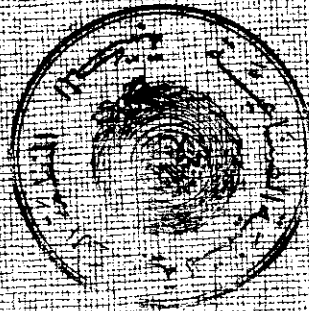




مركز التنمية الصناعية
للدول العربية

AGREEMENT

FOR CONSULTANT'S SERVICES

CONCERNING

THE PREPARATION OF

A TECHNO-ECONOMIC STUDY FOR STRATEGIC

APPROACH OF THE INDUSTRIAL

CONSTRUCTION DEVELOPMENT

IN

ARAB STATES

Box

المستند رقم 1074
الطبعة المبرمجة للتنمية الصناعية
رقم التسجيل: 1074
رقم الترخيص: 2.2
3-1-81

THE INDUSTRIAL DEVELOPMENT
CENTER FOR ARAB STATES

A G R E E M E N T
FOR CONSULTANT'S SERVICES
CONCERNING
THE PREPARATION OF
A TECHNO-ECONOMIC STUDY FOR STRATEGIC
APPROACH OF THE INDUSTRIAL
CONSTRUCTION DEVELOPMENT
IN
ARAB STATES

MARCH 1978

AGREEMENT

This Agreement (hereinafter, together with the Conditions of Engagement and the Appendices annexed hereto and forming an integral part hereof, called "the Agreement") made in duplicate the 19th March in the year Nineteen Hundred and Seventy Eight,

Between :

- "The Industrial Development Center For Arab States" (IDCAS)
P.O.Box 1297 - Cairo - Egypt
Cable Address (IDCAS)
Telex 2451 IDCAS UN
(hereinafter called the CLIENT)

"On the One Part"

And

- "Societe Generale de Techniques et d'Etudes" (S.G.T.E.)
33 Quoi National 92806 Puteaux France
Telex Parel 620834
acting as the leader and representant of the Consortium
Formed by :
- S.G.T.E., and,
- "Bureau d'Informations et de previsions Economiques"
(B.I.P.E.)
122 Avenue Charles De Gaulle 92322 Nenilly, Sur, Seine
both being jointly and severly responsible for execution
of this agreement and hereinafter collectively referred to
as the "CONSULTANT"

" On the Other Part"

.../

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Whereas the CLIENT is desirous that consulting services be rendered for Techno-Economic Study for Strategic Approach in Arab States, the object and scope of work of the study as follows:

OBJECTIVE OF THE STUDY

The ultimate aim of the study is to provide an appropriate and comprehensive planning tool, to assist IDCAS, and to serve as bases for decision, in evaluating the future plans of the Arab States and propose advices for coordination, integration and implementation of the industrial development plans along with adequate development of the industrial construction.

It will be achieved through a definition of a strategical approach in establishing and encouraging the development of efficient and appropriate industrial construction activity.

Such approach will be formulated by a methodology for creating the conditions of an efficient development of the industrial construction and the formulation of long lists of projects for manufacturing all the required products in the field of main construction materials, elements and components, tools and equipment, required for the industrial construction sector and other construction sectors, using the model stipulated in the Consultant's offer and the pertinent norms to determine the interrelation functions between the industrial sector targets and the other sectors targets, which will be materialized by pre-feasibility studies on a short list.

* OF THE INDUSTRIAL CONSTRUCTION DEVELOPMENT

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SCOPE OF WORKS

With reference to the objectives of the study and the relevant Terms of Reference prepared by IDCAS which are attached in Appendix A, the Consultant shall perform the services, as detailed in attached Appendices B and C, respectively "Project overview and Methodology" and "Addendum" to the same: which both form integral part of the Agreement.

The services will be divided in four parts :

PART I : FORMULATION OF LONG TERM INDUSTRIAL GOALS

The formulation of the long term industrial goals shall lead to the evaluation of the requirements in volume of investments then to the evaluation of the requirements in industrial construction⁽¹⁾ and significant in economic and technical terms, the investment will be expressed in physical production capacity, all will be submitted to IDCAS for mutual agreements.

The industrial goals will be estimated in terms of value of production by sector for the whole of the 20 Arab States. This estimation will result by the use of the Scenario X of the UN World model, corrected by an approach taking into account the Arab States pattern of development.

In order to achieve a precise quantification of the needs concerning the industrial construction, the Consultant will elaborate a trans-codification starting from the seven sectors to match with the output levels in Scenario X, and establish more pertinent nomenclature to identify the main industrial products in every industrial group in order to calculate the investment required expressed in physical production capacity as far as possible.

(1) To be inserted: ' However, when necessary for determination
' of the requirements of industrial construction
.../3
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As the UN model does not isolate the specific Arab States production in "Middle East-Africa" and "Arid-Africa", the whole Arab States production by sectors will be estimated on the basis of the available statistical data; for each country the basis of this estimation will be done in a short monography.

The appropriate methodology and scope of work for part I is thus illustrated on the scheme shown in Part I of Appendix B.

PART II - DETERMINATION OF THE CAPACITY OF INDIGENOUS CONSTRUCTION SECTOR

The Consultant shall determine the quantities of products required for the industrial construction in order to fulfill the industrial goals as formulated in Part I.

The calculation of these quantities after being classified in four categories :

- Construction materials
- Elements and components
- Tools
- Equipments

will be executed in three stages as defined in the scheme shown in Appendix B, Part II, page 16.

PART III : RECOMMENDATIONS FOR THE METHODOLOGY TO DEVELOP THE INDUSTRIAL CONSTRUCTION

The following main subjects will be dealt with by the Consultant in this part of the study:

- Typification of industrial buildings
- Standardization of basic rules on dimensional basic building materials and components.
- Mechanization of construction process and erection of equipment on site.
- Advanced technology and time in organization and assembly.
- Coordination for construction sector.

The Consultant will devote special attention to the organizational problem of the construction and relevant requirements in the field of human factor, skilled workers, in particular connected with an advanced technology, and will give recommendation for the coordination for construction sector management.

The principles and the means required to optimize the production process regarding mechanization and automation will be set forth. Thus, the connection to be established between progress of the programs within the seven sectors, condition of infrastructure (road, railway, power, etc....), skilled manpower resources on one hand and level of mechanization on the other hand will be emphasized.

A good choice in the determination of building system and standardization of elements will allow to extend the scope of activity of such production units to all types of building, housing, schools, hospitals, offices, hotels, warehouses etc.

PART IV : FORMULATION OF FOUR LONG LISTS OF PROJECTS AND PREPARATION OF PRE-FEASIBILITY STUDIES

This in fact constitutes the main part of the study and represents the basic and final objective.

As it is not possible to develop the projects of the construction materials, elements and components, tools and equipments without taking into consideration the requirements of the construction sector including housing, administrative and commercial buildings, public works, infrastructure, and other industries in addition to the seven industrial sectors, the Consultant will take into consideration in formulating the four long lists of projects all the requirements of the industrial construction sector and the construction sector taking into account the future consumption pattern of Arab States, and the function of the future socio-economic structures.

The construction products, construction materials, elements and components, tools, and equipment to be manufactured shall be defined in the four long lists as follows taking in consideration all the Arab States requirement in all areas in quantities to be foreseen in m^2 , in tons, or in numbers.

A - Category A : Major Products

A.1 - Main use in industrial construction

A.2 - Main use in other construction sector

B - Category B : Minor products

Products of which use in construction sectors is minor.

The Consultant will realise the above mentioned tasks by taking the most appropriate and suitable methodology one of which is stipulated in Appendix C.

The Consultant will briefly indicate the various methods used in realising the above mentioned tasks and will apply the most suitable one.

The Consultant shall take into consideration among the four lists of products, the possibility of grouping into families.

In the criteria for grouping together the manufacturing of these products will be the following :

- Close technology.
- Same raw materials.
- Same distribution network... etc.

The factories identified shall be presented in the form of technical data sheets including the following :

- Size (production capacity).
- Unit capital investment cost.
- Annual turnover.
- Personnel employed.
- Number of factories to be planned between 1980 and 1990 and between 1990 and 2000, taking into account the renewal of equipment and its amortization as regards tools and equipments.

PRE-FEASIBILITY STUDIES

The Consultant shall carry out the pre-feasibility studies on four projects selected by IDCAS.

The tasks to fulfil within the pre-feasibility studies are described in the Terms of Reference.

Now these presents witness and it is hereby and declared by and between the parties hereto as follows:

The Client hereby appoints the Consultant and the Consultant accepts the appointment on the conditions as laid down in the conditions of engagement and appendices hereto and made AN INTEGRAL part hereof :

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APPENDIX A : Terms of Reference dated October 1977.

APPENDIX B : Consultant's proposal dated January 13th 1978.

APPENDIX C : Addendum to Consultant proposal "Project Overview and Methodology" dated 18th March 1978.

APPENDIX D : Remuneration and payment.

APPENDIX E : LETTER

In witness whereof the parties sign :


THE CLIENT
17-4-1978


SOCIÉTÉ GÉNÉRALE DE TECHNIQUES ET D'ÉTUDES
THE CONSULTANT
"BOURBON"
33, QUAI NATIONAL, 92005 PUTEAUX
TELEX: PAREL N° 64234
Société Anonyme au Capital de 2.574.975 F
R. C. Seine 54 B 3367



CONDITIONS OF ENGAGEMENT

ARTICLE 1 - TERMS OF REFERENCE

The services to be performed by the Consultant under this Agreement (hereinafter called 'the Services') are described in the Terms of Reference set forth in Appendix 'A', Consultant proposal set forth in Appendix B, and Addendum to Consultant proposal's set forth in Appendix C.

ARTICLE 2 - RELATIONSHIP BETWEEN THE PARTIES:

(TO BE DELETED) Nothing contained herein shall be construed as establishing or creating a relationship of master and servant or principal and agent, it being agreed that the position of the Consultant and of anyone else performing the Services under this Agreement is that of an independent contractor.

ARTICLE 3 - RULING LANGUAGE

This Agreement is written in English which shall be the Ruling Language, however as provided in the " Terms of Reference " The Consultant shall provide also Fifty (50) copies of the final report in French. All other reports shall be written in English. *INCLUDING SKETCHES, DRAWINGS ETC...*

ARTICLE 4 - Words importing the singular only also include the plural and the masculine includes the feminine and vice-versa without in either case altering the meaning of the context.

ARTICLE 5 - The headings shall not limit, alter or affect the meanings of these Conditions of Engagement or the Agreement.

ARTICLE 6 - SERVING OF NOTICES

Any notice or request required or permitted to be given or made under this Agreement shall be in writing in the ruling language. Such notice or request shall be deemed to be duly given or made when proof is provided that it shall have been delivered by hand, mail or cable to the party to which it is required to be given or made at such party's address specified below, or at such other address as the party shall have specified in writing to the party giving such notice, or making such request.

For the Client IDCAS: P.O.Box 1297, Cairo, Egypt, Cable Address (IDCAS) Telex 2451 UN.

For the Consultant: 33 Quai National, 92806 Puteaux, France
Telex Parel 620834.

GETUD 613 591 F

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ARTICLE 7 - AGREEMENT IN FORCE

The Agreement is considered to have come into force upon the latest of the following:

- The signing of the Agreement and its approval by the relevant Authorities of IDCAS and the relevant Franch Financial Autjorities.
- The reception by the Consultant of the down-payment.

ARTICLE 8 - COMMENCEMENT DATE

The Consultant shall commence the Services (as defined in Appendices B and C) within two weeks after the Agreement has come into force.

ARTICLE 9 - ALTERATIONS

Should circumstances arise which call for modifications of the Agreement these may be made by mutual consent given in writing. Proposals in this respect from one party shall be given due consideration by the other party.

ARTICLE 10 - ASSIGNMENT

The Consultant shall not, without ^{PRIOR} consent of the Client, assign the benefits, other than the assignment and/or hypothecation of any monies due or to become due under this Agreement, or in any way transfer the obligations of this Agreement or any part thereof.

ARTICLE 11 - SUB-CONTRACTS

Any Sub-Contracts to be made by the Consultant relating to the Services shall be made only to such extent and with such duly qualified specialists and entities as shall be approved in writing in advance by the Client, and upon request of the Client the Consultant shall submit for the Client's prior approval the terms of reference of any such sub-contract and any amendment thereof. Notwithstanding such approval the Consultant shall retain full and unseverable responsibility for all the Services he is committed to render under this Agreement.

ARTICLE 12 - SUSPENSION AND TERMINATION

- The Consultant shall promptly notify the Client in writing of any situation or of the occurrence of any event as a result of which it cases to be reasonably practical for the Consultant to carry out in whole or in part his obligations hereunder. Upon confirmation in writing by the Client of the existence of any such situation or event or upon failure of the Client to respond to such notice within 45 days, the Consultant shall be relieved from all liability for failure to carry out such obligations and the Services may be deemed to have been postponed.

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**THE INDUSTRIAL DEVELOPMENT
CENTRE FOR ARAB STATES
(IDCAS)
P.O.Box 1297 - Cairo - EGYPT
Cable Address (IDCAS)
Telex 2451 IDCAS UN**

TERMS OF REFERENCE

**For
TECHNO-ECONOMIC STUDY FOR
STRATEGIC APPROACH OF THE INDUSTRIAL
CONSTRUCTION DEVELOPMENT IN ARAB STATES**

- The Client may by written notice to the Consultant at any time upon giving not less than forty-five (45) days' prior notice of his intention abandon or postpone the Services in whole or in part, or terminate this Agreement.

ARTICLE 13 - DUTIES OF THE CONSULTANT

- The Consultant shall exercise all reasonable skill, care and diligence in the discharge of his duties under the Agreement. The Consultant shall in all professional matters act as a faithful adviser to the Client, and, in so far as any of his duties are discretionary, act fairly as between the Client and third parties.
- The Consultant, his staff, employees and attached specialists shall respect the laws and customs of the Arab States and shall carry out all his responsibilities in accordance with the professional standards of his profession.
- The remuneration of the Consultant charged to the Client according to Appendix D shall constitute his only remuneration in connection with the Agreement and neither he nor his personnel shall accept any trade commission, discount, allowance or indirect payment or other consideration in connection with or in relation to the Agreement or to the discharge of his obligations thereunder.

ARTICLE 14 - SETTLEMENT OF DISPUTES

- Any dispute or difference arising out of the Agreement including those considered as such by only one of the parties shall be finally settled under the Arbitration Rules and Procedures of International Chamber of Commerce.
- The Arbitrator's decision shall be final, binding on both parties, and enforceable in the countries of both Client and Consultant. The resulting award shall be in lieu of any other remedy.
- The Arbitrator will not be of the nationality of either the Client or the Consultant.

ARTICLE 15 - PERSONNEL

- The Services shall be carried out by personnel specified in the Consultant proposal hereof for the respective periods of time indicated therein, provided that the Consultant may make such reasonable adjustments in such periods as may be appropriate to ensure the efficient performance of the Services.

- The Consultant shall designate a Project Manager to be in charge of the project and to be responsible for liaison between the Client and the Consultant.
- The Services shall be carried out by the personnel of the Consultant set forth in Appendix B, substitutions for personnel shall not be made without the prior approval of IDCAS.

ARTICLE 16 - REMUNERATION OF THE CONSULTANT

For the performance of the Work under the Agreement the Client shall pay to the Consultant the Fees at the time and in the manner specified in Appendix D.

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N.B.

The following terms are to be regarded
as synonymous, as used in these terms of reference:

- * Consultant - Tenderer - Proposer -
Firm - Consortium.
- * Proposal - Offer.

INTRODUCTION :

Taking into account the fact that industrial progress in the Arab States as a whole has not displayed significant advances, in spite of serious efforts on their part, and that, in many cases, the dependence of their economies on the export of primary goods, and that, the measures taken in the majority of the Arab States, have not made it possible to achieve a profound dynamic effect, which would be capable of transforming internal socio-economic structures and laying the basis for real development which conform to the broad objectives of self-sustaining and integrated socio-economic development.

Persuaded that, since not all the Arab States have socio-economic structures which permit them, through industrialization, to attain the objectives pursued by the establishment of a new international economic order, it is essential to adopt more favourable treatment for the Arab States to render possible harmonious and balanced development.

Stemming from " Lima Declaration and Plan of Action on Industrial Development and Cooperation " 12 - 26 March 1975, which determined the target of the developing countries in total world industrial production to be increased to the maximum possible extent, and as far as possible to at least 25 percent of total world industrial production by the year 2000, while making every endeavour to ensure that the industrial growth so achieved is distributed among the developing countries as evenly as possible, this implies that the developing countries should increase their industrial growth at a rate considerably higher than the 8 percent recommended in the International Development Strategy for the Second United Nations Development Decade, in order to promote industrial development through concerned measures at the national, subregional, interregional and international levels with a view to modernizing the economics of the developing countries.

- d) Preference should be given by the more industrialized developing countries, as far as possible, to imports of goods produced by the less industrialized countries. Positive policies are needed to increase intra-regional and interregional trade in manufactures.
- e) Specific, urgent measures to establish the necessary conditions for industrialization, infrastructures, inventories of natural resources, and the technical and financial assistance required for the exploitation of these resources.
- f) The establishment and financing of complete industrial estates and pilot plants based as much as possible on the use of available local resources.
- g) The creation of integrated production units such as agricultural machinery plants, appropriate engineering industries, and repair and maintenance services.

To give a historical picture on the economy of the Arab States, the following are :

- The growth rates of population.
- The growth rates of G.N.P. per capita
- Population in 1975.
- G.N.P. for the year 1973 - 1974 - 1975.

Country	Population (000)	1975			1974			1973		
		G.N.P.		Per Capita U.S. \$	G.N.P.		Per Capita US \$	G.N.P.		Per Capita US \$
		Amount US \$ Millions	Amount US \$ Millions		Amount US \$ Millions	Amount US \$ Millions		Amount US \$ Millions	Amount US \$ Millions	
1. Jordan	2709	1240	460	460	1120	430	430	970	380	380
2. United Arab Emirates	656	6870	10480	10480	6060	11060	11060	4990	10910	10910
3. Bahrain	260	630	2440	2440	580	2350	2350	220	950	950
4. Tunisia	5590	4230	760	760	3560	650	650	2940	550	550
5. Algeria	15747	12290	780	780	11100	730	730	9750	660	660
6. Saudi Arabia	8296	24960	3010	3010	22670	2830	2830	16000	2070	2070
7. Sudan	15550	4510	290	290	3460	230	230	3000	200	200
8. Syrian Arab Republic	7409	4870	660	660	3990	560	560	3070	440	440
9. Somalia	3180	320	100	100	290	90	90	280	90	90
10. Iraq	11120	14260	1280	1280	12000	1110	1110	9120	880	880
11. Oman	773	1600	2070	2070	1250	1660	1660	815	1130	1130
12. Qatar	202	1680	8320	8320	1380	7240	7240	1155	6360	6360
13. Kuwait	980	11280	11510	11510	9330	10030	10030	8250	9380	9380
14. Lebanon	3164				3290	1070	1070	2800	940	940
15. Libyan Arab Republic	2442	12400	5080	5080	10430	4440	4440	8100	3590	3590
16. Egypt, Arab Republic of	37096	11550	310	310	10210	280	280	8970	250	250
17. Morocco	16680	7890	470	470	7070	430	430	5790	360	360
18. Mauritania	1322	410	310	310	380	290	290	280	220	220
19. Yemen Arab Republic	6471	1380	210	210	1160	180	180	960	150	150
20. Yemen, People's Democratic Republic	1677	410	240	240	360	220	220	300	190	190

OBJECTIVES AND SCOPE OF WORK :

In accordance with the general consideration stipulated in the introduction, and the background of the industrial strategy of Arab States, the objectives of the techno-economic study for strategic approach for the construction industrial development in the Arab Countries shall include the following :

I - The formulation of long-term and clearly defined industrial strategic goals - to fulfill " Lima Declaration " targets for Arab States in the following :

1. Iron and Steel Industries.
2. METallurgical Industries.
3. Petro-chemical Industries.
4. Mechanical Engineering and Electrical Industries.
5. Chemical Industries.
6. Manufacturing industries for consumer goods.
7. Non-metallic mineral products Industries.

In the formulation of industrial plans, the characteristics of each country and/or group of countries in the light of its social and economic structure should be given due consideration, with the object of achieving the highest degree of growth as is required for economic development, and should also be a powerful factor for the promotion of technology and growth in other sectors, and to achieve the intensive use of national resources, infrastructural development, and internal regional development, placing particular emphasis on employment policies, as well as achieving full and intensive utilization and on-the-spot processing of raw materials, in the same time the industrialization plans have to achieve a higher degree of efficiency in import substitution process, and the formulation of appropriate incentive measures to encourage the export of manufactured and semi-manufactured products with the highest possible local content and value-added.

2. Bases of standardization in regard to the industrialization of construction for the following :
 - Some basic rules on dimensional or modular coordination.
 - Analysis of basic building materials including bricks, cement blocks, stone and aggregate, lime, cement and steel reinforcement.
 - Design criteria for foundations, structures and concrete.
3. Mechanization of construction processes, and erection of equipment on site using automation, and determination of the best utilization of construction equipment and tools in industrial construction, and selection of equipment and tools which can be fully utilized in order to manufacture it locally on economic bases.
4. The introduction of construction techniques, advanced technology and line methods in the organization of construction work and assembly operations.

The abovementioned studies should cover the following industries :

- a) Iron and steel industries.
 - b) Metallurgical industries.
 - c) Petro-chemical industries.
 - d) Mechanical engineering and electrical industries.
 - e) Chemical industries.
 - f) Manufacturing industries for consumer goods.
 - h) Non-metallic mineral products industries.
5. To propose the methodology of the official organizations on the national and regional level to supervise and coordinate the construction sector to fulfill the proposals of the standardization and unification of construction industry.

5. Choice of location.
6. Project engineering :
 - Project layouts.
 - Scope of project.
 - Technology.
 - Selection of equipment.
 - Structures and civil works.
7. Plant organization and overhead costs :
 - Plant organization.
 - Overhead costs.
8. Manpower :
 - Manpower requirements.
 - Labour norms.
 - Supervisory and managerial staff.
 - Foreign experts.
 - Training.
 - Planning of overhead manpower cost.
9. Project implementation :
 - Project scheduling.
 - Types of schedules.
10. Financial and economic analysis :
 - Total investment outlay.
 - Project financing.
 - Production cost.
 - Commercial profitability analysis.
 - National economic evaluation.

V - Conclusion :

- On the basis of the foregoing objectives and scope of work, it will be possible to choose a long term plan for the industrial construction development in the Arab States to satisfy the targets of the industrial development.

The financial aspects of the projects would be illustrated by presenting the financial forecasts in the form of sources and applications of funds statements, and appropriate viability measures such as discount cash flow rates of return and debit services coverage.

In presenting the financial performance of the projects the study would highlight the sensitivity to changes in the main assumptions, and hence what are the inherent risks.

It is necessary to examine the costs and benefits of the projects from the point of view point of the national economy, in addition the effects on employment and the foreign exchange balance has to be considered.

All foregoing information will be arranged in a form which will permit readily the comparison of the contributions of each project to the objectives laid down for the overall development of the industrial construction. The objectives must, of course, be supported by a defined set of criteria by which alternative projects can be evaluated and compared. The criteria themselves are likely to be conflicting with each other in many areas, and it will not necessarily be possible to quantify or combine all these various criteria into one overall measures. An important aspect will therefore be to establish a mechanism by which the separate criteria can be weighted. The weighting of these criteria will be a matter for IDCAS to undertake.

The pre-feasibility study for every project should include :

1. Background.
2. The production program that satisfy the estimated requirement.
3. Determination of plant capacity.
4. Materials and inputs :
 - Classification of materials and inputs.
 - Characteristics of materials and inputs.
 - Supply programme.

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- The time programme for attainment of certain major objectives in relation to the chosen plan is of particular importance. The whole plan must be viable and self-sustaining in the long term with regard to costs and distributed benefits on a regional and national basis.

Working within the broad outline defined in the plan for industrial construction development, the next approach will be to develop a short term 4-5 year action plan and implementation programme.

- The plan should include proposals for necessary training activities, the development or strengthening of organization, to secure the continuity of executing the plan.

- The study is intended to be used as a planning tool to assist IDCAS in evaluating the future plans of the Arab States, and propose the necessary advice for coordination, integration, and implementation of the industrial development plans, through the development of the industrial construction.

In practical terms, a schematic outline of the required objectives and scope of work could be as follows :

The third interim report - The final output of the study in phase II is to formulate four long lists of projects for the main construction materials, elements and components, tools, and equipment, classified in each list according to its priorities required to fulfill the goals determined in phase I, the formulation of the lists should include together with proposals for their timing, location, and size.

Upon receipt of the second and third interim report, IDCAS will review the Consultant's recommendations, and select short lists of projects in order that the Consultant will prepare a pre-feasibility studies based on the predetermined requirements of the industrial construction, approximately thirty (30) days should be allocated for these determination and the Consultant should anticipate being called upon during this period to assist with discussions by furnishing explanations, elaborating on details and providing other advice as required.

Upon conclusion of the review, the Consultant will be authorized to proceed with the third phase.

The Fourth interim report - will include the pre-feasibility studies for the selected projects.

Upon receipt of the Fourth interim report, IDCAS will review it, approximately thirty (30) days shall be allocated for the approval of the report.

Upon conclusion of the review the Consultant will be authorized to proceed with the preparation of the final report.

The final report - will be submitted after approval of the Fourth report, the final report will include all the studies stipulated in the objectives and scope of work, taking in consideration all the comments and remarks on the interim reports. The final report will be the document which sets forth the results of the work. The contents of the report is to be analytical and not historical, the project work is to be assessed rather than described in detail, background material (historical, introductory) should be kept to a minimum.

PROPOSAL SUBMITTAL :1. Proposed Time Table :

IDCAS desires to initiate work at the earliest possible date. To achieve this objective, the following time table, subject to modification, is proposed :

	<u>Completion</u>
- Submittal of proposals	Dec. 20, 1977
- Evaluation of proposals	Feb. 1, 1978
- Negotiations and award of contract	March 15, 1978
- Notice to proceed	April 1, 1978

This time table should not be considered fixed but rather is included as a guide to permit the Consultant to estimate availability of staff and resources.

2. Pre-proposal questions :

Questions for clarification of these terms, consultant may address them in written form to IDCAS, answers will be issued for acknowledgment to all proposals in due time.

3. Number of copies and submittal deadline :

A total of eight (8) copies of the proposal are to be delivered to and received by IDCAS not later than 12.00 a.m. on 20 December 1977. Proposals shall be addressed to :

- THE INDUSTRIAL DEVELOPMENT CENTRE FOR ARAB STATES
33 Street 14 Maadi - Cairo, A.R.E.
B.O.Box 1297 Cairo Egypt
Cable Address : IDCAS CAIRO
Telex : 2451 IDCAS UN.

The offers can be handed over to the said address or sent by registered air mail provided that they are air-mailed on an early date to secure their arrival before December 20, 1977 at 12.00 a.m.

4. Validity of Offers :

The offers will be valid till end of April 1977.

5. Information and Conditions of Tendering :

- Tenderers are requested to submit the itemized fees for the required services, specifying clearly the currency required and the terms of payment.

- The documents of the offer will be submitted in two separate sealed envelopes A and B. Envelope A will contain the documents and informations of the offer for the technical evaluation, envelope B will contain the list of fees quoted. Envelope B will only be opened when the Consultant's offer has been found acceptable after the examining of the contents of envelope A. In the case of Consultant's Offer considered unqualified envelope B will be returned to the Consultant unopened.

- The Consultants who will be invited to participate on this Call of Offer, have the option to delegate one or more of their specialists to come to IDCAS to review the available data relating to this project.

- The offer which will not cover all the items of the scope of work will not be considered.

- IDCAS is not bound to accept the lowest tender or any other tender, and may cancel the adjudication partially or entirely without being liable to give any reasons whatsoever.

- No tender may consider himself successful unless and until he receives a written notice to the effect from IDCAS.

- The terms of reference and the Consultant proposal together with such amendments that will be agreed upon will form part of the agreement.

6. Language, system of weights, and measures :

Proposals for this work, all studies, reports, drawings, contract documents, etc., shall be in English, a french translation is required for the final report only.

All weights and measures, design computations, computer programs, and preparation of plans and drawings shall utilize the metric system of measurement.

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INSTRUCTIONS TO PROPOSERS :

Proposals shall be based upon the services to be provided as outlined in these Terms of Reference. The proposer shall prepare his proposal using the headings and subheadings shown below :

1. Project overview :

The proposer is given an opportunity to demonstrate his understanding of the study. The proposer shall furnish brief statement regarding the following :

- a) The proposer's interpretation and evaluation of the Terms of Reference and any suggested modifications to these terms to better realize the objectives of the study.
- b) Steps taken by the proposer to familiarize himself with the study.
- c) Other important aspects of the study that the proposer wishes to emphasize or elaborate upon.

2. Work Program :

The technical proposals should be set out in detail the proposer's approach to the planning and performance of the services required and described in these Terms of Reference.

The program shall include a breakdown of the work into tasks, the sequencing and interrelation of these tasks, and the manner of undertaking the tasks.

The proposed time schedule for the tasks shall be presented in bar chart or network form and show the start and completion dates of tasks, in days or months from notice to proceed. Products of the project shall be defined and described thoroughly, and schedule delivery dates indicated.

3. Organization and Manpower :

a) Consultant :

Proposals combining more than one Consultant or Firm must

describe their proposed working relationship and allocation of responsibilities and a letter of intent to associate should be furnished. All firms or individual consultants comprising a selected Consortiums will be required to assume all project responsibilities jointly and severally.

b) Organization Chart :

The proposer shall present a detailed organization chart indicating the relation between, and the names of, all technical and professional key personnel.

The organization chart shall clearly identify the staff member who will have direct responsibility for the work being performed.

c) Personnel Assignment :

The proposer will designate the key staff members to be assigned to the study. The staffing anticipated will be presented in clear, preferably tabular form, and will show for each key staff member :

- Name.
- The title of the position he will occupy.
- The beginning and end dates and the duration of assignment (may be by bar chart).
- Location(s) of assignment.
- A brief description of the work to be accomplished by the staff member.

In the event the individual designated for assignment to this study is not available at the time his services are required, the Consultant may assign a substitute staff member, however, the substitute staff member furnished shall have equivalent qualifications and experience, and be subject to the approval of IDCAS.

d) Manpower Estimates :

The proposer shall provide an estimate of professional manpower requirements, preferably in matrix (chart) format. The presentation shall

breakout man-month allocations by work to be performed, for work tasks grouped as follows :

- I - Formulation of the industrial strategic goals.
- II - Determination of the capacity of indigenous construction sector, and the requirements of the main construction materials, elements and components, tools, and equipment required.
- III - Recommendations for the methodology to develop indigenous construction sector in typification, standardization, mechanization, and advanced technology.
- IV - Preparation of pre-feasibility studies to establish indigenous industrial project.

At the option of the proposer, further breakdowns may be shown, although sub-totalling to the above should be achievable.

A comparison presentation will indicate professional key personnel to be assigned to the job, their position, and the man-months allocated for participation, broken down by the respective work tasks listed above.

e) Curricula Vitae :

The resumes, or personnel experience record, of each key professional or technical staff member shall be included and indicate proposed job assignment, current status and firm, nationality, age, education, professional qualifications, specialization, number of years with the firm, (if applicable), work record, overseas experience in developing countries, and particularly that experience applicable to the work expected to be performed on the project.

f) Qualifications of Proposer :

The proposer shall furnish basic information on the background and activities of the Firm and associated consultants forming the consortium as follows :

- Description of its organization, history and ownership. If the Firm is a corporation, provide name and general type of the parent organization.
- Names, positions, specializations, and brief resumes of all Director, principals, and senior executives presently holding office.
- The two most recent annual financial reports and/or summarized balance sheets.
- Statements certifying that the firm and its associates have no past or present relationship with contractors, suppliers, the engineering trade, or commercial business, whereby the firm and its associates would benefit from the selection of any particular type of equipment, plant, material or know-how.
- Certificate from the proposer that the firm has or has not been involved in any litigation as a dependant or claimant during the past ten years. If it has, clarify the nature of the litigation and outcome.
- A tabular listing of projects initiated within the last ten years and similar to the one under consideration, provide the following information for each project :
 - Project name and location.
 - Client name and address who may be contacted for reference.
 - Brief description, cost and duration of the project (not cost of construction).
 - Role of Consultant and dates of start and completion of services.
 - Names of staff members who worked on the project who would be involved in this study.

- A tabulation similar to the one described above, covering work performed during the last 10 years which relates to one or more aspects of the study under consideration.

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EVALUATION OF PROPOSALS :

The Consultant's proposal will be evaluated according to the following :

A - Experience and Expertise :

- A.1 Significant experience in the field of the industrial planning.
- A.2 Significant experience in the field of construction studies, and industrial construction studies.
- A.3 Significant experience in the field of typification, standardization, mechanization, and development of construction methods.
- A.4 Significant experience in the field of feasibility studies of industrial plants for the production of construction materials, elements and components, tools, and equipment for industrial construction.

B - Approach and Work Plan :

- B.1 Suitability and thoroughness of proposed methodology and presentation of work.
- B.2 Suitability and thoroughness of division of work by discipline and task.
- B.3 Suitability and thoroughness of study team organization(chart).

C - Study team personnel :

C.1 Qualifications of study team personnel, classified as :

- C.1.1 Bachelor's degree.
- C.1.2 Master's degree.
- C.1.3 Doctor's degree.
- C.1.4 Professional registration.

C.2 Experience of study team personnel, classified as :

- C.2.1 Total years of experience after graduation.
- C.2.2 Years of experience with the firm.

C.2.3 Years of pertinent experience.

C.2.4 Years of experience in developing countries especially in Arab Countries.

D - Manpower estimates :

D.1 Man-month estimates for each qualification/discipline.

D.2 Man-month for the study.

E - Duration of the study :

E.1 Time table (Bar chart, network) comprising elements and tasks of the study.

E.2 Total duration of the study.

The Consultant is requested to represent these factors in the offer (except factor B.1) on separate sheets identified according to the above mentioned classification, in order to evaluate the proposal in the shortest possible time. In the meantime if the Consultant wishes to add other factors, he is requested to represent these factors apart from this classification.

DATA AVAILABLE AT IDCAS :

The data available concerning the study which may be useful to the Consultant are as follows :

A - GENERAL DATA :

1. Basic Data Report : This report includes background information about the all Arab States as follows :

* The "Geography and the Climate" of the Arab Area in detail, the records of temperatures and rainfall all over the year in all the Arab States are included.

* The "population" where many demographic information are listed.

* The "most important natural resources" available in the Area as follows :

- Iron ore.
- Petroleum and natural gas.
- Rocks.
- Forests.
- Phosphate ore.
- Water resources.

* "Transportation" including roads, railways, Air transportation and marine transportation, a detailed charts are available for each individual Arab State.

* The "Labour Force" in the Arab States, its distribution and the rules controlling employment.

* An "economical review" about the Arab States this review discuss:

- National Economy: G.N.P. and G.D.P. and its distribution between different economical sectors, wages, investment etc.

- Agriculture : Areas, production.
- Extractive industries : production.
- Manufacturing industries : Number of establishment, labour force, production intermediate consumption, production... etc.
- Electricity : Power consumption, capacity.
- Foreign Trade : Import and Export structure and trends
- Index Numbers : For trade prices, imports, exports, industrial production and cost of living.
- Taxation : includes the rates of income taxes.

* The " Arab Economical and Industrial Planes " and this includes the plane summary of some key Arab States.

(ARABIC)

2. Industrial Surveys : Ten industrial surveys for individual Arab States are available, the industrial survey report includes detailed description for the industrial sectors in the country illustrated with statistics. Also a diagnosis studies included in this reports mentioning the problems which face the industry and the solutions suggested. The industrial surveys available for :

- Egypt, Sudan, Syrian, Iraq, Lebanon, Jordon, Algeria, Yemen Democratic Rep., Yemen Arab Rep., and Arab United Emirates.
- The dates of this reports ranging from 1969 upto 1976.

(ARABIC)

3. Country Papers : During the last "Industrial Development Conference for Arab States" held in Bagdad in December 1976 many country papers were presented this papers includes information concerning the situation of the industry and the forcoming planes in the Arab States(there are 18 country paper).

(ARABIC)

4. Country Files : Country files is an Industrial Files includes the Industrial progress of 15 Arab Country this files also consist a historical chain for the production, labour force development, imports, exports.. etc.

(ARABIC)

5. Economical and Industrial Arab Planes: Some countries like Jordan and Saudi Arabia has detailed 76/81 economical planes, other countries as Somalia and Democratic Yemes and Lybia and Syria have summarized economical or industrial planes (76/80) a country like Kuwait has a detailed economical draft plane (76/80).

Also old economical or industrial planes (70/73/77) for Morroco, Algeria, Iraq, Lebanon, Sudan, Tunisia, Libia and Arab Yemen Rep. are available.

(ARABIC)

B - Specific Data :

1. Cement industry in the Arab States : A study carried out by IDCAS in 1973 and updated in 1975, the study present the situation and future of Cement industry in the Arab States.

(ARABIC)

2. Opportunities for Building Products In the Middle East (Main report) :

A study carried out by Foreign interprise it comprise 10 Arab States and the data is available up to 1975 also a 1980 forecast for building materials and construction needs are summarized.

(ENGLISH)

3. Middle East Construction : A special issue of the Financial Times in 28 July 1976 describe the main problem of the construction sector in some of the Arab Countries.

(ENGLISH)

4. A Five Year Plane for Construction Sector
(76/80) in Kuwait :

This study carried out by the Kwuation Planning Council in June 1975 (120 pages).

(ARABIC)

N.B.

1. The above mentioned data are available in the library of IDCAS and the Consultant can refer to it if necessary.
2. Any additional data available at IDCAS, not included in the above mentioned list the Consultant may refer to it in the study has to be approved before hand from IDCAS.
3. The available data are in English and Arabic language, it shall be the Consultant's responsibility to have these data translated as required.

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REFERENCES :

The following references were consulted during the preparation of the terms of reference:

1. Lima Declaration and Plan of Action on Industrial Development and Cooperation :

This declaration adopted by the second General Conference of Unido at its final plenary meeting.

The Declaration and the Background papers of the Conference are available in the Library.

2. The Conference of Construction Industry :

This meeting held by Unido in Vienna 1974 and the documents of the conference which 15 documents are available, the subjects are many and the most of it was about the experience of the developed countries in the construction field.

3. Trends in the Industrialization of Building :

This is a "UNIDO" Publication 1975 it discuss the process of industrialization of Buildings through typification, standardization, and modular design.

4. Comparative study of Development Plans of Arab States :

This study has been prepared by UNIDO and IDCAS in 1976.

5. World Bank Atlas :

(Population, per capita product and growth rates) Published by the World Bank 1976.

6. Construction Industry :

UNIDO monographs on industrial development. Sales No. E-69
II.B39 Vol.2 ID/40/2.

7. Building Materials Industry :

UNIDO monographs on industrial Development. Sales No. E.69
II B.39 Vol. 3 ID/40/3.

8. Index numbers for Construction Sector in Arab Countries:

A study carried out by IDCAS.

9. Yearbook of National Accounts Statistics (1970) :

A United Nations Publication includes individual country data
international tables.

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Appendix B

Project
Overview and Methodology

In order that this Appendix "Project Overview and Methodology" submitted by the Consultant to be in conformity with the "Object of the study and Scope work" in the Agreement, the necessary amendments are stipulated in Appendix C"

PROJECT OVERVIEW AND METHODOLOGY

We present in the following pages our proposition of a methodology to undertake each of the four parts of the tender document, as well as a "diagram" showing the way the different parts will be articulated.

Before, we would like to make some comments on the terms of reference.

The ultimate aim of the study is to be used as a planning tool to assist IDCAS in evaluating the future plans of Arab States and propose advices for coordination, integration and implementation of the industrial development plans through the development of the industrial construction. Actually, the scope of work proposes a step which permits to evaluate the indigenous industrial construction capacities required to match the needs of seven major industrial sectors. One can proceed from part I to part III without any need for additional information to the one indicated in the scope of work.

However, we must emphasize that it is not possible to proceed with prefeasibility studies including timing, location and size of projected plants without taking into account the needs in materials, components, tools and equipment generated by other branches than the seven industrial sectors surveyed in part I. Thus the demand created by the development of housing, administrative and commercial buildings, public works and infrastructure, and finally miscellaneous industries, must be considered before being in position to determine the best location and size for, say, a cement plant or a rolling mill.

Many reasons are militating in favour of considering the whole building needs of the Arab countries. These reasons are developed in part III. We just want to point out here that, although bringing attention of IDCAS on the forementioned problem, we have prepared our offer in conformity with the tender documents, that is we have limited the study to the seven indicated sectors. However, we are prepared to discuss with IDCAS experts the possibility of extending the scope of work of the study to the other sectors of the economy consumers of components, elements, tools and equipment.

I - FORMULATION OF LONG-TERM INDUSTRIAL STRATEGIC GOALS

A - OBJECTIVES OF THE STUDY

The objective of this part of the study is to formulate long-term industrial strategic goals for Arab States. This specification depends upon the future of the social, educative and economic structures, which are function of socio-cultural conditions, value system and human motivations prevailing in Arab States.

Also, the formulation of long-term industrial goals should not be, as pointed out by IDCAS, "a straight forward extrapolation of the industrial pattern of the Arab States. It should emphasize on factors and opportunities unique to Arab States to attain the strategic goals". The economic and human potentials of Arab countries are evident, as one looks at the richness of the underground (energy and mineral resources), the extensive exploitable agricultural land, the vast human resources and the convenient geographic location. These potentials have to be taken into account along with long-term targets regarding housing, social equipment (schools, hospitals), collective equipment (roads, railroads, tele-communications ...) and social services. For natural, financial and human resources are limited. Definite arbitrations have thus to be made between the different goals in order to precisely determine the resources to be allocated to industrial development.

Finally, the formulation of the industrial targets for Arab States have to incorporate the imperative objectives encompassed in the "Lima declarations" regarding growth, quality of growth in, and independence of the developing countries.