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Guarantees in Technology Transfer

Most important factor for the transfer of technology is that it takes care of the interest of both the parties and maintains their interest. It can only happen if the agreement is balanced, good and fair. This can happen when both the parties feel that their legal interests are covered, obligation and rights, obligations and considerations are balanced and serves the economic aims and purposes of the licensee. This all should result into a successful transfer of technology.

2. On the completion of the project it is the licensee who is in full command of both plant and production including marketing. Therefore a licensor can not be held responsible for the financial success of the project. His only responsibility is that the technology transferred by him brings the results as promised by him. Similarly the supplier of equipment must ensure their stated performance on the basis of technical documentation supplied by him and operated under conditions and performance values stated therein. Such operation, however, shall be carried out by the staff trained under the guidance of the licensor who should be able to perform.

3. How to ensure these goals specially when the licensee does not have much knowledge about the exact nature of the technology? He only knows the objective not the procedure and has to believe the statement

of licensor or by physically seeing the performance of technology in an alien country. How same performance can be transplanted into his factory. That is the question we have to tackle under this chapter.

4. The first and foremost is to carefully establish all performance values that have bearing on the economy of production and on the sale value of the product. These are the parameters which require to be guaranteed. These all values are not critical hence all of them are not required to be guaranteed. Therefore, it is necessary to define clearly how performance values should be measured, by what method, how the average over the period of the performance guarantee test should be calculated and how in general, the performance guarantee test could be carried out.

5. No licensor can be made responsible for how you run the plant. He only has to demonstrate that the plant, if designed, constructed and operated in accordance with his documentation, advice and instructions, is capable of producing the products according to the specifications and with the performance values guaranteed. This is the role of performance guarantee test after which Provisional Acceptance protocol should be signed.

6. However, a reduction in product purity may not only reduce sales prices but could increase consumption figures and noxious by-products. This could lead to further investments and result into health hazards. These would affect the production cost on a long term basis. Therefore it is necessary to determine the limits

of tolerance for each factor within which variation can be tolerated without consequences to the licensee and licensor. Such variation within the tolerance limit could be compensated by price reduction beyond which it should be considered unacceptable and unsuitable. However, it should be remembered that nothing should be overdone.

7. If the compensation is too heavy the licensor may overdesign increasing the investment cost. He may lose his profit in the license making him uninterested in the transfer of technology. He may also over-train, prepare excess documentation, deploy excess staff and demand ideal situation. All this would jack up the investment without any extra benefit to the licensee. Here the principle of balancing is put to the test.

8. The contract must provide the right of the licensee to repudiate in case the guaranteed values exceed limits and become unsuitable. Sometimes, the loser will be the licensee by being in greater need for cooperation. Therefore, there could be a case where he is forced to want it since he loses his rights of license too. Therefore, efforts should be concentrated on fixing the technology within a reasonable time and if the guaranteed values could not be reached then to reduce the damage and find a price reduction equitable to both the parties. It is not an easy job but a license agreement, if success is sought, should always be on mutual trust, goodwill and friendly cooperation like a marriage.

9. A performance guarantee test should also be used as a demonstration of successful training. If it is found that the staff has not been sufficiently trained and the plant otherwise conforms to the contractual stipulations and performs good the Provisional Acceptance Certificate should not be held but the licensor should contractually undertake to provide further training.

10. There are various types of guarantees which one could stipulate in the agreement depending upon nature of technology, product and locations. A few of them are:-

- (i) Guarantees against mechanical defects
- (ii) Legal guarantees
- (iii) Guarantees against Rights
- (iv) Guarantees relating to Scope and Form
- (v) Guarantees about mutual Obligation

10.1A. Normally a technology transfer agreement until and unless it is coupled with the supply of agreement shall not have any requirement about this guarantee. This refers to defects due to incorrect design, improper material and inadequate workmanship. It does not cover accidents during transportation, storage, erection or from incorrect operation by the licensee's staff members not in accordance with the operation manual of the supplier.

1B. Such guarantees must cover remedies for defects by way of repair, replacement, price reduction, alternative procurement or repudiation of the contracts. A detailed procedure should be specified in case of enforcement of guarantee as how the supplier is to be notified, inspection and determination of defect, what exact action is required to make it operable like the new one without sacrificing

the life and quality of equipment, period within which rectification action to be taken, loss or delay due to such event how to be compensated etc.

1C. The period of guarantee, when should it start or end is normally from the successful completion of the performance guarantee till 12 months from the date of Provisional Acceptance Certificate. In any case not later than 36 months from the date of dispatch whichever is first depending upon the technical character of the equipment. An unnecessary longer period may mean more safety but more money too. A reasonable experience may assist in determining this period.

1D. A longer period of erection means more guarantee time is lost. An unreasonably early supply of equipment will have the same result. Therefore a proper harmonization of supply of machinery and erection would help in getting benefit of a good guarantee provision in case something goes wrong and saves lot of botheration and money for both the parties. The guarantee period must be prolonged by the down time.

1E. It is also advisable if supplier is asked to supply the expected spare parts for the operation of machinery for say next two years. This should be added in the price of the machinery at the time of making a comparison of prices with the competitors. This would ensure a fair price and trouble free maintenance for atleast 2 years. Any spare part required during this period over and above provided for will have to be supplied by the supplier free of cost.

1F. It is useful if representative of supplier is present at the time of opening of cases of expensive equipment. Similarly any damage occurred during the transport ascribed due to inappropriate packing should be charged to supplier and due to inappropriate handling to the carrier or the forwarding agent. However, a proper all risk insurance could help ease the situation for both the parties.

1G. The best solution in such case of damages is replacement but it is always not possible due to long manufacturing time, heavy booking of orders and paucity of funds with the licensee.

1H. One of the solution could be that place of delivery of machinery could be the site of the construction of the project.

10.II. The guarantees against legal defects means that the licensor has every right to provide both the process and the equipment under the conditions of the contract. The licensee will get no claims for infringement from any third party for the use of the technology or any part of it including equipment, drawings and software etc. for the application and marketing of any product produced by such technology and sold under the conditions of the contract.

10.II.a. most licensor would agree to provide this clause but the problem comes when a third party actually presents a claim for infringement. This could be analysed as under:-

(a) If the technology is patented, if yes whether in the country of the licensee also patented

(b) Patented but not in the licensee's country

(c) Not patented

10.II.b. In the case of (a) it is rather simple because the burden of proof will be on the third party claiming the infringement. But situation is difficult if there is no patent in the country of licensee. Normally licensor offers a clause to indemnify the licensee against the damage of a negative court decision upto a certain percentage of his license fees and will assist the licensee in the defence of his case. This has certain elements of risks.

10.II.c. The licensee does not have sufficient knowledge of technology to defend himself, absence of sufficiently experienced attorneys in the country in this field, lack of finances since such proceedings take years to come to any conclusion, loss of market during the pendency of the suit and in case he loses he may have to pay the damages to the claimant.

10.II.d. It is therefore necessary that an appropriate patent search is essential in his own country or in the countries which is going to be his potential market. He could seek help of experts and experienced people in this field. It may reveal either the risk is zero or there are serious obstacles. He may request the licensor, in case later happens, to modify or change the technology. If there is no patent various safeguards should be provided, steps to be taken, assessing the gains against expenses and calculations of possible losses if no action is taken at all. It is always advisable if

further development and research work is patented in the countries concerned.

10.III. Rights relate to production, use and sale. This may include the rights and methods to design based on the process licensed. It could be patent license or a know-how license or a trademark license. Such license could be 'exclusive' meaning thereby, no one has right to produce, use or sell it including the licensor himself or "sole" **only** the licensee and licensor have the right or "non-exclusive" anyone else could have the rights. These are mixed cases as well.

10.III.a. It is essential that if transfer is to be successful, lucrative then the licensee should acquire market rights which absorb his production and that he has as few competitors in the market as possible. Such rights will depend upon the type and subject of license, whether the licensor himself is capable of covering that market, whether a similar licensee exists in the same area, and whether the transport cost and distribution expenses make it unattractive for him to market his goods in those countries.

10.III.b. In certain countries to limit the production, sale market and volume, field of use is considered illegal. Therefore it is necessary that the negotiating power and ability of the licensee should convince the licensor, futility of such provisions in the contract. It would however require the study in detail of the laws of the particular country.

10.IV. Scope and Form of transfer of technology should be as much as necessary to absorb the technology. However

this will depend upon how well the staff is trained, complexity of process and equipment, degree of automation, facilities of maintenance and spares, prevention of damage and shortening of down time. Therefore the scope of transfer should include all knowledge how to run the plant and operate the technology under normal commercial operating conditions, in a lucrative manner.

10.IV.a. The form of transfer must include written technical and Basic engineering documentation. These must describe process, product, quality control and production methods, maintenance, repair, procurement of equipment, construction designs and energy supply system etc.

10.IV.b. Any deficiency in the availability of drawings and designs means more money to procure them from alternative sources. This may bring in conflict the two different technology and a technical argument may ensue thus jeopardising and atleast delaying the project. It is therefore useful if a system is provided for the participation of the transferor in the review of all design work done by the licensee and training of the licensee's staff. They should be able to achieve from know-how to show-how.

10.IV.c. There may be another form of transfer of technology by delegating an expert to lead the setting up and commissioning of the plant or a contract for the transfer of future development results or training of engineers in the licensor's pilot plant or assistance provided in the management by the licensor.

10.V. Mutual obligations are the realization or implementation of the project in the form of a working programme. All sequence of action must be noted indicating whose obligation it is and who has to provide starting data and nature of data. After this the time element be added to all items realistically.

10.V.a. Mutual obligation for free notification and transfer of improvements, offer of patentable improvements at not worst than those offered to others, freedom to sub-license after the expiry of agreement except the trade mark, assured supply of spare parts, obligation of legal defects until expiry of patent and obligation of secrecy are a few other provisions to be added wherever required.

11. When there is compensation for delays it is logical to provide bonus for early or timely completion of the project. An early erection need not necessarily mean early commissioning. There should be no bonus if nothing is gained. Penalties should be calculated for days, weeks or months. Usually ~~they~~^{is} 8-10% of value of equipments. It could be higher for failure to deliver documentation as whole project will get delayed without documents.

12. The licensor will most probably want to set a limit on overall liabilities. If it is too high he might not be interested in the project. It would be advantageous to cancel the contract if the delays exceeded the limits of tolerance prescribed. Liability means the acceptance of financial consequences for unimplemented obligations causing loss to the other party. These could be :-

- Losses due to delay in implementation
- Extra investment due to imperfect equipment supplied and for not reaching the performance guarantee levels
- Expenses due to claims made by third party for infringement or damage to life and property of third party.

Unusual long delay should provide for compensation or repudiation of the contract in addition to penalty. The third party liability should be insured adequately. The direct and indirect damages should be separated to avoid litigation.

Now question arises once a claim has arisen how to realise it. The best way is to open a revolving letter of credit whenever possible to cover a guarantee. This will mostly be for supply of equipment and material.

It goes without saying that a technology transfer agreement to become successful necessarily be based on mutual trust, fairplay, impartial, balanced and innovative. It is not a short term arrangement limited by time and performance because certain obligations continue to exist for a longtime even after expiry of the formal agreement. Thus mutual accomodation and understanding of each others difficulties will make it attractive to both the parties. Unless it is so it will not survive and collapse. Guarantees are their for reminding the obligations and not the obligations itself. The purpose of guarantee is not to earn any pecuniary benefit but to help to keep the project economically viable. So it is the spirit of give and take which ultimately makes it successful rather than a binding.