



TOGETHER
for a sustainable future

OCCASION

This publication has been made available to the public on the occasion of the 50th anniversary of the United Nations Industrial Development Organisation.



TOGETHER
for a sustainable future

DISCLAIMER

This document has been produced without formal United Nations editing. The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. Designations such as “developed”, “industrialized” and “developing” are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. Mention of firm names or commercial products does not constitute an endorsement by UNIDO.

FAIR USE POLICY

Any part of this publication may be quoted and referenced for educational and research purposes without additional permission from UNIDO. However, those who make use of quoting and referencing this publication are requested to follow the Fair Use Policy of giving due credit to UNIDO.

CONTACT

Please contact publications@unido.org for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at www.unido.org



D03729



United Nations Industrial Development Organization

Distr.
LIMITED

ID/WG.131/3
30 June 1972

ORIGINAL: ENGLISH

Expert Group Meeting on Licensing Practices

Vienna, 28 August - 1 September 1972

LICENSING AS A PART OF THE INVESTMENT PLAN ^{1/}

Technology Transmission and Investment
in Developing Countries

by

Edward P. White

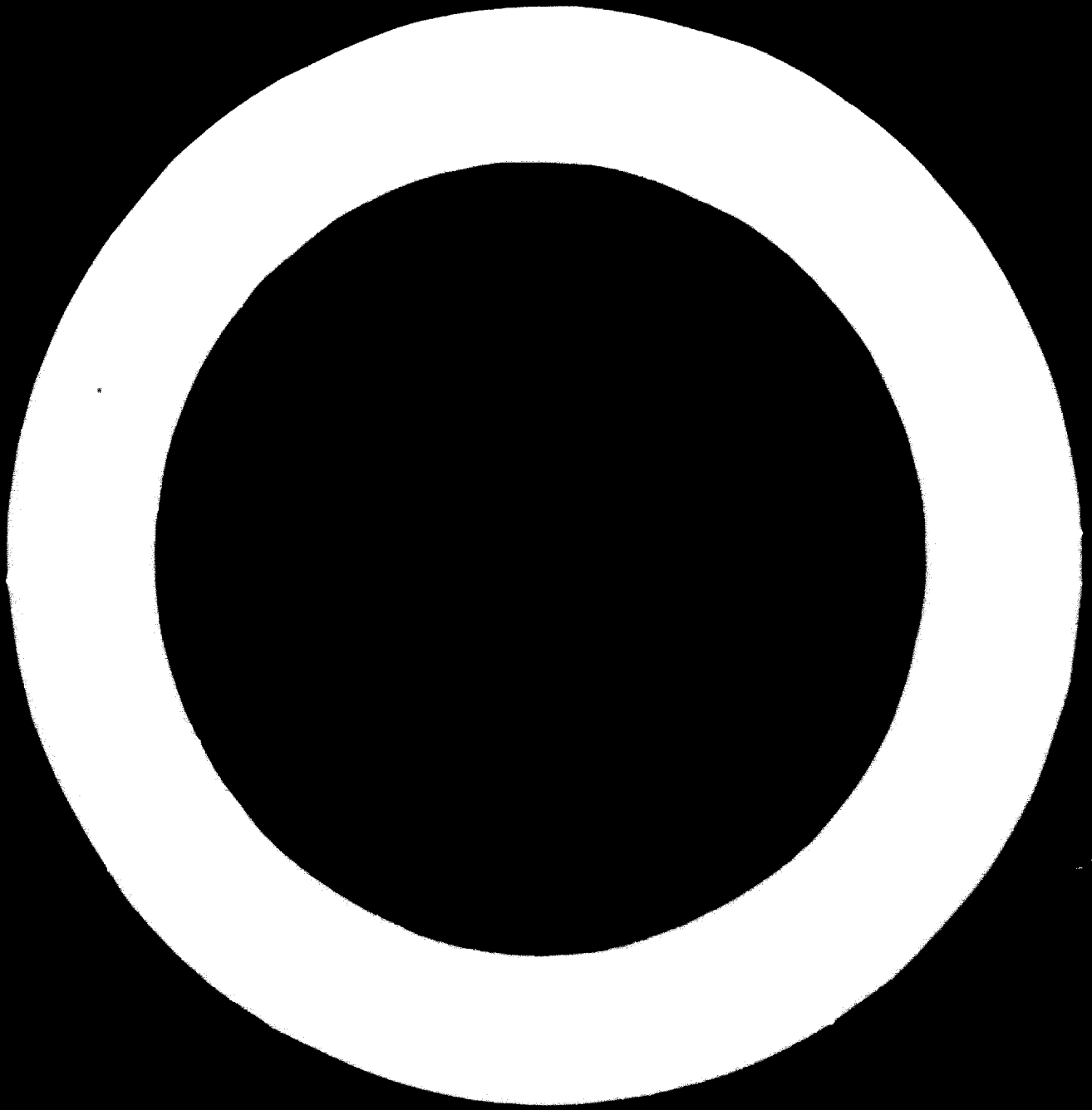
Consultant to UNIDO

Pittsburgh Penn. U.S.A.

^{1/} The views and opinions expressed in this paper are those of the consultant and do not necessarily reflect the views of the Secretariat of UNIDO. This document has been reproduced without formal editing.

id.72-4279

We regret that some of the pages in the microfiche copy of this report may not be up to the proper legibility standards, even though the best possible copy was used for preparing the master fiche.



LICENSING AS A PART OF THE INVESTMENT PLAN

Technology Transmission and Investment in Developing Countries

I. LICENSING/INVESTMENT PLANNING - SUMMARY

II. INTRODUCTION

Licensing - versatile means for buying and selling technology
Major elements to be treated, some topics covered farther in
the appendix

III. THE PROBLEMS OF DEVELOPING COUNTRIES

Need for development
Need for profits
Need for full study and proper selection of projects

IV. CONSIDERATIONS FOR INVESTMENT PLANNING

Outside loan guarantee
Promotion support
Market study support
Stability and incentive needs

V. LICENSING AS A VEHICLE FOR TECHNOLOGY TRANSMISSION

Advantages and disadvantages
Industrial Property Rights - Significance and evaluation
Technology, Know-How, Management Methods - Significance
and evaluation

VI. TRAINING, SERVICE OBLIGATIONS AND OPERATIONS MANAGEMENT

- Training and technology transfer
- Assurance of adequate service and organizing for same
- Training programs - organization and support
- Management training and management contracts
- Responsibilities of partners -
 - When partners have equal ownership
 - When licensor is minority partner

VII. MARKETING - THE INFLUENCE OF THE MARKET PLACE

- Special Arrangements for Special Problems
- Indigenization
- Product Adaptation
- Products for internal use or for export
- Complementation
- Special Promotion Efforts
- Use of Special Consultants

VIII. FINANCIAL TERMS OF THE LICENSE

- Evaluating the License
- Capitalization of Property Rights and Know-How
- Alternate Financing - Needs, Sources and Guarantees
- Royalties and Other Fees
- Licenses between Parent and Subsidiary

IX. AVOIDING CATASTROPHE

- Investment protection
- Arbitration

X. CONCLUSION

XI. APPENDIX

- A. Advantages of Licensing
- B. Disadvantages of Licensing
- C. Use of Industrial Property Rights in License Contracts
- D. Special Management Training
- E. Survey of Management Problems in LDC's
- F. License Cost Factors

I. LICENSING/INVESTMENT PLANNING - SUMMARY

Licensing, with possibilities of equity or no equity participation, may well be the best of all methods for marketing or transferring technology. The latest developments in investment guarantees, financing of market studies and project analysis, planning of investment programs and financial partners--all combine to establish a well planned license program as being an outstanding opportunity for licensors and licensees in advanced and developing countries. Such planning will, of course, cover the various schemes offered by national and international finance institutions. It must also include specific attention to the details of a license in order to assure adequate protections and to establish proper evaluation of the technology. The complete value of a license and equity association will include an appraisal of all training and operational or managerial opportunities--in addition to the importation of new products and market developments. Proper financial arrangements and attention to guarantees or recourse on performance by both parties, all of these factors can be combined to give Developing Countries the optimum opportunity for profitable industrial expansion. With guidance from UNIDO, these accomplishments can be met while avoiding unfair restrictions, unjustified limitations, unnecessary payment for technology already available or over charging for technology that is needed (9). An intelligent approach to these opportunities can, for example, create industrial expansion in several countries on much the same product line but with different license provisions and venture organization--such as is found with Sifco-Industries in Ohio, producer of precision forgings and other industrial and aerospace applications. Using individually planned approaches, Sifco has had three separate success stories reported (2f) for Argentina, India and Brazil.

II. INTRODUCTION

Licensing in its various forms is probably the most versatile means of obtaining or marketing technology. Properly selected, wisely negotiated licenses permit maximum progress with minimum expense. With fair terms, licenses can be profitable to both licensee and licensor. In most cases, licensor firms would like to have a significant voice in the management and operation of their licensee firms--an understandable attitude, since they are anxious both to assure the proper use of their technology and to obtain a maximum share of the increased profits and capital value created through the licensed technology. In some cases, licensees are also interested in the financial investment and support of licensor firms--both because they need the money and because the licensor will probably have more interest in the project when his finances are also committed. In other situations equity or joint venture relations will not be appropriate, and the primary concern will be a specific product or process. Regardless of the equity position, any license or license program--as a successful business venture--must be financially sound--must represent profit for both licensor and licensee--and should be evaluated as an integral part of the investment plans of both licensee and licensor.

The proper consideration of a license as part of the investment plan must be related to all phases of licensing--must review such factors as

technical service as well as the sources of loan funds--if the subject is to be fully understood. With this thought in mind, the following summary has been written. It is the purpose of this review to identify the different aspects of licensing and to relate these factors to each other--thus creating a consolidated picture of a business/investment plan for both licensee and licensor. As this subject is developed, there are additional details which are pertinent for consideration but not vital to the over-all subject. When this situation occurs, further comments have been added in the appendix--or specific numeric reference is made to literature in in the bibliography. Those actually involved in licensing and technology transfer between the Developing Countries (DC's) and the Advanced Countries (AC's) are urged to consider thoroughly all of this material.

Finally, an attempt has been made in this review to generalize and to identify policies and attitudes which can apply to most or all situations. With the divergent conditions of Developing Countries--from Brazil to Guinea to Taiwan--it is not possible to have the same judgment fit all cases. Therefore, it must be emphasized at the start that all recommendations and statements in this report must be interpreted and adapted to fit the circumstances of each country.

III. THE PROBLEMS

The problems of developing countries are substantial unemployment, limited technical capability, limited capital resources, restricted markets and an inadequate infrastructure. For example, an estimated 80% of the population of Black Africa is agriculturally employed--yet diet and adequate nutrition is the largest single problem in this part of the world. Of the world's population, 67%--a fantastic market potential if it had purchasing power--lives in the world's poorest countries. Without trying to solve all the world's problems at once, it is possible for private industry in more advanced countries to assist both private industry and the public planning goals of the developing countries. The giving of help in this context is complicated by a wide disparity in technical and managerial abilities. At the same time, help may be in modest amounts as in the case of training metal workers for a small fabricating operation--or it can be the creation of entirely new food processing plants which supply highly nutritious dietary supplements, thereby expanding markets and relieving a basic food deficiency--or it can be a very large investment of an international consortium, which brings a new industry and a major infrastructure, a significant single economic influence. In each case the source of new technology must be encouraged to invest money and personnel time with a reasonable expectation of an adequate return on investment. Without realisable profits, neither large nor small companies can afford to invest their resources. The problem, then is to bring needs and opportunities together and to persuade each that he needs the other.

IV. CONSIDERATIONS FOR INVESTMENT PLANNING

The demands of new industry in Developing Countries for financial support, operating funds and capital equipment often exceed the ability of both the host country and the private industry investor. Recognition of a need for extra help has come from the financial sectors of all the Advanced Countries. Supplementing and coordinating individual country efforts, the Organisation for Economic Co-operation and Development (OECD) was established in 1960-- with one of its stated purposes being "to contribute to sound economic expansion in member as well as non-member countries in the process of economic development". To summarize the financial planning facilities available for developing countries, OECD has published "Investing in Developing Countries" (8). For those considering any significant investment in the developing countries, this survey of incentives provided by capital exporting countries is "required reading". Without going into detail here, the available facilities for financial incentives are divided into 5 categories:

1. Investment guarantee schemes
2. Fiscal provisions for investment income
3. Information and promotional support
4. Government agency/private investor cooperation
5. Government sponsored investment corporations

The survey results are reported in general summary and specific review for all 16 participating countries. Licensors from Advanced Countries and licensees from Developing Countries should be thoroughly familiar with the various incentives and opportunities which are covered by this informative publication.

Of particular importance to those considering new ventures in Developing Countries are the investment information and promotion activities which can now be financed through governments of Advanced Countries. It is possible, for instance, to obtain partial or complete financing of feasibility studies and pre-investment surveys. Without proper information of this type, a licensor with a viable, potentially profitable technology cannot determine whether a given country represents a profitable opportunity--while both the private and public sectors of the developing nations can equally not establish what such a new technology might be worth in terms of royalty or other terms of sale.

Concurrent with the financial assistance offered by the capital exporting countries, OECD points out that the major responsibility for improvement of the investment climate must remain with the host country. It should also be noted that "investment climate" in this context should include the entire range of considerations that both strengthen the confidence of those who invest money, technology, plus manpower and support a viable market place for the products of the investment. These factors must include among others:

- Ability to repatriate funds
- Freedom from government intervention
- Favorable tax structure

Unfortunately, the writer is not aware of any up to date summary of the financial incentives and/or difficulties presented by the various Developing Countries of the world. Considerable information is available, however, from selected publications such as references 2a, 2b, 13, 25. Originally the writer hoped

to include with this review a summary of area and/or country regulations which influence investment and licensing plans. Such a summary, however, proved to be impractical for the time available.

Recommendation to UNIDO

A universal summary of financial and investment support, plus a review of limitations and licensing restrictions would have great value for both licensees and licensors in furthering DC - AC relations.

V. LICENSING AS A VEHICLE FOR TECHNOLOGY TRANSMISSION

Advantages and Disadvantages

Of the various schemes or systems for accomplishing the transmission of technology, licensing is probably the most versatile, since it offers complete freedom of choice and opportunity for both the source firm and the receiving firm to accommodate their individual needs through negotiation. Appendix Section A gives a summary of the many advantages of licensing in respect to both licensee and licensor. All of these advantages are real and valid--and hold varying degrees of importance depending upon circumstances. The most important single feature for the licensee, however, is probably the factor that new or improved technology can be made available without the restriction found with total or controlling ownership by an "outside" group. This advantage is real and of great significance to both receiver companies and the host governments of DC's. The corollary advantage to the licensor--and there must be a corollary or there cannot be a lasting agreement--is that additional profit can be made available at reasonable cost with minimum capital outlay. Concurrent with this last statement is the assumption that there must be some assurance for the licensor that the corollary advantage will continue to remain valid during the term of the agreement.

Despite the advantages of licensing for both parties, there also are potential disadvantages. If these difficulties are not also understood, there can be problems built into the basic agreement. A review of disadvantages

is given in the Appendix Section B. Fundamentally, these factors can be summarized by saying that each party must fully recognize the needs of and demands upon the other party. Without such recognition, problems are almost sure to arise. Although this general remark may not appear to bear specifically on the financial planning aspects of licensing, it does indeed represent the greatest single reason for difficulties in licensing--whether these difficulties are financial, technical or managerial.

Industrial Property Rights

In terms of essential guarantees for both licensee and licensor, the matter of industrial property rights is one of the most significant. Of the many reviews and discussions on this subject, one of the best and most recent is the paper of Ludwig Baeumer of WIPO, "Importance of Industrial Property Protection in Developing Countries" (13). This review is a significant summary--and all aspects of it should be studied and taken into account by those concerned with the licensing of technology into DC's. To underestimate the need for valid equitable industrial property laws their administration and use, is to ignore a fundamental cornerstone of values in the transfer of technology.

While a license agreement of any sort is first a legal document, it is also a business vehicle. Thus, a proper license outline must provide for technical/business considerations as well as legal elements. With this thought in mind, Appendix C outlines the incorporation of industrial property rights

into the business scheme of licensing. These considerations are given here to emphasize the essential element of confidence and protection which is offered to both licensee and licensor by a sound, dependable system of industrial property rights.

The establishment of values for patents or other industrial property-- including know-how is one of the most difficult determinations in any license. There is no single set formula, but logic must be followed, and the job is fundamental to the pricing of a license. Insofar as possible, all reasonable value analysis methods should be considered. The factors to review vary in their importance by reason of market conditions, license subject matter and reputation of licensor and licensee. Full consideration should at least cover the following questions:

1. Costs
 - Cost to develop technology or patent
 - Cost to maintain technology
 - Probable cost of related improvements
 - How much might it cost to develop independently
 - Can the licensor recover some original development costs
2. Potential profitability to licensee - Licensor should submit adequate information with relation to both manufacturing costs and market estimates. How fast can profits be realized?
3. What substitutes are available - either under license or by indigenous development
4. Could the patent be reasonably challenged by infringement

These are all factors in the determination of suitable values for a single patent or a group of patents--for a trademark--for a know-how package--

or for a combination of all three in one or more licenses. A knowledgeable legal or business counselor can often be helpful to a licensee in evaluation of these factors.

Technology, Know-How and Management Methods

In the field of technology marketing and transfer there can be no doubt that industrial property rights are vital. At the same time it must also be recognized that the greatest amount of technology--and often the most valuable in a practical sense--cannot be protected as an industrial property right, cannot even be classified as "confidential know-how" or "trade secret". This is the area of technology covered by general engineering, science and practical operating experience. The mere reading of a patent or a text book will create neither a trained mechanic nor an experienced plant manager. This knowledge is the basic strength of all successful manufacturers--and is the very core of need on the part of industry in the DC's.

To say that experience is the teacher of in-depth operating know-how is to admit that mistakes and expense are the background of all sound operating experience. When a firm has spent time, manpower and money in developing a position of expertise, it is natural that such a firm does not want to give away or to sell cheaply the knowledge so gained. This practical background is also worth money to a prospective licensee--since it represents an opportunity to obtain new products or processes for a lower cost than would be possible through self development--and in a shorter period of time.

The evaluation of unpatentable, unprotectable know-how and management methods is always difficult--but can be accomplished by several means, some more accurate than others. Considerations are basically the same as those used for patents and other protected industrial property:

1. Cost to develop
2. Potential profitability
3. Potential alternatives
4. Availability from other sources

Further considerations for evaluating both protected property rights and non-protected operating knowledge are given in bibliography references: (12, 13, 20, 23, 24).

Since these factors of experience have genuine value and are not protectable "rights", the licensor often is justified in demanding a "know-how fee". Such a sum will represent a single evaluation of the valuable techniques to be transmitted as a result of the license. To be properly considered, this fee should cover only the evaluation of the know-how, not to be combined with technical assistance fees which are also necessary to pay for the cost of technology transmission. If the know-how of operation management and technology is very significant, the fee to cover may be large--sufficiently large to require loans for the licensee to pay. Alternatively, a percentage of licensee equity may be "sold" to the licensor in return for all or a portion of the technology involved. Regardless of the system of payment, the licensee should be prepared to negotiate in these terms, and should have full latitude to deal and negotiate to his best advantage. Restrictions on this freedom to negotiate will limit the ability

of both licensee and licensor to establish an equitable agreement. In this field, both licensee and licensor would be well advised to seek professional consultation in establishing proper values.

Recommendation to UNIDO

The availability of professional advice in evaluating technology and property rights would be a major contribution to the problems of licensing with Developing Countries.

VI. TRAINING, SERVICE OBLIGATIONS AND OPERATIONAL MANAGEMENT

Training and Technology Transfer

The transfer of technology from one firm to another is often more complicated when that transfer is also from one culture to another--or from one who is highly skilled to another much less skilled--or both. Graham Jones (19) has called attention to a situation of technology transfer on a particular type of airplane from a U. S. firm to a Japanese firm. In this instance airframe technology was readily transferred and engine technology transferred with some difficulty, while electronic technology could not be properly covered in the allotted period of time--simply due to the lack of familiarity of the Japanese with the specific types of electronic equipment involved.

Speaking at the UNIDO/LES Symposium on Licensing in Developing Countries May 2-5, 1972, K. Aselman (11) has presented an outstanding review of the considerations necessary for proper technical information transfer in certain mechanical or manufacturing licenses. Similar detailed handling is vital for all types of technology. Whether or not this phase of operation is handled smoothly from the beginning will be critical for satisfaction on both sides of a license. If it is possible to have the entire technology summarized in one report, such a report should be prepared. Typed directions, specifications, drawings and all relevant material should be included. If it is not possible to cover all details in writing, a summary record should be made of

all verbal instructions. Since most technical information transfer cannot be accomplished in one single effort, provision must be made to keep a running record of transfers as they are made--the record to be kept by licensee as well as licensor.

As a matter of prudence, every licensee should determine in advance--insofar as possible--that the needed technology will be both available and presentable in a readily understood manner. In addition to establishing the availability of technology, the means of transfer must be made clear. Compatibility of language and systems of weights and measures must be determined. If the licensee firm is accustomed only to the metric system of measurement, and the licensor uses only English measurements, someone must make the conversion. The time to establish this responsibility is at the time the agreement is being negotiated. Likewise, the probable length of instruction time should be studied--to establish just exactly what the obligations are for the licensor in this respect.

All programs for technology transfer require the expenditure of money by the licensor--whether it is only time of experts and technicians, or whether operations and laboratory equipment are also involved. In one way or another the licensor must be compensated for this help, or he can be dragged into the costly experience of long periods of "hand holding" without compensation--with a resulting lack of interest and lack of success for the licensee. It may even be that a certain amount of assistance should be required

as opposed to being merely offered. Likewise, the licensee must have assurance that proper technical training will be available--and in a form that can be readily used. The pricing of the required assistance can be done on a set fee minimum--while help on request is established on a per diem rate for personnel involved plus any travel and living expenses. In any case, proper compensation for training must be established. If these arrangements are not clear to all concerned, the licensee can have severe difficulties. Furthermore, the understanding of technical assistance charges should extend into the operations and technical departments of both licensee and licensor organizations. It is these parts of the companies involved which will be most concerned with the matter, and a lack of understanding and agreement at the operating level can cause severe frictions in carrying out a license program.

Training Programs and Their Financial Support

Over and above simple technology transfer lies a basic problem for many firms in the developing countries--the need for trained personnel. In their relations with large international firms, the Developing Countries and the industrial efforts in those countries will do well to consider the training benefits which a foreign licensor can offer--in addition to the bare technology necessary for product manufacture or process operation. The Metal Box Co. Ltd. of the U.K.; the Caterpillar Tractor Co. of the U.S. and Phillips

Gloeilampenfabriken of the Netherlands (2a) have carried out extensive and successful training programs with African firms. The results of these programs have been a more firmly established business relationship on both sides and an increased level of competence of the total labor force of the countries involved. Study of these and similar systems (Ref. Appendix D) is urged for all those who contemplate any significant technology transfer to a developing country.

A fundamental encouragement for such far reaching education and technical instruction benefits is participation. When one considers such an activity, it is virtually impossible to establish a complete "price" for a full education program. If the price could be established, the DC licensee recipient probably could not afford it. Therefore, the licensor may need some further incentive--equity participation. It is difficult to establish a percentage of equity based upon training values; nevertheless, it may be possible to attribute some element as being a part of capitalized know-how. This participation, plus the possibility for long term sharing in profits can give the AC licensor sufficient incentive to undertake an effort that might otherwise not hold adequate advantage.

Management Training and Management Contracts

Concurrent with technology transfer and training requirements, licensing to the developing countries may present another type of problem:

management skills. Appendix E outlines the conclusions of a survey of management problems carried out by the United Nations Research Institute for Social Development (20). Gordon Graham (20) says "The proper application of scientific management may have more far-reaching effects than the application of the natural sciences. Yet it has been claimed that 'one of the major bars to rapid economic and social development is the failure of too many key leaders (in developing countries) to give more than lip service to modern management practices'". This problem is the reason for foreign management provisions and management service contracts concurrent with license contracts. Considerable present success is being achieved in Iran, for example, through management contracts in both industry and agriculture. Incidentally, the success of these operations has been attributed to the ability of the Iranian Government and Iranian firms to give assurance of stability and responsible cooperation. As quoted in Business Week magazine (22), Geo. H. Wilson of TransWorld Agricultural Development Corp. says "You can sit down in other countries and figure out more profit with a pencil and paper, but they don't have the stability that Iran does".

The responsible assessment of needs in business and operations management should be, then, an essential part of a successful license. A licensor can, if given the opportunity and encouragement, contribute considerably more than technology. "Encouragement" in this case can be very effectively given through the stability of government regulations--proper

guarantee protection against nationalization--repatriation of funds--the ability to participate in the growth of the enterprise that is created.

Recommendation to UNIDO

Standard management training course, management evaluation methods, cost accounting systems and market analysis techniques could be prepared for use in many DC's--to the advantage of both private industry and government administration.

Responsibility of Partners

Responsibility for the success of a license must always be shared between licensee and licensor. The standards for measuring success may also vary from one to the other. When joint venture partners have equal ownership, it is possible to have differences of opinion which cause argument and delay the operation of the venture itself. In this case, it is wise to establish the specific responsibility areas for both sides. When the licensor is a minority partner, there may be occasions when a commercial or technical judgment is made by the majority owner--and is opposed by the minor partner, licensor. To protect against severe problems of this nature, it may be wise to give operation or management direction of critical phases to the minority owner on the basis of a service contract with performance specifications, assuming that there are areas of technology or market analysis that require the expert judgment of the minor partner. Even the study alone of such potential difficulties during contract negotiations, without making hard and fast rules, may help in avoiding later trouble through the identification of potential trouble spots.

Probably the largest number of difficulties in this area have arisen because the licensor does not take enough interest in the operation of the licensee. This lack of interest may result from an inability to receive profits-- repatriation of funds--may come from inadequate compensation for training-- or may simply be a breach of contract responsibilities. Whatever the reason, the contract should carry protections for both licensee and licensor--whether major or minor partners--outlining responsibility for both technology and management where appropriate, and offering suitable remedy or recourse for the licensee when a responsibility is not properly handled.

In the cases of both joint ventures (50-50 ownership) and equity participation where the majority ownership in a DC operation is held by foreign interests, there is growing concern for undue influence by foreigners. In some cases this concern is justified and in some cases it is not. Nonetheless, Enrique Aguilar (9) has pointed out that the trend is inevitably toward the restriction of foreign ownership or control. The advantages and assurance are obvious for the DC firm in limiting foreign participation. What is not so obvious is that this limitation may need to be balanced by comparable assurances to AC licensor firms. The investment plans of both licensor and licensee must be considered in equity limits. With a limitation of equity, it may be desirable to establish corollary advantages to the licensor that will outweigh the disadvantage of a minority position. Sales outlets for related products, options for additional equity in expansions, opportunity to purchase lower cost supplies or sub-assemblies-- are some of the advantages that can accrue to the licensor. Furthermore,

arrangements for management contracts, technical service, etc., can be worked out in the establishment of a license with limited equity. The subject of equity interest is discussed further in this review. However, it is appropriate to emphasize here that technical service and management are vital considerations in evaluating the investment potential of any license plan, and these elements are often felt to be a basic prerequisite for equity positions.

VII. MARKETING - THE INFLUENCE OF THE MARKET PLACE

The statement has been made "if developing countries want to grow faster than the developed world, they will have to trade relatively less with the developed world and relatively more with each other". (20) The truth of this statement may be basic economics. The implementing of the direction is not so easy. Furthermore, the development of more export sales to the AC's will obviously raise the income level of the DC's and permit those firms to obtain much needed foreign exchange in "hard currency". It is in this subject area that intelligently counselled and managed DC firms and DC governments will do well to study their market plans.

Indigenization has been both criticized and praised in Africa. When operated to exclude skilled foreigners from business, this movement can create hardships. However, an intelligent appraisal of indigenous market opportunities could be combined with minor equity situations with foreign firms--resulting in profitable licenses that strengthen indigenous DC firms and return profit to contributing AC firms.

Not only can existing local markets be expanded through proper handling, but also untapped markets can be opened through product redesign. The November 5, 1971 issue of Business International cites the case of the Goss Division of MGD Graphics who specifically adapted an offset printing press to put out a wide range of publications. This unit has found wide acceptance on many DC markets. Similar modifications may be possible for

other products and other services. The adaptation of "last years model" to both product and production machines can often be a wise move for a licensee if he also obtains proper back-up technology. It can well be that earlier models of production equipment will be less expensive and more labor intensive, and therefore a better investment than later designs of more expensive, more highly automated machinery. Many times AC firms will be willing to contribute sound, reconditioned machinery in return for an equity interest. Other times-- as in the case of the Ford "minitractor", a two wheeled, hand held machine-- redesign will create a new product that fills a special DC need.

Regardless of the approach, through special product design, or the identification of a special need. DC markets must be properly analyzed and their opportunities evaluated. In some instances raw material exports can be further processed to develop products with higher value. AC processing firms may be persuaded to participate in such programs through incentive tax programs and equity participation. In other cases complementation agreements may be possible between two or more DC's involving specified manufacturers of related parts or subassemblies. These elements, when assembled, then constitute finished products available to the market total of the cooperating DC's. If the component parts and the assembled products move between the cooperating DC's with no duty--or minimum duty--a larger market can be created to permit more profitable manufacturing operations (2a.). Usually these operations will involve new technology and a suitable license--investment plan. The May 11, 1972 issue of Business International (2f.) outlines further considerations and

references in respect to the success of complementation and some of the difficulties experienced to date.

To increase appreciation of market opportunities, some DC's have published special literature--pamphlets and reports advertising their markets, skills and special opportunities. Aggressive, intelligent market evaluation can be a key to successful licenses and profitable investments. Because market analysis and product testing methods are not widely used in most DC's, the business entrepreneurs who do carry out this work will find themselves in the preferred position with AC firms who have suitable technology to answer their needs. Likewise, those AC firms who can demonstrate to prospective DC licensee firms a market need for certain products will clearly be able to make the most favorable or profitable license arrangements.

It is obvious that many outside factors will also contribute to favorable market conditions--preferential tariffs--special import quotas to AC markets--etc. Nevertheless it is often not appreciated that simple market analysis can be one of the most important factors in any licensing and investment scheme. It is for this very reason that OECD promotes loans for market study, while Ex-Im Bank and OPIC of the U. S. include loan guarantees to cover project study.

Recommendation to UNIDO

Various industrial and managerial consultants can provide market study information, as well as product engineering and technology assistance

and management guidance. Some have special skills or particular fields of expertise. It is the writer's understanding that UNIDO has published (1968) a "Manual on the Use of Consultants in Developing Countries". If this manual could be up dated with a listing of those concentration fields of specific consultants (presumably without any recommendation as such)--it could be most helpful to many DC firms. The opportunities and requirements of market planning might be better understood and better used if approached with "expert" assistance. Such advice can well be an essential part of any financial plan--since the pay back period, the ability to carry a certain interest rate for loans, the possibility of future expansion is all dependent on the market opportunities of the licensed subject.

VIII. FINANCIAL TERMS OF THE LICENSE

Evaluating the License--Capitalization of Patents and Know-How

The value of a license to the licensee and to the licensor must obviously be sufficient to justify the terms. If it is not, the licensee could avoid royalties by using standard technology and self-generated product-- while the licensor could avoid expensive, uncompensated technology transfer, releasing this money and manpower for more profitable activities. It is the need for continuing returns which has created the greater interest of U. S. licensor firms in increased equity participation with licensees. In a study report of 1969, the NICB (26) points out that foreign licensing without any equity is proving less satisfactory in over-all returns. Thus, many U. S. companies--and presumably licensors from other countries--prefer ventures which include a significant equity with the licensee, thus obtaining more permanent control over the use of their technology plus a better return on all know-how input.

When valuable know-how and/or patents are involved, the licensee may not be able to pay the full evaluation--or the licensor may not want a valuable "property" to escape completely. In these cases it may be possible to capitalise the know-how and/or patents to establish equity of the licensor with the licensee. The advantage to the licensee of such an arrangement is the increased interest of the licensor in an equity partner--with concurrent greater availability of technical help. For the licensor, the advantage will be a greater voice in the use of valuable know-how--plus the possible tax advantage for long term capital gains tax treatment (U. S. tax law consideration).

In some cases it will be necessary to invest cash as well as know-how in large projects, and the various financial guarantee schemes of AD and DC countries are of great importance. Earlier discussion of the OECD work in this field (8) has pointed out the many possible organizations such as International Finance Corp. (IFC) that can work with licensor and licensee in establishing proper financial arrangements. Other literature covers a diverse number of such establishments (2a, 2b, 14, 21).

A typical example of the ways in which these organizations operate is seen in a review of the Overseas Private Investment Corporation (OPIC) of the U. S. and its arrangements for longer term financial needs. Depending on U.S. money market levels, risks involved, etc., rates will vary in the range of 7 to 12%. Financial viability is of prime importance. Development impact on the host economy is also considered. This U. S. agency will also help find other lenders and will help establish the financial structure. Tax breaks from host countries will also assist in financing plans. When taxes are levied against private fund lending agencies, however, OPIC, as a U. S. government agency is exempt from such taxes. When this program is entered at the very beginning, loans are also made available for feasibility studies. Thus, OPIC and many counterpart organizations--working with the financial institutions of the developing host countries-- can offer significant assistance in putting together many licensing/investment plans. Reviews of those agencies involved with financial assistance are found in a variety of publications (2a, 2b, 8, 14, 17).

Recommendation to UNIDO

It would be very helpful for DC licensees and AC licensors if UNIDO could maintain a review of the world-wide financial institutes which have special programs for assistance to Developing Countries--along with comments on any special interests or requirements of those institutes.

Royalties and Other Fees

Naturally, every licensor wants to get as much money as possible for his technology with as little effort as possible, while the licensee wants to get as much technology as he can for as little money as possible. Usually it helps to establish the base for payments before getting into the details of amounts or percentages, and the best base is that which can be measured best by both licensee and licensor. Volume or weight of production may be appropriate--or total units made. If production is difficult to measure equitably, the input of one or more raw materials may be used.

For royalty rate, the best is often based on a percentage of final sale price--giving the licensee the pricing freedom, while the licensor obtains profits in relation to the profits of the licensee. Other rates involve a fixed sum for a given number of units produced, and minimum annual fees may be appropriate to assure a licensor's returns. There have also been cases where a maximum limit has been set either as a total payment limit, or as an annual limit.

The proper analysis of any investment program must include a summary of anticipated costs vs. expected revenue. While royalty is most

often thought of as the principle cash cost for any license, there are other "cash" cost elements which may have equal or greater importance:

Know-How Fee
Technical Service Fee
Patent Costs (Taxes, New Filing, Litigation, etc.)
Government Fees

If these elements cannot be established in amount, they should at least be covered by provisions in every license. Many times such factors are not appreciated as business considerations and are therefore not covered. Further comments are provided in Appendix F to offer a better background of judgment for those actually involved in DC license negotiation.

Recommendation to UNIDO

A basic understanding of cost analysis, interest rates, and thorough financial analysis must be promoted by UNIDO on both AC and DC sides of licensing. The former must understand the basic cost situation faced by the licensee--while the latter must properly appreciate the total financial demands of each license "opportunity".

Licenses between Parent and Subsidiary

Since some AC - DC licenses involve a DC licensee as a subsidiary or minor partner, this situation deserves special attention--although the relationship is actually becoming less common than formerly (9). When a licensor controls or owns a licensee, there is always a possibility that the licensor may take undue advantage of his influence. As new agreements are made, it is to be hoped that the restrictions of the host country, the regulations of the financial supporters and the negotiating skill of the potential licensee will adequately defend against such problems. At the same time it must be recognized that the licensor must be permitted a fair return on money and time invested; should have the assurance of stable government regulations. Very often, apparent unfair demands of a licensor are an attempt to achieve proper returns when such is not granted under other methods. (e.g. apparently excessive technical service charges may be compensation for inadequate royalty returns.) To summarize, there should be no basic difference in respect to payments from a minor partner (or wholly owned) licensee and a major partner (or total owner) licensor as compared to the opposite situation of ownership or a 50-50 joint venture. It is essential, however, that the treatment of the licensee be fair and equitable on both sides.

Recommendation to UNIDO

Regional offices of UNIDO--in collaboration with the Central Office-- could offer a useful advisory service to DC licensees in respect to judging the equalities of various license situations. In establishing guiding principles for such work, UNIDO could receive substantial help from various private institutions and world organizations, such as OECD, LES, etc.

IX. AVOIDING CATASTROPHE

Planning is essential for effective licenses as well as permanent investments--and never was this statement more true than in making provisions for "catastrophic changes". Whether the problem be a change of DC government or government policy--or whether it is a sudden change of market conditions-- the difficulty should be resolvable under contract provisions or other regulations.

Changes in host country policies can have a major effect on license / investment plans (3, 9, 10, 15, 18, 23). As a counteracting influence, insurance against expropriation is available through many investment guarantee schemes (8, 14). Through the use of such provisions it is possible to cushion the damaging blow of nationalization. At the same time, it cannot be overemphasized that stability of host governments and dependability of policy are key factors in the reduction of costs for insurance and other "add-on" elements which are designed to compensate for unknown government changes (22).

In 1966 the International Center for Settlement for Investment Disputes (ICSID) was organized as an affiliate of the World Bank. With its convention ratified by 62 states, ICSID is in a position to resolve disputes between nationals of one country and the government of a second country. As pointed out by Business International (Feb. 18, 1972), the mere fact that such arbitration must be publicly announced should have the effect of encouraging contracting states to resolve their disputes privately. In the recent past months the first arbitration case was brought to formal proceedings

(Occidental Petroleum and Holiday Inns vs. Morocco). A substantial number of contracts have incorporated a provision for recourse to ICSID over the past five years. The fact that the first case did not occur for five years indicates that the simple existence of this facility may have prevented serious disputes.

In addition to ICSID, it is also understood that other investment institutions can offer similar arbitration or dispute settlement facilities. The International Chamber of Commerce, of course, has for many years offered arbitration facilities. Regardless of the facilities available for settling arguments should clearly outline the options available to both parties for arbitration or other recourse in case of disputes.

Recommendation to UNIDO

With the importance of arbitration in settling disputes, UNIDO could offer substantial assistance to both DC and AC licensees and licensors by listing those organizations which offer sound, unbiased forums within which disputes can be resolved.

X. CONCLUSION

There are many needs of the Developing Countries and there are a variety of investment opportunities with which to support the licensing of needed technology. At the same time there are increasing problems in restrictive regulations and there may be severe difficulties with communication in sophisticated technology. UNIDO can offer valuable, permanent assistance in this field through coordinated advisory service in:

1. Summary of world wide financial/investment support programs.
2. Summary of specific investment agencies and institutions which have local DC assistance programs.
3. Availability and use of consulting services in technology, marketing and finance.
4. Furnishing and cooperating in management training.
5. Arbitration institutes and proceedings.
6. Establishment of recommendations for equitable regulations and restrictions of DC countries in respect to investment and licensing.

A P P E N D I X

A. ADVANTAGES

The potential advantages of an international license agreement are many and vary from case to case. Some of the most significant are:

1. Capital investment may not be necessary for the licensor. Licensing is usually an inexpensive way of operating within a foreign country. Equally, the licensee is able to offer to the licensor an opportunity for profit without having to give the licensor any control of the business.
2. The jurisdiction of the foreign government may not have any direct effect on the licensor in respect to labor and social legislation, etc. Comparably the licensee is able to operate the business in a manner appropriate to local customs without being compelled to accept the regulations imposed by tax laws and regulations of the source firm's government. (e.g. accounting requirements for certain tax purposes, etc.)
3. Licensee obtains rights to use patents, trademarks, designs, know-how, etc. Reverse flow of a licensee's new improvements and developments also is often advantageous to the licensor.
4. Where patent laws require either a loss of patent rights or compulsory licensing for continued non-use of these rights, licensing affords the potential licensor protection against such contingencies.
5. Rights to future innovation of licensor firm will be a prime advantage to the licensee who has limited R&D facilities.
6. For a licensee with limited staff, restricted operating background and virtually non-existent supply of trained labor, a license offers:
 - a. Technical Service
 - b. Management assistance and manpower development
 - c. Marketing and general business help (promotion ideas, advertising, public relations, accounting, billing, inventory control, etc.)
7. For the licensor there is usually no need for a permanent staff of administrative and technical personnel in the foreign country.
8. The licensee may obtain rights to sell the imported products of the licensor firm. Conversely, the licensor is able to expand export sales opportunities--as well as complementing or expanding other foreign operation.

9. Licensing may be the only avenue open to a market when export sale is blocked and equity associations are not immediately possible.
10. A potential prestige factor may help the licensee with marketing contacts, financing and other factors important to an expanding business.
11. A "source" firm which has an interest or an equity in a foreign company can have an extra protection or binding influence through a license when a minority interest is involved.
12. Large and profitable equity operations often have their beginning with a mutually advantageous license agreement.
13. Increased returns on Research and Development and support for future Research and Development will hold further attraction to the licensor.
14. Possible purchases by licensee of related products represent additional profit to the licensor plus an opportunity for the licensee to be assured of proper quality material supply.

APPENDIX

B. DISADVANTAGES

With all the advantages of foreign licensing, there are also disadvantages. Unless the disadvantages are properly understood, a license agreement may turn from a source of profit to a source of problems. Most of the recognized disadvantages can be summed up in the following list--with variations from case to case:

1. Licensor may be limited in profit possibilities, usually at a fixed royalty, without the opportunity of continuing or expanding participation beyond original terms.
2. Demands for education, training, technical assistance, supply of technical data, plus supervision on quality control and production standards may make the program so costly as to be impractical for the licensor. Conversely, the licensee may not receive the technical assistance which he expects or feels that he is entitled to receive.
3. Licensing does not offer the same opportunities to the licensor for growth and expansion as an investment in a direct manufacturing operation.
4. Licensor usually has no direct voice or participation in the control or management of the licensee. (Note: This factor is also an advantage to the licensee in respect to controlling influences but there have been cases of a licensor having to sit by and watch while a licensee ruins a business through poor judgment.)
5. Licensing may create a competitor for the licensor.
6. Licensee may challenge the licensor's patent position--or learn how to avoid same.

A P P E N D I X

C. USE OF INDUSTRIAL PROPERTY RIGHTS IN LICENSE CONTRACTS

1. Patent licenses

- a. For specific apparatus, product or design coverage
Examples would include a specific apparatus whose essential element is patented or a refinement or even a "convenience" feature" which makes an existing standard product more salable.
- b. For a specific process or method of manufacture
Such as a metal finishing process that is the only way to achieve a certain decorative or functional surface quality--or the method of economically forming a manufactured element, or a method of deriving a certain synthetic material.
- c. For the combination of a and b to achieve a complete, marketable product.

2. Trademark and/or Copyright Licenses

- a. Cover certain registered or accepted proprietary identification or artistic creation.
- b. Must be carefully controlled to guarantee the continued proprietary position.
- c. Can be entered into with or without concurrent patent and know-how coverage.
- d. Recommended to be handled in documents separate from those covering patents or know-how.

3. Know-How agreements

- a. Cover specific secret or otherwise difficult to obtain (expensive) information on formulas, processes, industrial techniques.
This type of coverage can range from a secretly held chemical formula to a special manufacturing technique that has been developed over many years.
- b. Usually are used in connection with patent licenses to complete the subject coverage.
- c. In technical subject areas are generally equal in importance to patent agreements and greater in value than trademark licenses.
- d. Have certain defensible protection in respect to industrial property in many countries, but in most cases are not as secure as patent licenses, and in other cases have no status at all for industrial property rights.

4. Technical assistance agreements

- a. Involve continuing supply to the licensee of scientific assistance, engineering services, training and management guidance.
- b. Often are embodied in licenses which involve know-how.
- c. Can be more valuable to both licensee and licensor when patents or trademarks are involved.

A P P E N D I X

D. SPECIAL MANAGEMENT TRAINING

Recognizing the needs for human resource development, the International Management Development Institute (IMDI) was founded in the U.S. about two years ago. A nonprofit research and educational organization, it offers means for upgrading local managerial personnel in firms through locally conducted programs. IMDI's first activity took place in Kenya, Africa with a three and a half week program using the Harvard Business School Case Method. Reaction to this program was so good that others have been held since. Inquiries may be directed to IMDI, Wilton, Connecticut 06897.

A P P E N D I X

E. SURVEY OF MANAGEMENT PROBLEMS IN LDC'S CARRIED OUT BY THE UNITED NATIONS RESEARCH INSTITUTE FOR SOCIAL DEVELOPMENT (20)

1. The management system found in both public and private enterprises was very often characterized by problems associated with a high degree of centralization of authority in the office of the top management and lack of delegation which created difficulties in the way of adoption of modern management methods. The principle reasons for this lack of delegation of authority were transfer to the enterprise of the traditional authority system, patriarchal roles, respect for age and superiors; lack of confidence of the top managers in the competence of their subordinates; lack of trust in subordinates and suspiciousness of outsiders.
2. A second and related major problem was the fact that managerial decisions were often made without adequate consultations with subordinates and without sufficient flow of information from relevant departments within the firm.
3. A third problem centred in achievement orientation. Both in public and private firms, there was reported to be a concern for achievement on the part of managerial personnel, but for individual achievement rather than company achievement. Incentives like personal remuneration, job security, and personal prestige carried more weight than incentives to build up a solidly established company. Orientation towards innovation and risk-taking was relatively weak with a strong emphasis on planning for short-term profitability.
4. The application of modern techniques is sometimes highly dependent on factors outside the enterprise, as in the application of marketing research and marketing organization. The introduction of long-range planning met with the greatest difficulties. Strong obstacles were also found in the introduction of systematic decentralization and plant communications.

APPENDIX

F. GENERAL COST FACTORS

Pricing Decisions

"How much can be charged?" and "How much should be paid?" are the two classic, dominant questions for licensor and licensee. Unless a reasonable answer is found, the license will be in serious danger during its life. Through judicious use of the various factors and types of payments, sound evaluations and payment schemes can be established. Depending on the sophistication of licensor and licensee, arrangements will be made with varying degrees of justification.

"Rule of thumb" is still one of the most widely used systems in this area--such as "25% of estimated profit" or "10% of capitalized cost"--or a combination of the two. In some industries a figure of 1 to 2% of total sales value for a new product is accepted as standard--while in other fields 10% of total sales price is readily accepted. However, times are changing. Today's business analysis methods, computerized cost controls and professional management systems leave less room for "instinct". Sound judgment, aided by proper use of modern cost analysis and business management techniques, is today the best and most reliable method for determining "how much".

Regardless of the sophistication used in management or accounting determinations, the following factors should not be overlooked:

- 1) Cost Estimation - logical estimation of present and future costs based on all factors of production requirements and predicted market change.
- 2) Present Value and Discounted Cash Flow - can be one of the most important tools of analysis when it realistically evaluates a given license proposal. For example, this approach can be used to determine whether a single lump sum is to be preferred over annual royalties on a clear financial analysis basis.
- 3) Marginal analysis - changes in cost or revenue as a result of a change in output or sales may be very important.
- 4) Decision Theory - the determination of alternative decisions based on all possible changes.

Other systems of analysis can be used--but are probably not well suited to the background of this discussion. However, the four factors indicated here are indeed important. For example, some who have claimed ignorance of the term "Discounted Cash" should have impressed upon them such truths as the fact that \$1,000--paid in ten equal yearly installments--might be completely paid up in one first payment of only \$400.

Duration of payments

Duration of a license influences many obligations of licensee to licensor--not the least of which is the payment of royalties. If the license is on know-how only, the duration will be based on the importance of present know-how and future know-how. Most such licenses will last for at least 5 years, but seldom more than 10 years. A few will be shorter term than 5 years and will be covered by only one or two payments--particularly in the case of general technology in which the licensor has a "one shot" special expertise. If a license is based on a patent, it may be logical to operate for the life of

the patent. On the other hand, a royalty carried on patent control only-- after know-how has been completely transferred and used--may become a "drag". A solution to this problem may be the setting of a maximum total accumulated royalty, or a maximum annual amount.

Other Costs

In addition to royalties, know-how payments and technical service fees, other costs must also be compensated or at least provided for in every license. While these elements may not be subject to discussion and opinion in terms of amount, they nonetheless should be included by specific provision. The principal such costs are:

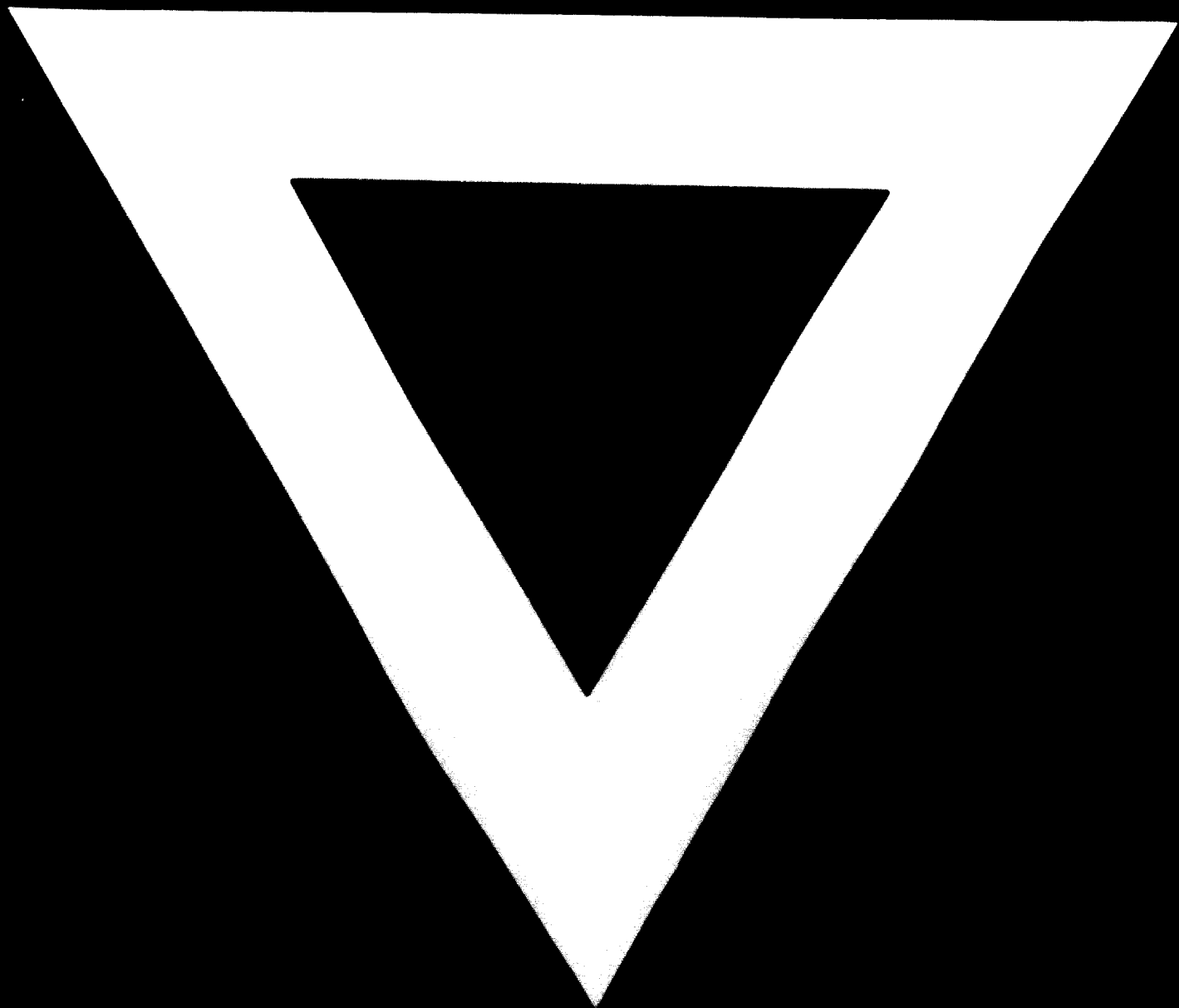
1. **Payment of patent taxes (in licensee's country)**
In those countries where patent taxes exist, it is proper to consider whether licensee or licensor should pay. There are arguments for both sides.
2. **Cost of new patents (in licensee's country)**
The cost of new filing by the licensor, and prosecution charges-- may be handled by either licensee or licensor. Final decision should include question of ownership rights going with payment and payment for use by licensee.
3. **Costs of patent litigation and distribution of any proceeds from suit.**
Generally allocated to licensor for first decision on whether suit should be filed--with later decision for licensee if licensor does not file suit. Party filing suit should bear costs and take proceeds.
4. **Patent indemnification**
Should be regarded with great caution. Any indemnification, if given at all, should be limited to the amount of royalties received by licensor or a portion thereof.
5. **Cost of technology or patent license obtained from third parties**
Should normally be shared on an equitable basis.
6. **Governmental taxes and fees**
Should usually be paid by licensee, except for income taxes on royalties as levied by licensee's country. The latter can be paid by licensee out of royalty due when tax treaties permit a tax credit to the licensor.

BIBLIOGRAPHY REFERENCES

1. Address to the United Nations Conference on Trade and Development - Robert S. McNamara, President World Bank Group, Santiago, Chile April 14, 1972
2. Business International, Inc. - various publications
 - a. "Prospects for Business in Developing Africa" 1970
 - b. "The Andean Common Market" 1971
 - c. "Business Europe"
 - d. "Business Latin America"
 - e. "Business Asia"
 - f. "Business International"
3. "The Expropriation Experience of American Companies" Business Horizons, April 1968
4. "The Economic Case for Have-Not Nations" Business Week April 8, 1972
5. "Licensing Technology in Developing Countries - Monsanto Enviro-Chem. Systems, Inc." by E. M. Aguilar and C. J. McCoy - paper at LES Annual Meeting, October 1970
6. African Report magazine - April 1972
7. African Progress magazine - March/April 1972
8. "Investing in Developing Countries" by Organization for Economic Co-operation and Development - Paris, 1970
OECD - Catalogue of Publications, 1972
9. "Changes Attitudes and Perspectives in Developing Countries Regarding Technology Licensing" UNIDO paper ID/WG.130/3 - presented UNIDO/LES Symposium May 2-5, 1972
10. "Consideration on Technological Requirements in Developing Countries with Observations on Technology Licensing Agreements" by Constantine V. Vaitsos UNIDO paper ID/WG130/2 - presented UNIDO/LES Symposium May 2-5, 1972
11. "Specification and Remuneration of Foreign Know-How" UNIDO paper ID/WG.130/1 - presented UNIDO/LES Symposium May 2-5, 1972
12. "The Role of Patents in the Transfer of Technology to Developing Countries" UN Publication E/3861/Rev. 1 Sales No. 65H.B.I.
13. "Importance of Industrial Property Protection in Developing Countries" by Ludwig Baeumer, World Intellectual Property Organization @ UNIDO/LES Symposium May 2-5, 1972 - UNIDO paper ID/WG.130/4

14. "Solving the Financial Problems of Financing in the Developing Countries" by Don Henderson, Exec. V. P. Export-Import Bank of the U. S. @ UNIDO/LES Symposium May 2-5, 1972
15. "Industrial Licensing in Lessor Developed Countries" by J. O'Brien, V. P. Research International @ UNIDO/LES Symposium May 2-5, 1972
16. Remarks on Technology Transfer to Developing Countries by Elliot Haynes, Publisher, Business International @ UNIDO/LES Symposium May 2-5, 1972
17. "It is Easier for Developing Countries to Attract Industries Rather Than Licensors" by Edward Alofs, Economic Commissioner of Netherlands Antilles Economic Mission @ UNIDO/LES Symposium May 2-5, 1972
18. "Obstacles and Incentives to Private Foreign Investment, 1967-68" Vols. I & II by National Industrial Conference Board, 1969
19. International Economic Policy Assoc., Wash. D. C. various reports
20. "The Role of Science and Technology in Developing Countries" by Graham Jones published by Oxford Press
21. "The United States in the Changing World, Vols. I & II" by Peter G. Peterson ("The Peterson Report") published by Supt. of Documents, U. S. Government Printing Office Washington, D. C. - Stock No. 4000-0271
22. "Iran. A Modern Economy for Investors" Business Week magazine June 3, 1972
23. "Emerging Restrictions on Transfer of Technology" by John C. Green Vol. 15, No. 2, Summer 1971 - IDEA, PTC Journal, Geo. Wash. Univ.
24. "Studies on Industrial-Intellectual Property in International Trade and Development" by L. James Harris and Gene I. Finn - Vol. 13, No. 4, Winter 1969-70 - IDEA, PTC Journal, Geo. Wash. Univ.
25. Report on the Conference on Joint Ventures Licensing Agreements and Sale of Know-How in Latin America, July, 1969 - BNEC, Latin America
26. "Appraising Foreign Licensing Performance" by Enid Baird Lovell, National Industrial Conference Board, Inc. (1969)
27. "Finance and Development" quarterly publication of International Monetary Fund and the World Bank Group





15. 7. 74