Руководство по составлению международных контрактов о консультационном инжиниринге, включая некоторые аспекты технического содействия

Guide for Drawing Up International Contracts on Consulting Engineering Including Some Related Aspects of Technical Assistance

[ЕЭК ООН]

(на английском языке)

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Part I. General

I Introduction

1. The present guide deals with consulting engineering, and some aspects of technical assistance, by means of a checklist and sections relating to the consideration of the main contract provisions. The present guide is a recommendation whose purpose is to facilitate the drawing up of international contracts in this field by drawing the attention of users to certain aspects peculiar to this type of transaction. It may usefully be read in conjunction with the numerous general conditions, model forms, guides, manuals, standards of professional conduct, and codes of ethics which have been drawn up and adopted by professional associations of consulting engineers and by other international organizations and which are in current use.

2. This guide is one in a series of interconnected guides which have been drawn up under the auspices of the Economic Commission for Europe, including: guide for use in drawing up contracts relating to the international transfer of know-how in the engineering industry (TRADE/222/Revel); Guide on drawing up contracts for large industrial works (ECE/TRADE/117); Guide on drawing up international contracts on industrial co- operation (ECE/TRADE/124); and Guide for drawing up international contracts between parties associated for the purpose of executing a specific project (ECE/TRADE/131).

II. Concepts of engineering and technical assistance

3. A distinction must be made between complex engineering and consulting engineering. Taken as a whole (complex engineering), the engineering contract governs the set of actions and supplies which result in the completion of an industrial installation or civil works (it might be a hospital complex, airport, railway or public transport network, etc.) that is the set of conceptual and operational tasks falling within the sphere of technical and engineering science and needed for the completion of the project. It can also be extended by assistance contracts in the broad sense whereby the installation when constructed is operated for a certain period of time, or the products manufactured by the installation are even marketed ("sold product" contract). In conclusion, complex engineering, in the broad sense, covers: - Consulting engineering, which relates essentially to intellectual contributions (supply of services) connected with the design of the plant, the preparation of projects and blueprints and the supervision of the work;

- Process engineering, which relates to the granting, to the principal, of the process or processes needed for the construction of an industrial complex and its operation (know- how, process-transfer and patent granting contracts); and

- General contracting which basically relates to the design and supply of equipment and material and/or the fitting up of installations, including, where necessary, civil engineering work.

4. Consulting engineering relates essentially to the intellectual services rendered by an individual or a group, with or without a legal personality, of engineers, technicians and specialists in various disciplines, organized in permanent teams and having the necessary means at their disposal for carrying out certain functions of research design, and supervision in the area of economic development in general and the construction of installations and industrial or other complexes in particular. These functions thus involve the supply of design, supervision and possibly management services with a view to completing an industrial project or civil works, but do not include any building, the supply of equipment, granting of licences or transfer of manufacturing processes. The terms "consulting engineering" and "pure engineering" are synonymous: they cover all consulting engineering functions and the contracts governing them. Only these contracts are covered by the present guide.

5. Consulting engineering contracts can cover "complete functions" or "partial functions", according to whether the consulting engineer is entrusted with the entire range of tasks which are normally within his competence or whether he is entrusted with only some of them such as, for example, the over-all design and general plans, or a quantity-control or quality- control function. In other words, consulting engineering services may extend to all these stages of a project or may be restricted to a part or to one stage only - for instance, the pre-investment stage. For the purpose of this guide, "project" means the overall idea and the physical structure of work to be carried out (and therefore project should be distinguished from the scope of a particular contract). 6. All tasks and functions entrusted to the consulting engineer, whether the services are to be complete or partial, must be clearly described in the contractual document (generally in an annex to the contract). The more precisely the tasks and functions are described; the easier it is to determine whether there is any departure from the contractual obligations.

7. Consulting engineering contracts may, or may not, be supplemented with co-operation elements - for instance, combined research or trial production or marketing by joint technical assistance or training components.

8. Although the arrangements between the consulting engineer and his client constitute an independent relationship, the background is often one where the client is party (again, usually as client) to a whole set of agreements which form what in this guide is referred to as the project. The consulting engineer may often play a special role in these contractual

arrangements. Even if he does not, it is important to define the consulting engineer's role with regard to the project as a whole and the contractual parties involved (see pare. 30).

9. Technical assistance is a service, or a set of services, rendered during the execution of a project and/or afterwards. It consists essentially of assistance given in the effective transfer of technology and, as such, concerns use, maintenance and repair. Technical assistance, therefore, is offered by the general contractor or by the provider of technology or by the consultant. When it is offered by the general contractor (which is usually the case) or by the provider of technology, the consultant is often adviser to the client and sometimes agent for the client. The consultant's role between the general contractor, as the provider of technical assistance, and the client, as the recipient of such assistance, is of importance. In some instances, however, the consultant may offer technical assistance directly, and it is only these instances which are relevant to the subject-matter of the present guide. Details about technical assistance offered by the consultant are provided in paragraphs 52-57 below.

III. Consulting engineering contract

Types

(a) Consulting engineering contract for a project as a whole

10. A contract for a project as a whole provides for services relating to all the stages of a project. However, it is sometimes difficult to foresee, with reasonable accuracy, the entire scope of consulting services which may be called for in the later stages, and the duties of the consultant may, in one contract, be divided and defined in consecutive stages of the project.
11. The most-frequently-occurring instances would seem to be those where the consultant is engaged by the client in one contract covering a project as a whole whereby the provision of consulting services is made dependent on certain conditions. Under a contract of this type, the rights and duties of the consultant rendering services following the pre-investment stage do not become operative unless the results of the previous stage are judged to be satisfactory by the client. Similarly, in special circumstances, a consulting firm which has completed a feasibility study for the same project, or which is under contract for design of a project and has already carried out work satisfactorily for the client, may be approved for continuing services. (b) Consulting engineering contract for a part of a project

12. In consulting engineering practice, contracts may be concluded at various stages of a project, for each individual stage independently of the others. Negotiation of such contracts permits the client to remain flexible in his relationship with consultants.

13. A project evolves gradually, beginning with identification of objectives and concepts and continuing through successive stages. Each succeeding stage is undertaken only after the previous stage has been fully considered; undertaking successive stages is dependent on successful completion of preceding ones. In a series of contracts successively concluded, each of the parties has the right to refuse to conclude a contract relating to the subsequent project stage. Therefore, the parties usually make provision in their contract as to whether or not the consulting services will continue in the next stage or stages.

Main contract documents

14. Agreement between client and consultant may be affected not only through a written consulting engineering contract but also through certain documents to be complied with during implementation of the contract. A statement of consulting work with detailed essential services and facilities in each stage of a project, including general work plans, is usually annexed to a consulting engineering contract. A distinction is made between different types of such documents. They should be expressly referred to and listed in the written contract by the parties if the latter wish the documents to govern their contractual relations - for example:

(i) basic general conditions of a technical character such as general condition, vis-a- vis the client, professional organizations, the lending bank, and the host government; and

(ii) already-existing documentation, such as feasibility studies, planning bases, terms of reference, etc. Specifically, reference to these documents should indicate which parts of them should be considered as having been included in the contract.

15. If, after conclusion of the contract, the parties produce additional documents, they should ensure that these do not contradict earlier ones. Since, however, the parties may also wish to revise the scope of work or change some of the technical parameters of the project, they should avoid ambiguity in attempting to make such revisions.

IV. Selection of a consultant

16. Practice suggests that there is no universally-accepted procedure for selection of consultants. First, the choice of consultant may be informal: the client contacts a consultant already known, or who has been made known to him, and entrusts the work to that consultant.
17. There are, however, more extensive and formal procedures for the selection of consulting

engineers. Before the actual selection takes place, it is assumed that the client has defined the project, has established a procedure for selection, and has authorized a person or persons (selection board) to select or recommend consulting engineers.

18. The formal selection process begins with the preparation of a list of consultants or firms claiming expertise in the specific field for which the client may contact professional associations of consultants, diplomatic and commercial representations, chambers of commerce, etc. Some banks, government agencies and investors maintain a register of consultants. It is at this stage that the first contact between client and consultant is made. On the basis of information obtained and after preliminary inquiries, a short list (three to five individual names or firms) is established.

19. In the selection of a consultant, the decisive factors may be his professional knowledge, experience and reputation. Many international organizations have established rules which are applied when they finance a project and which, in most cases, contain a rating scale for qualification. V. Client-consultant relationship

20. Although the contractual relationship between client and consultant is the same during all stages of a project, the services rendered by the consultant vary from stage to stage. Hence, the legal consequences of noncompliance with an obligation also vary in terms of services concerned. 21. Once the decision to proceed with a project has been taken and all preliminary studies in the pre-investment stage have been completed, the client selects the method of project achievement. The four principal methods are: conventional; in-house; project management; and turnkey. The consultant's position with regard to the client depends on the scope of work and his functions.

(a) Conventional method 22. The conventional method of project achievement occurs when the client retains a consulting engineer to act as his professional adviser, to prepare plans and specifications for a project, and to receive tenders from general contractors and suppliers for carrying out construction work, as well as to inspect and supervise construction of the project. In addition, the consulting engineer may be mandated to act as authorized representative of the client in negotiating with contractors and suppliers or in concluding contracts on the instructions and on behalf of the client.

(b) In-house project achievement 23. In-house project achievement involves substantial or total use of the client's in- house staff. Members of the client's organization handle project management, concept design, and sometimes even construction. Whilst no client is in a position to manufacture or to produce all the materials or supplies required for a sizeable project, some elect to recruit sufficient staff to handle the major part of project achievement

internally; the in-house staff must be sufficiently well qualified and capable of handling the work as well as having the ability to plan, organize and execute the project. In-house project achievement therefore usually involves minimal use of independent external consulting engineers. The role of the latter is limited to consultations or assistance on specific aspects of the project for which the client's in-house staff do not have sufficient skills or experience.

(c) Project management method of project achievement

24. The project management method of project achievement entails a single contract between the client and a firm of consulting engineers which handles project planning, project management, design services, procurement, construction management, commissioning and such other aspects as assistance in arranging finance. The services provided are generally limited to professional services and do not include actual project construction. Unlike the usual methods, project management involves much greater management efforts and employs multiple contracts for construction, materials and equipment supplies.

25. The consulting engineering firm using the project management method negotiates and prepares contracts with all entities involved in the construction process, and manages the actual construction work. In these activities, the firm acts as the client's agent; it does not function as contractor, as in the case of turnkey methods.

26. One variation of this approach is the use, grouped under one head, of several consulting engineering firms, or a combination of such firms and a contractor, to perform the project and construction management services. This may involve the use of one consulting engineering firm on design services, a second consulting engineering firm or a contractor for construction management services, and perhaps a third firm for over-all project management.

(d) Turnkey method of project achievement

27. The turnkey method of project achievement involves a contract with a single entity (corporation, group, consortium, etc.) for the design and construction of a complete project ready for operation, with some responsibility for subsequent efficient operation. In some instances, this arrangement may include provisions for financing the project. The owner or ultimate client retains the responsibility for maintenance and operation of the facility. In turnkey project achievement there are two separate roles which may be filled by the consulting engineer: the one is a consulting role as adviser to the owner, assisting the latter to define clearly his ultimate requirements and evaluating offers submitted by turnkey entities; the other is a role as subcontractor to the turnkey entity, acting as adviser of that company, or

as part of a contracting consortium.

Part II: specific

28. A general check-list, which is not intended to be comprehensive, is given below. Its provisions are those most frequently encountered in a contract on consulting engineering : (1) Parties (pares. 30-31)

29. The parties should pay due attention (when drafting contracts) to the present methods of contractual practice, which consist in grouping provisions listed in paragraph 28 above in three categories: those of a technical character; those of a financial character; and those of a specifically legal character.

II. Consideration of the main contract provisions

30. The first part of the contract should comprise a clear definition of the parties with a description of their legal status, capacity and/or authorization with regard to conclusion of the contract. Many persons, including enterprises, financial institutions, government agencies, etc., may be involved in a project. They may be called parties in a wide sense. This does not mean, however, that they are all parties to one and the same contract. Several contracts relating to the same project may be concluded. It is therefore important to specify in each and every contract who precisely (in a legal sense) is a party to it. If there should be more than one party on each side, the responsibility of each one (for example, joint or individual) should be stated clearly in the contract (see pare. 8).

31. The consultant can generally be placed in one of the following categories: individual consultant; firm of independent consulting engineers; firm which combines the functions of consulting engineers with those of general contractors, or firm which is associated with, or is a subsidiary or affiliate of, or is owned by, general contractors; or consulting engineers who are affiliates of manufacturing firms, or who are employed within a department or design office of such firms. If the client is required to deal with a party comprising several members (joint venture, association without juridical personality, consortium, etc.) the relations between each member of such party and vis-a- vis the client should be defined in the contract. Clarification of the subject of liability - that is, whether the liability is individual or joint or joint and several - is essential.

32. The preamble usually contains a review of the investment background and defines the intentions and interest of the parties in the project. The parties should be aware that the

formulation of the preamble can have considerable legal significance.

33. Sometimes the parties insert in a consulting engineering contract a section containing definitions of terms used in it in order to ensure uniform interpretation. Should several documents form part of the contract, this fact might be noted (and their order of priority defined) in the above- mentioned section of the contract.

34. It is essential in consulting engineering contracts to define precisely the nature, extent, location and objectives of the project, followed by a definition of the scope of the contract. These may be used as terms of reference in attempts to reach eventual agreement between the client, a possible funding or financing agency, and any other relevant agencies on the fundamental issues of the proposed project. Practice suggests that most discussions, disagreements and/or disputes relate to the subject of scope of contract.

Starting and completion dates of consulting services

35. The time-schedule is an important element in project description, and the starting and completion dates of consulting services should be stated as precisely as possible in the contract. These dates depend both on the extent of services which the consultant is obliged to provide and on the date of entry into force of the contract. If the services are to be provided in stages, the dates for each stage should be agreed separately. If official approval or third-party agreement is requested, the parties should provide for the contract to enter into force only after such an approval or agreement has been obtained.

36. A distinction is made between the date of entry into force of the consulting engineering contract and the date of commencement of services. Since the latter may be dependent on the former, the parties should make provision for the consultant to commence his services within a specific number of weeks after the contract has come into force. The parties should also provide for the services to be concluded within a specific number of months of their commencement.

Transfer of consultant's contractual rights and obligations

37. Generally, the parties may agree in their contract as to whether the consultant may assign the contract or a part thereof. Normally, the consultant may not in any way assign or transfer his contract without the prior written consent of the client. On the assumption that an assignment has been agreed with the consent of the client, one legal consequence would be the establishment of a direct relationship between the client and the assignee in respect of the

contract or that part of it which has been assigned.

Subcontracting

38. Sub-contracting, which is frequent in engineering practice, is subject to certain conditions. The client and the consultant often agree on the proposal of one of them as to whom the consultant will employ as sub consultant; and this is included in the consultancy contract. In other words, the consultant may not be permitted to select sub-consultants without the prior express consent of the client; the client, in turn, may base his consent on possible restrictions, and may even impose sub- consultants. The consultant, however, may request the client to provide for the fees of sub consultants in the contract (see pare. 106). If utilized, sub-contracting produces no legal consequences vis-a-vis the client since the sub-consultant does not enter into a direct contractual relationship with the latter. In the absence of such a relationship, sub-contracting means in effect a relationship between consultant and sub-consultant.

39. Sometimes the client refuses a request by the consultant to subcontract, or disagrees with the consultant's choice of sub- consultant. In principle, the client approves the sub-consultant selected by the consultant on the understanding that approval does not relieve the consultant of any of the obligations under the contract and that the terms of any sub-contract are subject to, and in conformity with, the provisions of the consultancy contract. The consultant, therefore, is liable for the acts of his sub consultant. 40. Instances where the client has retained the right not only to propose but to impose or choose sub-consultants may cause many difficulties, and even disputes, between client and consultant: liability is then at stake. In principle, the consultant should incur no liability concerning acts of a sub consultant imposed on him. Nevertheless, in international practice, some clients hold the consultant liable for acts of the sub- consultant despite the fact that it is they who have imposed that sub-consultant. Therefore, the main issue here is whether the consultant accepts a sub-consultant imposed by the client. If the client insists on his right to impose sub-consultants and if the consultant accepts this right, then the latter may attempt to protect himself by having certain safeguard clauses inserted in both the consultancy and the sub-consultancy contracts. These clauses are, in fact, reservations concerning possible over-pricing and the consequences of the sub consultant’s non-observance of time-limits and quality requirements.

41. Finally, the client usually permits the consultant to recruit specialists for certain specialized technical services (for example, those of geologists, topographers, radiographers, etc.). In some cases, the consultant informs the client, with reference to the respective contract provision, that a specialist has been recruited by him. The client may reserve the right to approve the appointment of any specialist(s) by the consultant on the basis of the former's qualifications.

Transfer of client's contractual rights and obligations

42. The parties should also agree in their contract whether and under what conditions the client may transfer his rights and obligations under a consultancy contract to a third party.
Obligations of the parties

A. General remarks 43. Determination of contractual obligations is the starting point for assessing whether there has been failure to perform in any respect. There is a direct link between contractual obligations, failure to perform and consequences of failure to perform. 44. In the following paragraphs are listed those obligations on the part of both consultant and client which should be considered during the negotiation of a contract on consulting engineering.

Obligations of the consultant

B. Specific remarks 45. It is essential for the parties to describe in the contract tasks in the various stages of project evolution and to define the assignments of the consulting engineer or consultant. In this connection, reference may be made to paragraph 6 (detailed essential services) and paragraph 34 (object and scope of contract) above. Contracts contain provisions to ensure that the consultant (or consulting engineer) performs his services with all skill, care, diligence and efficiency and carries out all his tasks in conformity with recognized professional standards. It should be noted that frequent use is made of standard contracts or general conditions in both national and international projects. The code of ethics of the consultant's association may also play an important part in determining the obligations of the former.

46. The tasks of the consulting engineer or consultant involve the intellectual contributions assimilated in the "supply of services". Some of these contributions are embodied in documents (e.g. engineering designs, plans, studies, drawings, and technical reports, etc.). These documents, however, are material evidence only of a contribution whose intellectual character remains unaltered. Consequently, the legal nature of such contributions remains unchanged. Although specific features of some contributions may, in certain cases, entail differences in degree of responsibility, the nature of obligations deriving from all tasks of a consultant remains exclusively that for the furnishing of services ("obligations of means").

47. The tasks and, consequently, the obligations of the consulting engineer or consultant are those specified in the contract; the most important of these are:

- Preliminary feasibility and schematic design studies; - Planning and preparation of layouts and cost estimates; Basic planning and programmed of financing;

- Preparation of preliminary sketches;

- Preparation of engineering designs, drawings and specifications; Preparation of detailed drawings;

- Invitations to tender; - Evaluation of bids for construction of facilities; Evaluation of bids for equipment;

- Advice to the client on all tenders, renderers, prices and estimates for carrying out the works;

- Construction supervision;

- Supervision of equipment manufacture;

- Supervision of equipment erection and connections; Issue of directives and instructions to - contractors;

- Notification of errors and omissions in the instructions of the client;

- Recruitment of personnel, depending on whether the consultant is to perform the tasks by himself or together with his staff, or whether he may assign these tasks to others; - Availability for discussions with the client; Progress reports;

- Co-ordination of activities of other participants in the project;

- Technical assistance (in as far as this comprises services in the framework of consulting

engineering);

- Delivery to the client, on completion of the project, of records of work carried out.

All these obligations may be amended and/or supplemented by the parties subject to particular provisions of the contract. It is necessary that the consultant co-operate with the client to enable the latter to perform his obligations under the contract.

48. During the construction stage, the consultant may perform several tasks of a contract management nature - for example, he may issue variation orders, authorize payments and issue completion and final certificates in connection with the works. When the consultant is engaged to inspect and supervise a project, it is important for the parties to make provision in the contract for procedures by which the consultant informs the client and obtains instructions and authorization from him.

49. In addition to normal services- obligations of the consultant referred to in paragraph 47 above, the parties sometimes agree that the consultant should provide one or more full-time project representatives and render such additional services as performance of financial feasibility studies or other special studies ; preparation of designs relating to future facilities, systems and equipment which are not intended to be provided as part of the project; and preparation of documents concerning alternative tenders for out-of-sequence services requested by the client. If such additional services are provided in the contract at the request of the client, additional compensation is required to be paid to the consultant for them.

50. Consulting engineering contracts usually pay due attention to documentation two aspects of which are of particular importance: procedures of delivery of documents ; and completeness of documents and their acceptance by the client. In the context of the procedure of acceptance of a document received by the client from the consultant, the parties may, inter alia, provide for both the possibility of organizing a checking of documentation by representatives of the consultant in the client's country or the country where the project is to be implemented and the conditions for such a checking (participants, place of checking, legal effects of the protocol on acceptance of the documentation).

51. The consulting engineering contract usually contains a warning that the documents provided by the consultant do not infringe the rights of third parties such as patents, copyrights or industrial or intellectual property. It also usually provides for the consultant's role in case of third-party claims.

Technical assistance as a possible obligation of the consultant

General 52. Since technical assistance covers a wide range of activities, the present Guide is limited to those aspects which are inherent in or related to consulting engineering only. Technical assistance by consulting engineers has often been considered part of the more general term "transfer of technology" and, in most cases, involves professional training. In other words, the effective transfer of technology presupposes technical assistance and training. The success of such technical assistance depends on the ability to apply acquired foreign technologies to different user conditions. Provisions concerning technical assistance may form part of a consultancy contract but they are usually embodied in a separate document.

Types of technical assistance offered by the consultant

53. Two types of technical assistance are usually encountered: technical assistance in connection with the preparation of specific projects; technical assistance in connection with education in schools, colleges, other educational institutions, or places of work.

Technical assistance for projects

54. The main purpose of technical assistance regarding specific projects is often the training of the client's personnel. This assistance includes not only the training necessary for a specific project or operation but that which enables trainees to assess critically their own work decisions as well as those of other persons. International practice indicates that technical assistance on projects is usually confined to training in the preparation and execution of a project, and possibly in the operation stage.

55. When rendering technical assistance on projects, the consultants make arrangements for the vocational training of foremen and/or engineers and for recruiting key personnel. For this purpose, the contract specifies the terms and conditions of such assistance: scope of services; the place where it is to be utilized (on site, or elsewhere); the period during which assistance is envisaged; the number of trainees and instructors (and qualifications of both); the terms of training in relation to operation of the works where the training is to be given; measures to prevent leakage of confidential information; working conditions, accommodation, transport and insurance for the staff concerned; remuneration of instructors; working languages; liabilities; arbitration; and other related matters1.

Technical assistance in education

56. Consultants may from time to time be requested to provide professional personnel to give training in specific engineering subjects. In such cases, the assistance mainly comprises selection of suitable personnel and their posting to the client's country and, in some cases, preparation of curricula for the courses and professional support from the home office during the contract period.

57. Contracts concerning this kind of technical assistance by the consultant should, in addition to those items listed in paragraph 55 above, include clauses regarding ownership of educational materials, replacement of experts in case of illness and/or accidents, requisite visas and working permits, taxes and duties, interpretation, tools, storage, notification of dispatch of personnel, restrictions on employment of personnel, replacement of experts by the consultant (either at his own request or at the request of the client), and other relevant matters.

Client Obligations of the client

58. The obligations of the client (like those of the consultant) are specified in the contract. The most important of these include:

- Prompt action in giving instructions;

- Furnishing of data and information, and availability of documentation know-how, space, sites, premises and equipment;

- Furnishing of information concerning local legislation in the field of industrial and social relations and all other information necessary to the consultant to fulfill the contract within the framework given in it;

- Provision of special services (geological, hydrological, meteorological, etc.);

- Provision of services by others; - Rendering of local assistance to consultant, and personnel and dependents, such as issuance of visas and permits. Customs clearance, access to all sites and locations involved in implementation of the project;

- Provision of own counterpart and supporting personnel;

- Submission to the consultant of a bank guarantee, if requested; and

- Payment for all the consultant's services according to the agreed terms.

All these obligations may be amended and/or supplemented by the parties subject to particular provisions of the contract. It is necessary that the client co-operate with the consultant to enable the latter to perform his obligations under the contract.

C. Performance and services by third parties

59. If the performance of the contractual obligations of either the consultant or the client depends on assignments to be carried out by third parties, the results of such assignments and the time-limits within which these are to be carried out should be specified. It should also be specified whether the consultant or the client, if any, has to bear the consequences of non-fulfillment of such assignments.

Failure to perform obligations under the contract

A. Among the parties

60. Failure to carry out a contract correctly may constitute breach of contract. It is therefore important that due attention be paid to what constitutes failure to perform. Failure to perform in any instance implies the liability of the defaulting party; and this liability may entail pecuniary and/or other consequences. For the affected party, such consequences may be seen as remedies and means of redress. In certain circumstances, the consequences for the defaulting party may be either limited or excluded. The parties may, for example, agree that circumstances of an extraordinary kind which hinder proper performance permit the invoking party to deliver at a later date or to suspend the contractual obligation to perform. In this case, there is technically no breach of contract and, thus, no liability for failure to perform. However, there then remains a discrepancy with regard to the original contract, and the parties may therefore wish to regulate distribution of additional costs, etc. during suspension of contractual obligations. Cases where either party fails to perform its contractual obligations owing to changed circumstances might be considered as the kind of anticipated breach of contract dealt with in paragraphs 88-91. Consultant

61. Under the terms of reference assigned to him, the consultant must perform all his contractual obligations. He may be held liable for failure in performance of his obligations, i.e. for non-conformity to the contract, or all or part of services to be rendered, and/or when the client has sustained damage due to the consultant.

62. The consultant's failure to perform his obligations under the contract may virtually be constituted by: delay, total non- fulfillment, partial non fulfillment and/or defective fulfillment. Nevertheless, no consequences derive from such a failure if there are grounds for relief (see pages. 80- 87).

Client

63. The client must meet all his contractual obligations. He may be held liable for failure to perform his obligations provided in the contract.

64. The client's failure to meet his obligations under the contract may in effect be constituted by delay (e.g. Lateness in issuing instructions to consultant); non- fulfillment (e.g. failure to provide local assistance or to make payment with regard to a consultant's invoice); or defective fulfillment (e.g. when special laboratory tests carried out by the client prove to be inaccurate, or when data furnished to the consultant are incorrect) - but no consequences would result from such failure if there were grounds for relief (see pages. 80-87).

B. By third parties

65. The parties should consider how failure to perform by third parties might affect their contractual relationship. The consultant may be liable for the failure of a third party to whom he has assigned the contract, or a part thereof, with the consent of the client (see pares. 37-41). The client is liable for the failure of a third party imposed or chosen by him. The consultant and the client may agree which of them should be liable finally for the failure of third parties, and may accordingly arrange for insurance of their respective liabilities (see pare. 86). Nevertheless, a limitation of the total financial liability as provided for in paragraph 71 does apply also if the consultant has sub-contracted some of his services in accordance with the contract.

Consequences in case of failure to perform contractual obligations

A. General

66. The parties should provide in their contract what are the consequences of failure to perform contractual obligations although the consequences of such a failure may be found in the applicable law. One advantage of this approach is that the consequences accord with the degree of seriousness of the breach of contract in each particular relationship. In particular, the parties may draw a distinction between failures of a significant and of an insignificant nature.

B. Consultant

Consequences of the consultant's failure to perform

67. If the consultant fails to meet any of his obligations under the contract, the client may have recourse to remedies described below, including the right to claim damages except in cases of relief. In practice, the consultant generally has the right and the duty to remedy any damage which is his fault by carrying out - free of charge - work which has not been performed, or has been partly performed, or has been performed with defects, or has been performed in disregard of terms and/or time-limits provided in the contract. The parties may limit the period during which the consultant remedies damage - for example, until the work has been accepted by the client or until a certain period of time has elapsed after commissioning or starting up operation of the project.

68. The client's remedies vary according to whether the consultant's failure is significant or insignificant. These remedies may include:

In case of delay - if there is an anticipated delay, the client may request that the consultant perform his obligations without delay and may insist that the consultant expend more efforts, without the right to additional remuneration; if delay has actually occurred, the consultant is liable to pay compensation for damage sustained by the client or to pay a penalty or liquidated damages according to the contract.

In case of total non-fulfillment - the consultant has to pay damages. In case of partial non-fulfillment or defective fulfillment - the client's remedies are by means of requests for completion, or correction of performance, or substitute delivery. If such remedies are not possible, or if the consultant does not agree to carry them out, then he must pay compensation for damages sustained by the client.

69. With regard to all arrangements concerning the client's remedies, account should be taken of the specificities of the respective services of the consultant.

70. If none of these remedies results in the fulfillment of contractual obligations by the consultant, the last resort of the client is to have the contract terminated. Termination of the contract by the client does not, however, release the consultant from the obligation to pay compensation for damage. (For aspects of termination on grounds other than failure, see paragraph 129.) If failure is constituted by a very short delay, insignificant partial non-fulfillment, or defects which are not serious, arbitral or judicial practice suggests that, in such cases, there are insufficient reasons for termination.

Limitation of consultant's pecuniary liability

71. It is generally accepted in practice that the total financial consequences of the consultant's failure should not be borne by him and that an equitable balance of interests of client and consultant should be secured, provided that the financial consequences for the consultant remain in fair relationship to his fee. The parties should agree in their contract that the total financial liability of the consultant should be limited to a certain amount, defined in absolute figures or as a percentage indicated in the contract, thereby determining a specific ceiling for that liability. Very often this ceiling is defined by the provision that the compensation which the consultant has to pay to the client should not be in excess of the consultant's fee or a percentage thereof. However, the right of the parties to limit the consultant's pecuniary liability may be subject to rules in the applicable law (limitation is not very often applied in cases of gross negligence, for example).

C. Client Consequences of the client's failure to perform

72. If the client fails to perform any of his obligations under the contract, the consultant may require him to perform his obligations and/or to resort to other remedies for failure including compensation for losses sustained. The consultant may determine an additional period of time for performance by the client of his obligations. In that case, the period during which the consultant has to fulfill his obligations is proportionally extended. It is for the parties to agree in the contract whether the client should pay interest on delayed payments (see paragraph 104).

73. If the client does not, within the extended period of time, meet his obligation(s), the consultant is not deemed to be in default and has the right to terminate the contract. The client

then has to pay for damage sustained by the consultant, unless relieved of that obligation.

D. Procedure in case of failure by either party to perform its contractual obligations

74. Normally, the contract provides for procedures in case of failure by either of the parties to perform its obligations under the contract. There may be different procedures according to whether the failure is significant or insignificant. The parties may, therefore, make a distinction in the contract between significant and insignificant failures; and may also specify the period which must elapse before a remedy can be exercised and the conditions under which a remedy, including any right to terminate the contract and/or to recover damages, may be exercised.

75. The following procedures may be followed: in case of failure by the consultant to fulfil his obligations under the contract, the client - subject to the contract and the applicable law - usually transmits to the consultant written notification of the nature of the alleged failure and invites the latter to remedy such failure within a certain time- limit. If, within a fixed period after the receipt of the client's written notification, the consultant does not agree or does not start to remedy such failure (although this is in the opinion of the client a significant failure), the client may, by means of a second written notification to the consultant, terminate the whole contract or such part or parts thereof in respect of which the consultant is in default. In the case of insignificant failure by the consultant, notification does not necessarily result in termination of the contract. The same procedure applies in cases where the client fails to perform his obligations towards the consultant under the contract.

E. Damages and penalties (liquidated damages)

76. The parties utilize penalties as a means of pressure which one exerts on the other in order to cause the latter to perform its contractual obligations in time. A distinction should be made between two situations: (i) when the consultant has undertaken a specific task within a strict time-limit; and

(ii) When the consultant's assignments are of a more or less general nature. In the former situation, the inclusion of penalties in a contract would seem natural, whilst in the latter it would not.

77. In some contracts, the parties merely stipulate that failure to meet obligations by one of

the parties entails the liability of that party to pay compensation to the other party for damages actually sustained, Usually, however, a general provision of this kind is inadequate to prevent difficulties to which problems of applicable law, of proof and of amount of damages give rise in certain cases. There are existing contracts which provide for payment of penalties by the consultant without obligation by the client to prove that he has sustained damage: in such cases, payment of a penalty may substitute for payment of damages. There are also contracts which provide for payment of both penalties and damages: in such instances, penalties may be additional to the payment for damages. Taking all variations into account, it would seem that the parties should provide for either payment of damages or penalties. If clauses are inserted in a contract concerning both payment for damages and penalties, the relationship between these two categories should be clearly defined. It should be pointed out that in some countries penalties are deemed to be contrary to public order or may be controlled as to amount by the courts. Liquidated damages are then used and are considered to protect in advance what might be losses for one party owing to the other party's failure to meet its obligations. 78. With regard to amounts of liquidated damages or penalties, parties often find it necessary to establish in the contract a lump-sum amount of liquidated damages or penalties to be applied in case of failure of performance of contractual obligations. The clauses providing for lump-sum liquidated damages or penalties are usually expressed in terms of the categories of failure to which they are intended to apply (delay, non fulfillment, and defective fulfillment). When parties select this method, they should take into account the law applicable to the contract since national legislation varies.

79. The penalty or liquidated damages for a consultant may be computed per day or per week of delay, or as a percentage of the consultant's fee; but the fee for a consultant's services relating to other stages of the project which have been completed in time is calculated and paid separately.

Relief from liability for consequences of failure to perform contractual obligations

a) General principles

80. The parties should provide in their contract for those situations which might bring relief from liability for consequences of failure by one of them to perform its obligations. In the absence of such a provision, solution should be sought in the applicable law.

81. There is usually a clause specifying that a party is not liable for failure to perform any of its obligations if it can prove that the failure was due to an impediment occurring after the signing of the contract, and which was beyond its control, and that it could not reasonably have been expected to have taken the impediment into account at the time of the conclusion of the contract, or to have avoided or overcome it or its consequences. Examples of such

situations are: war, civil strife, interference by public authorities, fire, natural disasters, etc.
(b) Procedure in cases when a party invokes relief from liability for consequences of failure

82. The party which fails to perform must give notice to the other party, not later than on a date agreed in the contract, of the impediment and of its inability to perform without delay. If notice is not given within the time limit established in the contract, the party invoking relief is liable for damages resulting from such omission or even prevented from taking this action.

83. The parties may provide in their contract that the existence of an impediment must be confirmed by the Chamber of Commerce and Industry or other competent organization of the country in which such impediment occurred. The parties may also provide for the fact that the receiving party, after appraisal of information received, might object to the assertion of the invoking party that the event concerned had really constituted an impediment to the performance of the latter's obligations. In such a case, a solution may be sought by negotiation or, failing a satisfactory result thereof, by the appropriate means for settlement of disputes (e.g. by arbitration, if so agreed, or in court).

(c) Effects of relief from liability for failure

84. Generally, the effects of relief from liability are: extension of the time necessary for meeting the obligation which had become impossible without prejudice to the application of clauses for adaptation of the contract; compensation by the client of extra costs; the fact that no party is liable to compensate for damage which the other party may have sustained on this account; non-payment of fees to the consultant for those obligations which have not been met; and unilateral termination of the contract by either party. The contract should specify how long an event constituting an impediment may be tolerated before the parties are required to take a decision on the future status of the contract. Relief has effect for the period during which the impediment exists plus a reasonable time for remobilization.

85. A party may not rely on failure by the other party to perform contractual obligations to the extent that such failure was caused by the first party's act or omission. Thus, the consultant does not bear the consequences of his failure if it was due to an act or omission by the client, and vice versa.

86. More difficult is the situation where the failure of a party to meet its obligations under a consulting engineering contract has been caused by a third party. If the first party's failure is due to failure by a third party whom the former had engaged to perform the whole or a part of the contract, that party is exempt from liability only if it complies with the conditions

described in paragraphs 80-81 above, and the third party whom it had engaged would be exempt if the provisions of those paragraphs were applicable to it. If the consultant's failure is due to failure by a third party involved in the performance of the consultant's obligations, the parties should provide in the contract for distribution of risk. If, on the other hand, such third party was imposed by the client, the consultant should be exempt from liability (see pare. 65).

87. The parties may agree in their contract that, during a period of suspension, they will share the costs required for continuation of the performance of the contractual obligations. They may also agree that settlement of these costs be made either when the event releasing from liability has taken place or during settlement of accounts in the case of termination of the contract on expiry of the period of suspension. Usually, the parties agree to retain the benefits of their reciprocal work carried out earlier. In that case, they should account to each other: one party would be required to account to the other for benefits received and maintained under the partially-performed contract, with the reservation that the sums due do not exceed the cost of services rendered by the consultant. Account is taken of payments already made by the client in execution of the terminated contract.

Changed circumstances and adaptation of the contract

88. In their contract the parties may describe any events and circumstances leading to grossly unfair situations which, strictly speaking, might not fall under pares. 80-87 but which might result in disturbance of its initial economic and financial equilibrium or make performance impracticable.

89. If the parties do not succeed in determining in advance events which might be defined as likely to affect the contract, they may make provision in their contract for negotiation and settlement of any problem which might otherwise lead to amendment of the contract. 90. To make provision for possible non- agreement between the parties, the contract might specify the degree of importance of effects of changes in circumstances; and those changes which would give rise to alteration only in the contract and those which could result in its cancellation, with all the consequences thereof. The first group of changes would comprise fundamental changes in circumstances which are essential for achieving the objective of the contract. When these changes occur, the adversely-affected party might propose to the other party a re- negotiation of the contract and its reasonable adaptation to changed circumstances. The second group of changes would comprise those which might prevent the achievement of the objective of the contract, even if the latter were to be re-negotiated and amended. When these changes occur, and when at the same time the other party does not accept proposals for re-negotiation, the adversely-affected party may unilaterally reject the contract. Obviously, amendment or cancellation of the contract occurs only when certain tolerances, to be specified in the contract, are exceeded. Equally, it might be stated in the contract that, if the parties fail to reach agreement on the effect which a change of circumstances might have on the contract,

the matter of amendment or cancellation should be submitted to a third party (if that is the form of settlement of disputes adopted). Should the parties agree to entrust amendment of the contract to the arbitrator, they should ascertain whether, in their respective countries, amendment of a contract by a third party - even with the authorization of the other parties - is legally valid. Cancellation of the contract, in the manner decided by the parties, whether by mutual agreement or by decision of the arbitrator, involves a requirement for settlement of the relationship between the parties. (This, however is a general question which is discussed in the section dealing with the termination of contracts (see pages. 129 and 130-134).)

Financial matters

(a) Methods of calculation of the fee to be paid to the consultant

91. The charges made for the consultant's services constitute reimbursement for a variety of costs represented by the technical payroll, administrative and clerical assistance, fringe benefits, equipment, supplies, office space, taxes, other general items, and an appropriate margin of profit for the consultant. Generally, engineering charges are specified in an annex to the contract. The parties may at a later stage modify the provision relating to charges; practice indicates that this is not always carried out in the way which the contract specifies. The parties should therefore ensure that, if charges are agreed beyond those established in the original contract, these should be implemented in accordance with the procedure for amendments to the contract (see pare. 128). Charges are usually computed on one of the following bases, or by a combination of two or more, with appropriate modifications in specific cases (and there may be other methods):

- Time;

- Payroll cost multiplied by an overhead factor plus direct expenses;

- Lump sum;

- Percentage of the project's construction cost; - Cost plus a percentage fee, or cost plus a fixed fee;

- Retainer.

Time

92. This method is based on the time which the consultant devotes to services for the client, plus reimbursement of direct expenses.

93. The parties establish a tariff providing for monthly, weekly, daily or hourly rates (man-month, man-week, man-day, and man-hour) as well as extra charges for all categories of staff. Additionally, to the specification of all expenses, the parties provide that the time spent on travelling in conjunction with the execution of the contract is the client's responsibility.

Payroll cost multiplied by an overhead factor plus direct expenses 94. This method is based on the payroll cost of the staff employed on the project, multiplied by an overhead, plus direct expenses incurred. The size of the multiplier varies with the type of work, organization and experience of the consultant, the area in which his office is located, and other relevant circumstances. The overhead factor covers fixed operating costs and profits.

Lump sum 95. The parties which apply this method decide on a lump sum in consideration of the consultant's total obligations, with expenses either included or not included. This method of compensating consultants is used frequently in investigations and studies and for basic services in design-type projects when the scope of assignments to be undertaken, as well as the duration of services, can be clearly and fully defined.

Percentage of the project's construction cost

96. This method is widely used for determining the fees of consultants in assignments of which the principal task is the design of various works and the preparation of drawings, specifications and other contract documents necessary for a description of facilities to be constructed. They do not cover feasibility studies and allied services, such as assistance in start- up or vocational training, which are generally paid for on the basis of hourly rates or salary costs. The project's construction cost - to be used as the basis for determining the consultant's fee - is the total cost or estimated cost to the client of all works arising from whatever cause - including any payments made to the general contractor by way of bonus, incentive or settlement of claims, and before deduction of liquidated damages or penalties, if any, payable by the contractor to the client. The percentage-forming basis for payment to the consultant should be stated in the contract, together with details of reimbursable expenses.

Cost plus a percentage fee, or cost plus a fixed fee

97. By this method, the consultant is reimbursed for the actual cost of all his services. The actual costs consist of three items - namely, the payroll costs (salaries plus social security), overheads which are often expressed as a percentage of the payroll costs, and out-of-pocket expenses. To these is added a fee expressed as a percentage of payroll costs and overheads covering such items as contingencies, readiness to perform, and profit. The consultant's fee may, however, be determined in the form of a lump sum instead of a percentage.

Retainer

98. This method is employed when the services of a consultant are expected to be required at intervals over a period of time. It is frequently practised by clients who, inter alia, wish to be assured of always having available the services of a certain consultant. The method is often used in connection with advisory services - for example, concerning litigation, ad hoc services on a part-time basis over a period of years, or additional services in continuation of a separate design contract. 99. The amount of a retainer varies according to the type and value of the services to the client; it is paid either during the entire term of the contract, or monthly, or on some other mutually-agreed basis, with per diem or hourly rates in addition for time incurred at the request of the client. A retainer can be considered as compensation additional to fees computed under the time or percentage-of-the- project construction cost methods.

(b) Rise in prices and price adjustments

100. It is for the parties to decide whether the contract should be at fixed prices, which may or may not be revised. The project price and the consultant's fee may be affected by various factors such as changes, modifications and/or additions to the project; and changes in prices of primary products, services, wages, etc. All these factors have an impact on the rights and obligations of the parties, and may cause variations in the project price and, consequently, the consultant's fee. Many contracts therefore contain a price adaptation clause, i.e. one related to the possibility of a change of tariff for basic services. Inflation (escalation) is not usually listed in any schedule of cost elements since it is incorporated in many different elements. Price revision clauses may be very detailed and may include, inter alia, those variations in prices which are taken into account in comparisons of tenders, the reference date for prices contained in the consultant's tender, statements as to whether the price revision applies to the interim payment or to the final balance or to the difference between the initial amount of such interim payment of balance and the amount of the advance granted, and similar.

(c) Payment of sums due to consultant

Advance payment

101. Under the time-payment method, the client usually makes an advance payment in favor of the consultant amounting to a fixed percentage of the estimated figure of the latter's fee.

Payment plan 102. Under the lump-sum method, the parties devise a payment plan establishing the dates when advance and interim payments become due.

Auditing

103. The parties may agree in their contract that, in the case of the time payment method, the client should carry out an audit of the accounts of the consultant or should appoint.