any post-licensing consulting from

University then the terms of consultation should be specified.

- xiii. If sublicensing to a third party would be permissible then the terms should also be pre-decided.
- xiv. Force Majeure and exit clauses should be carefully considered.
- xv. The clause that 'name of the university should be clearly mentioned in readable font as developer of the technology', should be inserted in the agreement.

#### **Royalty Sharing**

The following scheme of distribution for royalty received from the commercialisation of the University-owned intellectual property will be shared between the University and the Inventors. [E.C. (2)-15-7-1999, Resolution No. 110, Point B].

The royalty or revenue received by the University directly from industry or through any other Government agency may be shared as follows:

- a. 60% to the Inventors/author(s), 20% to the department/centre where the research was carried out and 20% to the University.
- b. The University share should go to a Science Reserve Fund of South Campus or North Campus as a new budget head, which should be utilized for the overall development of science departments in the respective campus.
- c. The department's/centre's share should be utilized for the infrastructure/upgradation/maintenance of the departmental facilities where the work was carried out. The utilization of the fund can be discussed in Departmental Research Council and utilized under the guidance of the HOD/Director.
- d. Where there are more than one author/inventor, 50% of the author's share may go to the Principal Inventor (PI) under whom the whole programme was carried out and the rest may be shared among other inventors and other workers associated with the work. These people may not be inventor but may be associated with work in other capacity. This distribution to each one, which may not be equal to everybody, may be decided by the PI and submitted for the approval by the PVC (for North Campus) or by the Director, South Campus (for South Campus). In a case where PI is the only beneficiary, he/she may authorize the University to

directly give any part of his/her to anyone who may not be an Inventor but associated with the work in any capacity, as per guidelines mentioned in various points.

- e. The revenue/royalty will be shared each time the University receives it.
- f. The beneficiary of the inventor share must be or must have been an employee of the University either on permanent roll or on temporary roll, as project employee. Students who have contributed in the particular research work may also be given a share. as decided by PI.

Revenue sharing is not necessarily concurrent with authorship. Mere assistance does not entitle one for authorship but may entitle for share in the revenue. Authorship is an acknowledgement of non-mechanical and

intellectual contribution. Revenue sharing may be acceptable even for routine/mechanical contribution at the discretion of PI.

- g. If any of the beneficiary including PI does not want to take his/her share for his/her personal income, it can be deposited in an account called Professional Development Account (PDA) for that particular person. Revenue received for different technologies may be pooled in one PDA of that person. The funds accumulated in the PDA for an individual can be utilized by that individual for the following:
  - 1. for purchasing books, subscription of journals.
  - 2. for procuring equipment for data processing and data management such as computer, printer and printing material, etc.
  - 3. for secretarial assistance and for hiring technical and nontechnical help, as required by PI.

- 4. for filling applications for Trademark/Patent.
- 5. for communication charges such as internet, telephone, fax, etc.
- 6. fee to the membership of various societies.
- for hiring transport for local travel for official purpose for PI and associates.
- to pay in full or part for travel and other expenses for attending professional conferences in India or abroad by PI or other associates and to work in a laboratory for a short period of time.
- 9. for the laboratory renovation including furniture.
- 10.for hosting scientific meetings and symposia.
- 11.to procure chemicals and instruments for laboratory.
- 12.or any other assistance required for the professional development of the individual inventor or his/her laboratory, as approved by the Director RDC Director,/ Director South Campus.

The expenditure for the purposes mentioned above will be done as per rules of the University for projects, as recommended by the Research Project Advisory Committee (RPAC)

h. Any unclaimed share (not claimed by the beneficiary within 3 months of notification) will go to the Science Reserve Fund.