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CONSTRUCTION INSURANCE IN THE
ARAB GULF AREA
AN ANALYSIS OF COVER AND CONTRACTS

by
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A thesis submitted for the degree
of Doctor of Philosophy in
The City University, London
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D E C L A R A T I O N

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ABSTRACT

Important problems have been frequently encountered in connection with the insurance covers of projects in the Arab Gulf Area. An attempt to investigate such problems and recommend solutions thereto is given in this thesis.

The investigation started by a study of the economic and the legal background, the legal liabilities of the parties to the construction project and the insurance market background and practices in the area.

Analysis of the insurance requirement clauses in the main contract conditions forms used in the area, revealed many ambiguities, shortfalls etc. therein, which, in addition to lack of insurance awareness, resulted in inadequate insurance covers asked for and led to most problems encountered.

Investigation of 453 losses showed that in many claims, inadequate covers asked for and obtained resulted in amounts claimed being either much reduced or wholly repudiated. Delays in settlements following disputes were therefore frequent.

In some cases significant losses occurred, seriously affecting contractors with limited means, as the losses were totally or partially not covered under the CAR policies they asked for.

Analysis of 1573 CAR/EAR policies showed the present low adequacy of cover. A system adopted in some cases, for checking CAR policies, improved their protection level, to the benefit of contractors, principals and insurers.

To assist engineers, accountants etc., who are not insurance experts but deal with CAR policies, an index has been formulated in the thesis to measure adequacy of cover thereunder. A limited random sample survey among contractors, employers and consulting engineers showed that they think the index would be very useful and they welcomed the idea.

The study confirmed that insurers are losing a sizable portion of the market left uninsured whether totally or partially. If properly arranged, these additional covers would widen insurers' market base and protect employers and contractors at relatively small cost.

To remedy the position, recommendations are given in the thesis for a suggested new wording of the insurance requirement clauses in the contract conditions. The new wording seeks clarity and adequate protection for contractors and employers without departing from normal insurance practices. Other recommendations given suggested implementing some practical steps for improvement, including the use of the aforementioned index to initiate better understanding and increased demand for more adequate construction insurance covers.

1. INTRODUCTION

1.1 Emergence of the subject

- 1.1.1 Development plans in the Arab Gulf Area during the past twenty years or so covered a variety of construction and erection works. The surge in construction of private and commercial buildings to cater for the fast growing population and business activities converted towns and cities into huge construction sites. At one stage the area was described as the construction site of the world where values of construction projects reached exorbitant amounts.
- 1.1.2 The enormous expenditure on construction/erection projects in an atmosphere of free economy resulted in the establishment of many local contracting firms and encouraged many foreign contractors to enter the market. As on any construction site, the contractual relationship between the owner of the project and the contractor(s) is regulated and controlled by the conditions of contract signed by the parties. The standard forms of these conditions are usually issued by authentic international organisations. Some government departments in the area have their own standard forms also.
- 1.1.3 Experience and knowledge in the fields of law, engineering, finance, insurance etc. are reflected in the construction of the conditions and in the wording of the clauses. Practical aspects and development in these fields sometimes necessitate certain changes in the clauses. New editions thereof may then be adopted by the respective organisations or government departments inserting such changes in the forms which they previously issued or approved.

- 1.1.4 Many risks associated with the construction/erection of the project are insurable under the customary covers and must therefore be covered by suitable insurance policies. The international standard forms of contract conditions usually include provisions for effecting insurance covers which aim at taking care of the major part of these risks. Most local standard forms also contain similar provisions but vary considerably from each other and from the international forms.
- 1.1.5 In practice many problems are met with when the aforementioned insurance requirements are implemented. These problems become more apparent when losses occur and the insurance policies issued in compliance with these requirements are found to be providing inadequate protection. Further, in many small projects proper contracts do not exist and because of lack of insurance awareness and proper advice on insurance matters the majority of these projects are not insured. Problems resulting from effecting inadequate insurance policies in connection with the insured minority of these projects are met with frequently. Problems resulting from not insuring at all are even more serious.
- 1.1.6 Not much work has however been done before for investigating such problems or suggesting remedies thereto, although they have been reflecting negatively on owners of the projects and on contractors and have had their unfavourable repercussions on the insurance/reinsurance markets. A survey of the present market practices and a thorough investigation of the causes and repercussions of these problems including a detailed study of the insurance requirement clauses in various forms of such contract conditions and in relevant regula-

tions in the area seemed therefore necessary. The study has also been oriented towards analysing, comparing and evaluating the insurance requirement clauses in use at present against practical needs of adequacy of cover, clarity of the requirement clauses etc., and towards investigating the actual extent of cover provided under policies issued in compliance with the insurance requirement clauses.

- 1.1.7 Recommendations and suggestions to improve the present prevailing practices in connection with insurance of construction projects seem more important in the present and foreseeable future economic situation in the area, where more reliable and advanced methods are needed for development in the economic, industrial, and other fields.
- 1.1.8 Should the recommendations and suggestions referred to in 1.1.7 be carried out, all parties involved would benefit. Owners of projects and Contractors would be more adequately protected by insurance covers at a relatively small cost. The owner of the small project who is usually an individual with limited resources would find a support in the insurance policy when he suffers a financial loss following destruction, loss or damage to the works and/or to third parties, especially if the contractor is unable to meet such loss and/or liability. The owner of the big project would also find a better protection in a policy providing adequate insurance coverage not only for the contractor but for the owner as well. Contractors in general would find in the policy providing adequate coverage a more reliable protection and financial help when needed in connection with repair or reconstruction of a loss to the property insured or in connection with liability incurred to

third parties. The result would be smoother site operation and less exposure to sudden financial problems brought about by unexpected and/or partly or totally uninsured losses.

1.1.9 Third parties who suffer bodily injuries and/or damage to their properties would benefit as well, since in most local countries there are precedents of third parties claiming directly against the insurer under liability policies other than motor traffic liability. Under the latter cover third parties have the right by local laws to claim directly against the insurer. Ultimately the economy of the country will benefit if owners, contractors and third parties suffer less than what they would have suffered had the recommendations not been implemented.

1.1.10 The said recommendations would also benefit insurers who would insure an increased number of projects and additional perils, hence widening their market base and balancing their portfolio. This benefit would similarly be reflected on reinsurers.

1.2 Construction/erection and risk management

1.2.1 Because the construction industry is a high risk business, the experienced management lays down rules and prescribes methods to deal with these risks from the time of planning the project. In many countries, regulations and rules are passed to ensure a minimum level of safety, such as the Health and Safety at Work etc. Act 1974 in the UK. In the Arab Gulf Area articles dealing with safety and loss prevention are found in labour laws, ministerial orders and other regulations.

- 1.2.2 Risk is synonymous with uncertainty which is one of the fundamental facts of life¹. In situations of uncertainty people's reactions differ widely. Many decisions are simply based on desire, some are based on previous experience and so on. Generally the behaviour of a person in making his decisions regarding uncertain events is affected by a variety of factors among which are his personality, education, beliefs, experience, environmental conditions etc.².
- 1.2.3 Risks have been classified as: a) pure and b) speculative. Pure risks are incidental to other activities and can result in a loss but not in a gain. E.g. A merchant having a store full of goods, if a fire breaks out in the store he will suffer a loss but if there is no fire his position is not changed. Speculative risks are risks incurred in the hope of a reward or a gain such as buying shares in the stock market in the hope that prices will increase realising a profit. In other words, pure risks can result only in loss or no change whereas speculative risks can result in loss, no change or gain³.
- 1.2.4 The insurable risks associated with a construction project fall under the classification of pure risks as described above. They involve not only the property on the site such as materials, machinery and completed works but extend to include the workers as well as property and people that are not connected with the project, i.e. third parties. Normally these risks are not static during the period of the contract but change following changing conditions in each of the various phases of the construction operation, i.e. preparatory phase, construction phase, testing/commissioning

phase and maintenance phase. Therefore evaluating and dealing with these risks at the various phases of the work require a special knowledge and experience which determine the difference between contractors when considering smooth site operations and satisfactory results in connection with insured or uninsured losses. This will no doubt reflect on the contractor's reputation in the construction market and on his relations with owners of projects in general, not to mention his relations with insurers and premium rates payable by his organisation.

1.2.5 Sources of risk⁴ have been summarised as:

- a. Social : such as theft, vandalism, arson, riots, strikes and accidents caused by people.
- b. Physical: such as fire, weather, landslide and earthquake.
- c. Economic: such as depression and inflation, local fluctuations and failure of individual firms.

1.2.6 Risk management presents itself as a practical concept to deal with these risks. Although the term 'risk management' has not been used until recently, since time immemorial people have used different methods to control risks and deal with them by whatever practical methods are available at the time. Risk management nowadays is looked at as a developing subject with no boundaries, it is the art of using suitable techniques to identify, measure and control the risk⁵. Broadly it embraces all efforts to minimise the impact of uncertain events⁶. Insurance is an important aspect of risk management. The fundamental mission of insurance has been defined as "the sharing of

losses - unpredictable in the individual case but predictable on group basis"⁷.

1.2.7 The tools of risk management have been described as:⁸

a. avoidance, b. retention (including self-insurance), c. loss prevention and reduction, d. combination or increasing the number of units exposed to the loss and e. transfer to others (including the purchase of insurance).

a. & b. Avoidance and retention are the two extremes of risk management tools. Avoidance is often impossible or impractical because most businesses would not be able to operate unless they are exposed to certain risks. A contractor, for example, even if he sub-contracted the whole project would still be ultimately responsible vis-a-vis the employer and third parties. Retention of the risk by the organisation may be active or passive. Active retention is when the risk is identified and measured and a decision is made to pay the potential loss from the resources of the organisation, such as self-insurance. Passive retention on the other hand is when the organisation is not aware of the existence of the risk and does not attempt to handle it. A sub-division of the passive retention is when the risk is recognised but under-estimated in such a manner as to ignore it.

c. Loss prevention or reduction as a tool lowers the chances of occurrence of the

risk and reduces its severity. Loss prevention may be illustrated in proper safety measures taken before occurrence of the loss such as the use of fire resistant materials or providing labourers with proper helmets or goggles. Reduction may be illustrated by successful salvage operations and the like. It is obvious that this tool consists of two programs which are used either individually or collectively, simultaneously or consecutively.

- d. Combination or pooling risks depends on the law of large numbers⁹ which reduces the impact of loss to each unit in the pool, other things being equal. This tool may be used in a variety of ways. Internal growth or merger with other organisations increases, for example, the number of property items exposed to risk and reduces the impact of loss to each item. It can also be achieved by spreading the exposure rather than accumulating it such as having more than one store instead of a central big one.

- e. The fifth tool is transfer. It may be achieved by transferring the property or activity to some other party such as a contractor sub-contracting the project or part of it to another contractor. Selling property is also transferring the risks associated with it to the buyer. It is also possible to retain the property or activity but transfer risks associated with it, such as hold harmless

agreements or inserting a provision in a contract holding the other party responsible in case of a loss. Probably the most important method by which transfer is accomplished is through insurance, surety bonds and guarantees. In such cases the property and activity is retained but the potential loss is borne by another party. In this context insurance may be defined as the business of transferring risk by means of a contract¹⁰.

- 1.2.8 The competent risk manager should know and be able to choose the right tool or tools to adopt for the various types of risks. His decision normally takes into consideration resources available which he can commit against the possibility of future higher returns, such as amount of premiums to be paid at a certain point of time against the expectation that an insured loss would be compensated by the insurer¹¹. The decision of the risk manager is however affected by various factors among which is his organisation's policy which is normally designed in the light of cost and organisation objectives¹². The policy must however be clear and capable of being implemented, otherwise the risk manager may be inconsistent in his decisions over time or in his treatment of different risks.
- 1.2.9 The risk manager in this sense has a functional role. His activities are better described as advisory or co-ordinative. His job is therefore multi-disciplinary and that of a liaison officer. He will be closely working with functional colleagues and operating management¹³.

In small sole proprietorship the owner takes all the decisions and implements them but in certain areas he must rely upon an outside adviser such as an insurance broker, agent etc. As business grows bigger it may be found necessary to have a part-time risk manager¹⁴. In this sense the risk manager's duties are considered wider than those of an insurance manager.

1.2.10 Actually in the Arab Gulf Area few insurance supervisors exist. Their job is not always confined to insurance matters but they have as well other duties to perform, mostly in connection with personnel or accounting departments within their organisations.

1.2.11 In practice it may be said, with confidence, that passive risk retention¹⁵ is widely encountered in the Arab Gulf Area particularly among individuals and small concerns. It is encountered not only in connection with construction projects owned by this group of the public but sometimes in connection with other types of social and economic activities. In some areas and among some groups of the public it might probably even go as a way of life or a temporary phase in the process of development.

1.3 Preview

1.3.1 The material given in the thesis involves mainly insurance issues. Economical and legal matters have been covered in various depths depending on their connection with the subject. Construction insurances are greatly affected by the size of the construction industry which in turn is a reflection of the economic activity of the country. The study covered the parts of the

economy which have direct effect on the construction industry in the six Arab Gulf States comprising the Gulf Cooperation Council. To achieve harmony in display which must be based on the statistics of each state it was found more practical to rely, in most cases, on the United Nations published statistics on the area. This however meant that the most recent year or two are not included in these tables pending their publication by the United Nations.

1.3.2 To be able to analyse and evaluate insurance as a concept, an economic activity and a contract in the Arab Gulf Area it is imperative to place it within the entire legal system and its development prevailing in the area. The study therefore included a survey of the codification process of modern laws which began in the late fifties and early sixties. It also discussed the impact of the fact that Muslim law which prevailed prior to the codification process is still a main source of legislation in five of the six states and the only source in the sixth. Insurance contracts are therefore affected by a combination of rules emanating from Muslim and modern laws. Because Muslim law has never dealt with insurance either as a concept or as a contract, the legality of insurance, since it was introduced to Arab and Muslim countries, has not been finally settled. This is probably a main reason hindering advancement of insurance in general and individual covers in particular. It is however a fact that the school which legitimises insurance is gaining more ground.

1.3.3. A survey of the whole insurance market in the area and the practices followed therein was

effected to show the environments that have given the subject its importance. Government support to the national insurance companies, the remarkable growth of construction insurance in the area compared with developed countries in Europe, the importance of this class of business for insurers, brokers and reinsurers, the actual results of the CAR/EAR business, all these issues which were investigated herein constitute the insurance background, which, together with the economic and legal backgrounds complete the layout of the basic facts in the area of the research.

1.3.4 Among the important questions which this study aims to answer are:

- a. Are all construction projects in the area insured? If not why?
- b. Do the policies issued in connection with construction projects in the area provide sufficiently adequate covers? If not why?

The study also aims to find out practical methods through which the present situation can be improved to the benefit of contractors, principals and insurers.

1.3.5 Generally, insurance of construction projects in the area is not mandatory. The initiative and insurance awareness of the owner, his consultants and the contractor, constitute the prime factor in creating a demand for insurance covers in connection with a construction project. The second important factor is insurers' and brokers' marketing techniques. This factor derives its importance from the area's present special

circumstances in connection with the people's attitude towards insurance in general, which applies to construction insurances as well. Other factors include the insurance requirements found in some mortgage or loan agreements. In Kuwait only the situation is partially different in that the municipality requires certain insurance policies to be submitted together with other documents before a building permit is issued.

1.3.6 The prime factor mentioned above is evidenced in the wording of the tender documents and the contract conditions, issued by the owner or his consultants, which normally contain clauses requiring the contractor to effect certain insurance covers in connection with the project. It is also evidenced by many contractors effecting inadequate insurance covers because of certain shortfalls, ambiguity etc. in the insurance requirement clauses. In the absence of proper advice on insurance matters by insurance consultants, brokers etc. these insurance requirement clauses become the only source of reference to which the owner and the contractor resort to be informed of what is needed to be insured and the scope of cover required. This fact led to a thorough investigation and detailed analysis of the insurance requirements in the forms most frequently used in the area, to check whether the relevant clauses therein are worded in such a manner that a person who is not an insurance expert can interpret the requirement easily and properly and effect adequate insurance covers. In selecting the forms, particular emphasis was placed on those adopted by the governmental departments and ministries that own

the majority of construction projects in the area. The investigation revealed the need for properly worded insurance requirement clauses to replace the present incomplete, ambiguous and confusing sets of clauses in the contract conditions used in the area.

- 1.3.7 For proper understanding of the effect of the present wording of the insurance requirement clauses on policies issued in compliance with these clauses the standard wording of a construction all risks policy as used in the area is discussed to explain the scope of the basic cover, as well as 14 different supplements that are needed in most covers and where omissions are more likely to occur. Actual examples proving the occurrence of these omissions and their effect on losses suffered by contractors have been brought out from the claims records of a major insurance company operating in the area.
- 1.3.8 Because owners and contractors of projects in the area do not normally use the services of insurance consultants, experts, managers etc., it becomes the job of the engineer or the accountant to negotiate the terms of the CAR/EAR policy and make sure it provides an adequate insurance cover for the particular project. The job of the engineer or the accountant would become much easier if he could check the adequacy of cover under the policy against a simple measure which he can easily understand and implement. For practical purposes the required measure must embrace the basic cover and the 14 supplements mentioned earlier. For this purpose an index has been formulated to quantify adequacy of insurance protection granted under CAR/EAR policies. To be

able to formulate an index that would be reasonably acceptable to all parties concerned, projects have been grouped into five main types and a separate index has been formulated for each type. These five indices prepared by the writer in collaboration with an experienced general manager and the actuary of a major local insurance company, have been discussed with an important employer, a big contractor and a well known loss adjuster all operating in the area to sound their opinion and benefit from their knowledge and experience which may be reflected in the formulation of a practical index. The result was four separate indices for each type of project. An average of the four sets for each type is calculated and on the basis that the five types carry equal weights an overall average index is formulated which can be applied to most CAR/EAR policies. Tests which have been carried out on the index components showed that they are reasonable and quite reliable. A further test was carried out to sound the reaction of engineers, financial managers and other officers who are not insurance experts but responsible for negotiating and checking CAR policies. A questionnaire was prepared and was given to a randomly selected number of the aforementioned officers engaged by contractors, principals and consulting engineers. The result indicates that the index has been found useful and is likely to be welcomed by these groups of officers as a practical tool to help them when negotiating a CAR policy.

1.3.9 With the measure now in hand it was possible to quantify adequacy of cover under the vast majority of CAR/EAR policies covering projects in the area. The process starts by finding out

under the policies the frequency of each component cover weighted by its relative index parameter. For this purpose a study has been conducted covering all CAR/EAR policies totalling 1573 issued during a period of nine years from 1975 to 1983 by a major insurance company operating in the area.

1.3.10 The study showed an overall low average frequency of the existence of cover components which obviously reflects inadequacy in the coverage under these policies. Since experience has shown that many of the big projects included in the study are insured by policies providing reasonably adequate cover, it has been assumed that the smaller projects are not adequately covered. The policies have therefore been split into two groups according to the category of the principal which is a prime factor in the nature and size of the project and in whether a well experienced consultant and contractor are employed. The first category are the individuals and small concerns, the second category are the governments, corporations and the like. The insurance awareness and initiative to effect adequate insurance covers on the part of the second category have been reflected in the result of the investigation. The aforementioned analytic process when carried out for each group confirmed the assumption but showed that although policies issued for the second category of principals provide more adequate cover than those issued for the first category, they are still, on the average, far from providing a fully adequate cover.

1.3.11 To show that adequacy of cover is improved if a system of follow up and checking of the policies is adopted, all the policies issued for projects supervised by a major authority in Kuwait were separated and analysed in a similar manner. Due to the system of follow up and checking of the policies adopted by the Kuwaiti authority the level of adequacy of cover under this specific group of policies has shown a remarkable improvement over the other two main groups. By applying the index formulated for the purpose of measuring the real extent of adequacy of cover to each group, the results showed a degree of adequacy of 49.54% for the first group, 67.99% for the second group and 86.78% for the Kuwaiti authority group studied separately.

1.3.12 The analysis that covered a period of nine years allows a study of the trend of the level of adequacy of cover during the period. The trend showed general improvement in the level of protection under the policies during the early years of the study after which some fluctuations occurred, then a deterioration in the level of adequacy of cover was obvious during the last three years of the study. This result confirmed the need to take immediate action to improve the situation in the coming years.

1.3.13 Unfortunately this part of the study could not be repeated in another gulf state due to the confidentiality of the matter in that no other insurance company would allow a person, who is not directly involved in the issue or supervision of its CAR/EAR policies, to inspect all policies issued by the company for any purpose. However since the policies investigated included also

policies issued by other insurance companies and shared by the company in question in addition to the fact that the insurance company is ranking the 3rd largest in the area with branches in some other Gulf states it is reasonable to assume that the policies investigated represent an example of the policies issued by most insurance companies in the area.

1.3.14 To complete the picture attention had also to be directed towards the claims side to show the actual effect of the losses under each of the various sections of the policy. The results of this part of the study draw the attention of contractors, principals and probably insurers also to the areas of the cover more frequently affected and those more seriously affected by losses. The investigation covered 453 claims paid, by the same insurance company referred to earlier, during a three year period; 1981-82-83. These claims represent all the claims paid during the period under policies issued and controlled by the insurance company. Other paid claims under policies shared with other insurers where no control of the company was exercised on the claims were not included because the latter claim files did not contain all the necessary information and details to allow a meaningful result be obtained.

1.3.15 The same remarks made under paragraph 1.3.13 above concerning the limitation of the research to one insurance company's records apply to the claims in the same manner as they apply to the policies.

1.3.16 The present situation has had serious negative repercussions on all parties connected with the construction industry and its insurances in the

area. The investigation of the claims referred to above revealed that the amounts paid under more than 50% of the claims that resulted in actual payments, have been affected to various degrees by inadequate insurance covers under the relevant policies. In addition, certain other claims have been fully repudiated for the same reason. Unfortunately an accurate calculation of the exact amounts lost by contractors and/or owners due to inadequate coverage is not possible due to lack of sufficient information and data necessary for this purpose, in the claim files. It is worth pointing out also that the aforementioned percentage of claims affected represent the claims which have been ascertained as affected from the documents in the files. The calculations of the minimum frequency of omission of certain aspects of the basic cover and its supplements in relation to the number of losses were limited to the ascertained cases only. The results show that certain omissions are much more frequent than others. This however does not mean that the low frequency omissions are not important because, some do not occur frequently by nature but if they occur the loss could be very heavy. Some of the ascertained cases show clearly also that certain amounts lost by the contractors were due to the absence of an insurance manager or consultant on behalf of the contractor at the time of preparing the claim or negotiating it.

1.3.17 The investigation showed also that the negative repercussion was not limited to amounts lost by the contractor and/or the owner of the project due to inadequate insurance coverage but extended also to affect the period taken to settle the loss to the insured. A calculation of the average period

between the time a loss is reported and that on which it is finally settled shows that undue delays are experienced. Because claims which involve a liability element and claims closed as "no claim" may normally take more time than other losses to be settled, the calculation of the average period needed for settlement is repeated after excluding these claims and confining the investigation to losses concerning property insured. In spite of the fact that these losses should be paid with no delay, yet the results of the investigation show not only that undue delays are still experienced, but that the situation over the three years period of the study sharply deteriorated. The documents in many files show clearly that inadequate insurance cover is a major factor in delaying agreements on the amounts to be settled. A few cases were investigated in depth. The result showed that significant losses occurred with unfavourable repercussions through inadequacy of the insurance coverage asked for by the contractor. These losses could have been avoided at relatively small cost.

1.3.18 The present situation has created an unfavourable atmosphere in which lack of confidence increases between the parties concerned which may well result in affecting the insurance market and increasing management costs and expenses.

1.3.19 On the part of small projects owned by individuals and small concerns the present situation has led to the fact that most of these projects are not insured. The minority insured has been proved to be carrying minimum coverage. Local insurers are therefore losing the business that would otherwise be insured. The business lost is not limited to CAR/EAR covers but includes other insurances

normally needed for the project. It also includes the portion of the risk which is self insured, such as the balance of cover under a policy not providing an adequate protection. An attempt to estimate the values of uninsured projects has been carried out in the state of Kuwait. The result of the investigation showed that in spite of the municipal requirement to insure, values of uninsured projects reached very high levels without calculating values of constructional plant, machinery etc. on the sites of these projects. In the other gulf states and especially in Saudi Arabia where the size of the construction market is many times more than that in Kuwait and where no municipal requirements to insure exist, the values of uninsured projects are expected to be much more. In this direction enhancing insurance awareness and the initiative of the owner and the contractor, play the most important role in improving the situation.

- 1.3.20 Actions needed to improve the situation of insurance of construction projects in the Arab Gulf Area must be implemented as soon as possible. The recommendations and the methods of their implementation suggested in this research have their roots in the results of the investigations and studies detailed therein. In general the courses of action recommended cover factors that will create more demand for construction insurance covers, with the aim of reducing and ultimately eliminating the huge number of uninsured projects. They also cover factors that will assist in modernising and upgrading the requirements for insurance construction projects, with the aim of improving the level of adequacy of cover under the various policies needed for the project. The aforementioned recommenda-

tions must be supplemented by actions, detailed in the research, to be taken in certain areas to assist in keeping up and maintaining the sought continuous improvement required. The recommendations included also a new draft of the insurance requirement clauses in the contract conditions, which are normally needed for the majority of projects. The new draft aims at protecting the interests of the owner and the contractor. It also emphasises the importance of clarity of insurance requirements and the need for an adequate protection, without departing much from the normal practice prevailing in the insurance and contracting markets.

1.3.21 In most tables throughout the thesis the following abbreviations are used to refer to the Arab Gulf States:

Kuwait	=	KT
Saudi Arabia	=	SA
Bahrain	=	BN
Qatar	=	QR
United Arab Emirates	=	UAE
Oman	=	ON

Chapter 1 References

- 1 A.H. Mowbray, R.H. Blanchard and C.A. Williams, jr. Insurance (1969). USA: McGraw-Hill Inc., 3. For 'definition of risk' see Robert J. Mehr and Emerson Cammack (1972). Principles of Insurance. USA: Richard D. Irwin, 18 and passim.
- 2 A.H. Mowbray, R.H. Blanchard and C.A. Williams, jr. op. cit., 39.
- 3 ibid., 6-9.
- 4 James L. Athearn (1969). Risk and Insurance. USA: Prentice-Hall Inc., 9-13.
- 5 Study course 313 (1981). Management II: Risk Management. London: The Chartered Insurance Institute Tuition Services, 2/1.
- 6 J.E. Bannister and P.A. Bawcutt (1981). Practical Risk Management. London: Witherby and Co. Ltd., 22.
- 7 Robert J. Mehr and Emerson Cammack. op. cit., 1.
- 8 C. Arthur Williams, jr. and Richard M. Heins (1971). Risk Management and Insurance. USA: McGraw Hill Inc., 169 and passim.
- 9 R. Riegel, J.S. Miller, C. Arthur Williams, jr. (1976). Insurance Principles and Practices, Property and Liability. USA: Prentice-Hall Inc., 18-21. See also W.H. Rodda (1966). Property and Liability Insurance. USA: Prentice-Hall Inc., 9-10.
- 10 H.S. Denenberg, R.E. Eilers, J.J. Melone and R.A. Zelten (1974). Risk and Insurance. USA: Prentice-Hall Inc., 12.
- 11 J.E. Bannister and P.A. Bawcutt. op. cit., 5. See also Elliot A. Johnson, Toward Professional Insurance Management in "the Growing Job of Risk Management" (1962). New York: American Management Association Inc., 29 & passim.
- 12 Study course 313. op. cit., 1/9.

Chapter 1 References continued

- 13 J.E. Bannister and P.A. Bawcutt. op. cit., 160 and passim. See also J.R. Parkinson Role of the Risk Manager in Commerce and Industry (1976). Keith, Shipton Developments Ltd.
- 14 C. Arthur Williams, jr. and Richard M. Heins. op. cit., 42-43.
- 15 Please refer to paragraph 1.2.4 of this chapter.

2. ECONOMIC BACKGROUND

- 2.1 Rapid growth of the economy and capital formation
- 2.1.1 In February 1981 six Gulf States announced the establishment of the Gulf Cooperation Council "in recognition of the special relations, common characteristics and similar institutions that link these states, and due to the importance of establishing strong coordination and integration in all spheres including various economic and social fields"¹. These states are: Kuwait, Saudi Arabia, Bahrain, Qatar, The United Arab Emirates and Oman.
- 2.1.2 For many years the economy of these states depended mainly on commerce, navigation, trade and pearl fishing². A new era started by the end of World War II. The turning point was the commencement of oil production in commercial quantities in the 1940s³. This fact together with the expected oil reserves drew the attention of the world to the importance of the area, especially as energy derived from oil was essential in the reconstruction process in Europe after the War.
- 2.1.3 The new income derived from oil accumulated rapidly as there were no plans ready to absorb it⁴. In addition, the limited population in all these states⁵ helped keep expenditures at moderate levels in the early years of the new wealth. It is however to be noted that oil production in Bahrain and Oman has always been moderate and these two states actually received aid from the more wealthy Gulf states⁶.

- 2.1.4 Soon thereafter, plans were prepared, hastily sometimes, to rush towards modernisation in almost every possible field⁷. Naturally infrastructural development was the means to improvements which the area was in need of. Introduction of social services such as health, education, housing, etc. improved greatly the standard of living.
- 2.1.5 In the seventies increasing revenues from rising oil prices caused internal development, which had started slowly in the late 1950s, to progress at rapid rate⁸. The decade also witnessed the achievement of a remarkable expansion of the Arab Gulf Oil Exporting Countries' economic base. This progress was not an easy task but was greatly assisted by the abundance of capital for investment in these countries during the same period⁹. It is worth pointing out that due to factors not always under the control of the oil exporting country, production and prices often fluctuated with obvious reflection on the country's economic activities¹⁰.
- 2.1.6 The table overleaf shows the gross domestic product at current market prices in each of the Arab Gulf States during the period 1970-1985.
- 2.1.7 It is however to be noted that the increases in GDP correspond to the increases in oil production and prices. This is due to the fact that the major contributor to the GDP in the Arab Gulf States is the oil sector which is almost wholly government owned. The private sector's contribution is still relatively small. The annual contribution of the non-oil manufacturing component ranged between 4 and 6 percent. In the seventies the services sector expanded rapidly leading to increased imports which together with other factors hindered the expansion of the industrial sector¹¹.

Table 2.1

Gross domestic product at producer's value at current prices
in Million US\$

	KT	SA	BN	QR	UAE	ON	TOTAL
1970	2691.1	3866.4	NA	NA	NA	256.3	NA
1971	4095.5	5269.2	NA	NA	NA	326.0	NA
1972	4763.6	6809.0	NA	NA	1470.6	366.9	NA
1973	7118.3	11422.8	NA	NA	2842.3	490.4	NA
1974	13193.8	39328.8	NA	NA	7817.9	1647.8	NA
1975	11860.5	46607.9	1185.6	2477.3	10005.1	2099.1	74235.5
1976	13378.7	58089.6	1515.9	3288.8	12832.0	2563.2	91668.2
1977	14489.3	63808.1	1964.6	3616.7	16269.6	2744.3	102892.6
1978	15663.2	75275.8	2384.8	4093.0	15807.5	2746.4	115970.7
1979	24629.3	114652.5	2730.0	5879.4	21235.3	3737.7	172864.2
1980	27480.4	156568.1	3793.4	7865.7	29919.1	5990.1	231616.8
1981	23977.9	153651.0	4296.0	8661.3	32488.7	7264.9	230339.8
1982	19887.2	120936.1	4643.6	7596.7	30954.2	7564.3	191582.1
1983	21370.1	115644.3	4842.1	6419.0	30334.0	7945.8	186555.3
1984	21748.6	93899.0	4611.7	6704.4	27742.6	8831.0	163537.3
1985	19717.3	79155.2	4263.0	6271.7	27081.4	10019.1	146507.7

Source: United Nations statistical abstract of the region of the Economic Commission for Western Asia 1968-1977 third issue, 1974-1983 eighth issue, and 1977-1985 tenth issue.

- 2.1.8 Expansion of the Arab Gulf Countries' economic base focused on the diversification of the oil based economies. This move which included industrialisation and development of financial institutions caused these countries to proceed on varying courses in this direction but without much co-ordination with each other¹². Being oil producing countries, they could not ignore the presence of oil and gas and therefore focused on select capital intensive industries connected with the raw material and cheap energy locally available¹³, such as oil refining, gas liquification and petrochemicals.
- 2.1.9 The non-oil sector has also received a share of these plans and each country pursued independently and to a varying degree development of new industries such as steel, cement, flour milling, ship repair, aluminium smelting etc.¹⁴, in addition to many other light industries.
- 2.1.10 Whilst the aforementioned efforts require substantial gross capital formation it is to be noted that expansion of the industrial sector is hampered by the lack of suitable raw materials, the small domestic market and the lack of local force¹⁵. To encourage the establishment and growth of industry by the private sector, the governments concerned provided support in a variety of ways such as, total tax exemption for a number of years, imposition of protective customs duty, allocation of land at nominal cost, soft and long term loans, preference given to government purchases of local products, government participation in capital, etc.¹⁶.
- 2.1.11 The following table shows the gross fixed capital formation at current prices in the three wealthiest Gulf States during the period 1970-1985.

Table 2.2

Gross fixed capital formation at current
prices in millions US\$

	KT	UAE	SA
1970	305.2	NA	651.5
1971	364.9	NA	782.3
1972	469.7	392.8	1372.0
1973	495.4	520.1	2366.1
1974	766.8	1033.2	4985.6
1975	1420.4	3057.6	9501.4
1976	1962.0	4170.2	14501.7
1977	2911.4	5819.9	19084.5
1978	2918.8	6716.8	23123.4
1979	2892.3	7552.3	28843.4
1980	3242.8	8214.4	31992.8
1981	3817.8	7904.7	35817.0
1982	4434.0	8766.3	34261.5
1983	4594.5	7215.7*	42565.0*
1984	4954.1	7931.4	25879.7
1985	3897.0	6662.5	20679.2

Source: United Nations statistical abstract of the region of the Economic Commission for Western Asia, 1968-1977 third issue, 1974-1983 eighth issue and 1977-1985 tenth issue.

* Including increase in stocks.

2.1.12 Increased imports into the Gulf countries following the oil price increases in the seventies have led to unusually rapid expansion in shipping operations, which necessitated urgent projects to increase and improve existing port facilities

throughout the whole area¹⁷. Modern ports are now scattered in the area equipped with up to date facilities to accommodate all types of vessels and cargo, including huge container handling facilities.

- 2.1.13 The shipping industry in the Gulf area has expanded considerably in recent years¹⁸. Some of the Gulf governments have priority to the development of a domestic merchant and tanker fleet for the last two decades. Increase in oil and gas production capacities in the area, together with the policy of diversification of income, induced the governments to enter the field of transportation of their exports of crude oil, gas and refined products. The Kuwaiti fleet of crude oil and gas carriers for example, is among the largest in the developing countries¹⁹. In line with the expansion of refining capacity, investment emphasis is now also on product tankers which have recently increased in number of operational units. Plans also exist to acquire more product carriers in the near future²⁰.
- 2.1.14 The table overleaf shows the number and tonnage/capacity of the oil and liquid gas carriers that fly the flags of the Arab Gulf States.
- 2.1.15 Economic growth necessitates improvement of communication systems with other parts of the world. In addition to the remarkable development in the telephone, telex and other means of communication, air transport of passengers and cargo has acquired a great deal of attention by the Arab Gulf Governments²². Three national air-lines now exist in the area²³. One is owned by Saudi Arabia, another by Kuwait and the third is based in Bahrain but is jointly owned by Bahrain, Qatar, The Emirate of Abu-Dhabi and

Table 2.3

Number and tonnage/capacity of oil and gas carriers of the Arab Gulf States

	<u>Crude and Product carriers</u>		<u>LPG and LNG carriers</u>	
	<u>No.</u>	<u>Dead Weight</u>	<u>No.</u>	<u>Cubic Meters</u>
Kuwait	22	2145151	6	490100
Saudi Arabia	24	2919400	2	101802
Qatar	2	197637	-	-
United Arab Emirates	12	1060937	2	1546

Source: H. Clarkson & Co. Ltd., London 1985 Publications²¹.

Oman. The area of their activities extends from the USA to the Far East. In addition to the national airlines, many international airlines carry passengers and cargo to and from the Arab Gulf Area. The density of traffic and size of modern aircraft necessitated improvement and increase of airports. Many new airports of international standard have been constructed in all capitals and major cities of the area²⁴.

2.2 Formulating new economic and social policies

2.2.1 When development commenced, the area was lacking suitable harbours, airports, power stations and most other facilities. The early contractors had to bring with them everything needed for their projects, including electricity generators, tools, camps etc.²⁵.

2.2.2 Implementation of the development plans resulted in the need for all kinds of skilled and unskilled labour. The contractors', companies', banks' and

governments' staff such as clerical workers, engineers, doctors, technicians, school teachers etc., had to be recruited from other Arab and non-Arab countries. Generally the number of foreign workers grew up and many contractors' main labour force were males living on camp sites²⁶. In the smaller and less populated states the number of expatriates including their families equalled or exceeded the number of nationals²⁷.

2.2.3 In time it was realised that more advanced plans were needed to modernise the Gulf States and form capable administration to plan further and implement sound diversification of the oil-based economies. This included encouragement and assistance of the non-oil industries which have been demonstrated to varying degrees by the States²⁸. The new plans also envisaged improvement of productivity and better utilisation of present capacities such as modernising, expanding and up-grading of existing refineries in addition to building new ones²⁹. Moreover the governments encouraged by the newly formed "Gulf Cooperation Council"³⁰ have become more selective in permitting the establishment of new industries and considerable attention is being given to preventing regional duplication and over-expansion. In some Gulf States such as Kuwait, thought is also being given to linking financial investments with the development of markets abroad for home industries, such as the purchase of already established oil refineries³¹ and filling stations in Europe, hence establishing a direct contact with the consumer outside the Gulf area.

2.2.4 The services sector has also received its fair share of the governments' attention. Planning for

the welfare of the people was given priority and covered most of this sector. It continued over the years until improvements have reached in some states very high levels of security and assistance³². Examples are generous pension schemes, housing, major subsidy schemes aiming at reducing the cost of energy, water and numerous food items, in addition to free medical and hospital care in and out of the country in some states. Expansion in this latter important service necessitated building and operating many new hospitals and clinics³³ and expanding health services to cover all areas for the benefit of all inhabitants whether nationals or expatriates.

2.2.5 Soon after the oil wealth arrived, education plans were given top priority with dramatic results, so that from little or no education in the early 1950s universal education was achieved in a very short time. Post-graduate study for those who could qualify is also available. Many students choose to have their university or post-graduate study abroad³⁴. In most areas elementary education for children is obligatory. Expenditure on education continued to increase over the years. In the school year 1974-75 the total governmental expenditure on education in the area reached US\$ 1421.7 million increased to about US\$ 9213 million in 1982-83, i.e. an annual average increase of 97.4%. A major portion of this expenditure relates to construction of new schools, the number of which increased from 5033 in 1974-75 to 11567 in 1982-83. These figures do not include private schools in some Gulf countries³⁵.

2.3 Revenue and expenditure of the Arab Gulf governments

2.3.1 The price of oil and its production levels are by far the main determinant of the governments' revenues and expenditures of the Arab Gulf oil exporting countries³⁶. Being government owned, the oil sector's revenue accrued directly to the respective governments³⁷. In the past these countries' oil production was much more than their needs to cover their planned expenditure on development, but in recent years with the change in oil markets and prices these countries have been faced with policy decisions to be made on³⁸:

- how much to produce,
- at what price to sell and how to invest the revenues,
- how to handle their exhaustible main source of income to develop their domestic economies.

It is however worth pointing out that the aforementioned decisions have been greatly affected by the world market situation and by the activities of other oil exporting countries which have recently followed different policies in connection with production restraint and marketing policies, leading to fluctuation and declining trend in the revenue of these states.

2.3.2 The Arab Gulf Governments which are faced with such fluctuation and declining revenue have at the same time an obligation toward their people to pursue the internal development plans that their countries are in need of³⁹. Given also the high rate of population growth⁴⁰ (locals and foreigners) and with social services in many areas lagging behind population growth, the next 15-20 years are likely to see continued development in the construction and services sectors. However it is more probable that future development will slow to a moderate pace unlike that in the seventies

and early eighties. This changed pattern is mostly attributable to the fact that these governments have decided to reduce their public expenditure to become more in line with their reduced revenue brought about by the new levels of oil prices and production⁴¹.

2.3.3 The table overleaf shows the amount of oil revenue and its percentage of the total government revenues in each of the wealthiest three Arab Gulf States during the period 1970-1985.

2.3.4 Non oil revenue resources include investment income representing mainly return on foreign assets, local taxes, customs duty and revenue from non oil industries⁴². Arab Gulf States' foreign assets are either deposits with banks in the industrial countries and the Eurocurrency markets or investments in equities, government securities, real estates and so on mainly in USA and Europe. It is however to be noted that income from such investments is affected by currency fluctuations, inflation and trends of growth and prosperity in the countries of investment. The Arab Gulf Countries have thus underlined their stake in the health of the industrial economies. Their experience however has shown that at certain times preserving oil can be more valuable than producing it⁴³.

2.3.5 The increasing revenues of the governments of the Arab Gulf States during the sixties, seventies and eighties have enabled the governments of the said States to spend substantial sums of money on practically all traditional budget items, in order to bring about the desired level of social and economic development⁴⁴. Government expenditures on development and capital projects covered

Table 2.4

Amount of oil revenue and its
percentage of total revenue

	KT		SA		UAE	
	Amount	%	Amount	%	Amount	%
1970	833.7	79.6	1517.1	85.8	173.7	96.6
1971	1076.6	83.5	2251.7	88.1	335.8	96.8
1972	1543.8	84.7	3242.2	87.8	473.1	95.2
1973	1833.2	80.5	11066.2	94.2	759.3	94.5
1974	7115.6	90.5	26532.4	94.1	3442.0*	97.0*
1975	12000.0	89.1	26481.9	90.4	3603.0*	95.8*
1976	9053.3	85.7	34333.7	89.1	4802.1*	96.4*
1977	9197.5	83.6	32536.9	87.3	6699.8	93.7
1978	11159.6	79.8	34714.3	87.5	6257.9	87.3
1979	21760.1	85.3	56254.1	89.6	9098.5	91.4
1980	16362.4	69.2	96031.6	91.7	14363.1	93.3
1981	9836.7	63.3	96220.8	89.3	12389.0	90.0
1982	8106.3	55.3	54441.8	75.8	9436.9	87.4
1983	10046.7	65.9**	37352.0	62.5***	7356.3	83.5
1984	8334.5****	89.9****	33768.4	69.4	6982.0	84.8
1985	6900.3****	88.6****	4118.7	74.5	6060.2	83.3

Source: United Nations statistical abstract of the region of the Economic Commission for Western Asia, 1968-1977 third issue, 1974-1983 eighth issue and 1977-1985 tenth issue.

- * The Emirate of Abu Dhabi
- ** Central Bank of Kuwait. The Kuwaiti Economy 1980-1984 p.47
- *** Gulf Cooperation Council in figures. 1987. The National Bank of Kuwait.
- **** Annual Statistical Abstract 1987

expenditure on construction projects of infra-structural nature such as airports, harbours, schools, hospitals, houses, roads, railways etc. as well as the establishment and erection of major manufacturing plants.

- 2.3.6 The table overleaf shows the expenditure on development and capital projects as a percentage of the governments' total expenditure in each of the three wealthiest Arab Gulf States during the period 1970-1985.
- 2.3.7 In this area which lacked in the past almost every facility the major spenders on development and capital projects have naturally been the governments in whose hands the income of the area concentrates. Other than private residential/commercial buildings and small industrial projects all projects of infrastructural, industrial and other types of projects have in fact been financed by the governments⁴⁵. In addition, many housing projects for private dwelling houses and residential complexes have been financed by the governments.
- 2.3.8 The position of governments' revenue and expenditure differs from one Gulf state to another. However the total Gulf governments' expenditure increased over the years at a more rapid rate than the increase in their respective revenue. In 1975 the total expenditures in the area represented 69.5% of the total revenues. This percentage increased in the following years until it reached 98% in 1978. In 1979 the increase in the price of oil improved the position, and whilst the total governments' expenditures in that year increased by 28% over 1978, it represented 83% of the total

Table 2.5

Expenditure on development and capital projects
as a percentage of total governments' expenditure

	KT		SA		UAE*	
	Amount	%	Amount	%	Amount	%
1970	134.1	15.8	596.8	39.7	69.5*	46.0*
1971	154.2	14.6	1213.5	46.7	77.5*	33.4*
1972	183.6	15.2	1892.4	49.2	84.7*	21.4*
1973	246.7	13.6	497.7	62.5	130.8*	15.5*
1974	445.3	11.9	7435.8	57.7	253.7*	14.6*
1975	691.2	19.7	21070.5	67.0	563.3*	19.6*
1976	662.4	13.8	21085.8	67.1	769.6*	15.3*
1977	1031.8	16.5	21359.8	67.2	2379.2	39.4
1978	1123.5	17.7	25052.2	63.9	2854.4	41.8
1979	1266.7	15.1	31370.0	66.1	2411.6	29.9
1980	1409.6	14.2	52552.5	66.8	2280.3	20.0
1981	1725.3	17.5	60300.1	60.6	2278.4	18.7
1982	1884.7	16.8	59181.2	64.7	2432.9	21.1
1983	2764.9	27.5	43415.3	57.7	1833.0	17.6
1984	2743.2**	22.7**	40011.4	54.2	1490.6	15.3
1985	2304.3**	20.2**	NA	NA	1535.3	16.2

Source: United Nations statistical abstract of the region of the Economic Commission for Western Asia, 1968-1977 third issue, 1974-1983 eighth issue, and 1977-1985 tenth issue.

* The Emirate of Abu Dhabi

** Annual Statistical Abstract - 1985 and 1986

1979 revenues. In 1980 the increased revenues caused the percentage to drop to 67% but changes in the early eighties in the international oil market leading to reduction in the oil production followed by reduction in the oil prices in early 1983 have clearly been reflected on the total

revenues which dropped by 39% in 1983 compared with 1980, whereas the expenditures in 1983 were 97% of those in 1980. In 1985 the total expenditure represented 133% of the total revenue in the same year. This is more clearly shown in Table 2.6 overleaf.

2.3.9 The increasing production of oil together with increasing price levels have in the sixties and seventies contributed to strong balance of payments positions of the Arab Gulf States despite the substantial imports of goods and services associated with local development efforts. The early eighties witnessed, however, a weakening in the balance of payments surpluses because of the deterioration in oil prices⁴⁶. This is more clearly shown in Table 2.7 overleaf that demonstrates the current account balances during the period 1970-1985. .

Table 2.6

Government Revenues and Expenditures
1977 - 1985 in Millions of US\$

	1977		1978		1979		1980		1981		1982		1983		1984		1985	
	Rev.	Expd.	Rev.	Expd.	Rev.	Expd.	Rev.	Expd.	Rev.	Expd.	Rev.	Expd.	Rev.	Expd.	Rev.	Expd.	Rev.	Expd.
KT	10867	4690	11442	6117	13610	6190	23690	12497	15601	13570	14671	12187	15233	12564	13122	10660	12944	10012
UAE	7192	6080	7225	6882	10014	8463	12604	9764	13033	11666	10227	11137	7967	9416	7700	8519	7153	8943
BN	663	754	700	765	651	715	1184	850	1427	1128	1479	1712	1288	1621	1360	1379	1413	1373
SA	40902	40032	40468	44917	65987	59988	104643	71112	108308	85194	71828	71457	59746	66636	48130	60957	30700	49942
QR	2073	1860	2159	1710	3174	2255	5197	3936	5234	4988	4514	4166	3808	3647	3307	3519	2937	3294
ON	1773	1568	1488	1584	2174	1857	2776	2750	3799	3527	3446	3813	3777	4479	4094	5098	4689	5743
Total	63470	54984	63482	61975	93610	79468	150094	100909	147402	120073	106165	104472	91819	98363	77713	90132	59836	79307
Expd. as Pct. of Rev.	67		98		83		67		82		98		107		116		133	

Sources: Unified Arab Economic Report 1981, 1984 and 1987

Table 2.7

Current Account Balances
(in Millions of US\$)

	KT	UAE	BN**	SA	QR	ON
1970	498.5	131.0***	NA	71.0***	148.0***	NA
1971	1033.7*	397.0***	NA	1009.0	162.0***	NA
1972	1040.0*	399.0***	NA	2076.1	156.2	NA
1973	141.6*	643.0***	NA	2642.3	283.7	82.8
1974	6132.6*	3547.9	NA	23223.4	1667.3	156.5
1975	5812.9	2827.4	-198.7	14240.2	1114.1	-37.1
1976	7059.2	3398.5	-375.6	14253.5	998.0	-9.0
1977	4707.1	1888.7	-332.2	12410.3	584.8	12.8
1978	6261.0	1498.2	-346.2	-2259.1	932.5	-59.7
1979	14208.8	5324.0	-64.4	10350.1	1311.2	362.6
1980	15232.5	10168.9	376.1	41427.4	2659.1	1115.1
1981	13594.3	9207.3	460.2	37987.1	2384.3	1177.7
1982	5868.5	7000.8	540.0	1299.3	1123.9	315.4
1983	5295.6	5257.4	243.1***	-16288.0	409.6	359.4
1984	6375.0	7463.9	-47.7***	-24035.5	829.7	107.2
1985	4810.6	6946.3	-194.9	-12965.4	412.9	110.1

Source: United Nations statistical abstract of the region of the Economic Commission for Western Asia 1968-1977 third issue, 1974-1983 eighth issue, and 1977-1985 tenth issue.

* Central Bank of Kuwait - Economic report for the period 1969-1979 p.145

** 75-80 and 82 Unified Arab Economic Report (1981 and 1984). 81 Central Banks and Monetary Agencies of Arab Gulf States, Economic Bulletin. Volume 2.

*** Unified Arab Economic Report 1987.

2.4 Development of financial institutions and money markets

- 2.4.1 The financial and monetary developments in the Arab Gulf Area are a reflection of achievements in various aspects of the economy and social development, particularly following the gains in oil receipts, industrial development, population growth and the expansion in construction and public facilities. These developments also reflect the strategy of the monetary authorities to develop the financial sector.
- 2.4.2 The banking and financial system in the Arab Gulf Area is currently made up of central banks, monetary agencies, commercial and specialised banks, credit institutions, investment companies, insurance and reinsurance companies in addition to money changers and financial and stock brokers⁴⁷.
- 2.4.3 Regulations in the Arab Gulf Area in connection with banking and other financial institutions differ from one state to the other. Some states restrict foreign ownership or operations of foreign institutions. Other states take more liberal views. In Kuwait for example, all banks are 100% owned by nationals of the State⁴⁸, the only exception being a branch of a Bahraini Bank jointly owned by Bahraini and Kuwaiti nationals⁴⁹. In Saudi Arabia a program was initiated in 1975 under which all foreign owned commercial banks are to be converted into local joint-stock companies with majority ownership held by Saudi nationals. Banks which are not majority owned by Saudis are not permitted to open new branches. As a result, foreign owned banks have been converted, and the majority of commercial bank assets are now under Saudi Arabian majority control⁵⁰. In all other Arab Gulf States national and foreign banks operate side by side.

- 2.4.4 Apart from commercial banks a substantial portion of financial transactions is undertaken by money changers who engage mainly in foreign exchange operations. Some of these money changers are capable of handling large operations including important bank type transactions such as taking deposits and making loans⁵¹.
- 2.4.5 Another important sector of the financial system in the area is that of specialised banks and credit institutions such as the Industrial Bank and the Saving and Credit Bank in Kuwait, The Real Estate Development Fund and the Saudi Industrial Development Fund in Saudi Arabia. These are national institutions providing financing to the private sector for construction of individual houses, for construction of multiple units for commercial or hotel purposes and for setting up and expanding industrial enterprises⁵².
- 2.4.6 A development of significance has been the emergence of a large offshore market centred in Bahrain which has been supported by the relatively low returns on deposits in the wealthiest Gulf States⁵³. Such an area of rapid economic growth, with a demand for banking services generating cash surpluses for lending elsewhere in the world, was considered an identifiable business opportunity. The market's major activities were in Saudi Riyals. But in late 1979 the Saudi government began to denominate foreign contracts of Saudi Riyals 300 million or more in foreign currency, a measure which has curbed the market expansion⁵⁴. It is however presumed that the efficiency of local banks has increased because of competition from the offshore market in Bahrain⁵⁵.

- 2.4.7 Another recent development in the area is the establishment of interest free banking institutions in furtherance of Islamic principles. These institutions accept time deposits, the holders of which, like their shareholders, are entitled to profit sharing rather than interest. They also engage in real estate and equity investment and avoid charging interest. Generally their activities have expanded to include a major part of the commercial banks' activities⁵⁶.
- 2.4.8 Among the non-bank financial institutions are the investment companies which are a feature of the Kuwaiti market⁵⁷. With the increase in domestic incomes they have become, along with the commercial banks, important agencies in mobilising domestic savings, which they then place in national, regional and foreign financial markets. They have also assumed the role of underwriters of issues of international bonds floated by international and foreign institutions. The investment companies are not permitted to represent foreign commercial banks⁵⁸.
- 2.4.9 In Kuwait a stock exchange was established in 1971. Dealings have been limited to Kuwaiti stocks and shares⁵⁹. In time a secondary market came into existence in which dealings in other Arab Gulf shares in recent years reached extravagant amounts. This secondary market however collapsed in mid 1982, dragging with it the official stock market and spreading the shadow of a disaster over nearly every economic activity in the country.
- 2.4.10 Another important sector of the financial system in the area is the insurance sector, which is dealt with later in more detail.

2.5 Summary

2.5.1 This chapter displays the economic background of the study. It explains also the sources and the usage of the resources of the Arab Gulf Area. The oil wealth caused a rush towards modernisation and development in all fields. Implementation of the development plans resulted in numerous construction projects such as building airports, harbours, schools, hospitals, houses, roads, railways etc., and erecting power stations, desalination plants and the like. Industrialisation which accompanied infrastructural development extended to construction, erection and setting up new important industries such as steel, cement, flour milling, ship repair, aluminium smelting, petrochemical, oil refining etc. in addition to many other light industries. This was achieved because governments' expenditure on development and capital projects was given priority and actually represented an important part of the total governments' expenditure in spite of the fluctuating oil revenue in recent years. Development in the construction and services sectors is bound to continue but probably will slow to a moderate pace unlike that in the seventies and early eighties.

2.5.2 The aforementioned activities were accompanied by a parallel development of financial institutions and money markets. The financial system is now made up of central banks, monetary agencies, commercial and specialised banks, credit institutions, investment companies, insurance and reinsurance companies in addition to money changers and financial and stock brokers.

Chapter 2 References

- 1 The Gulf Co-operation Council's Charter, released on 4th February 1981 in Riyadh - Saudi Arabia. "Digest, The Gulf Co-operation Council 1981", 9th edition. Kuwait: Kuwait News Agency.
- 2 A.M.K. Altameemi (June 1981). The Arab Gulf: A study in the economic and social history. Journal of Social Science. (Arabic) - Kuwait University. 9-15.
- 3 ibid., 25.
- 4 Carl T. Bazarian (1980). The Gulf States. New York: Chase World Information Corporation, 21.
- 5 United Nations statistical abstract of the region of the Economic Commission for Western Asia, 1968-1977 third issue and 1974-1983 eighth issue.
- 6 Carl T. Bazarian, op. cit., 6.
- 7 Carl T. Bazarian, op. cit., 1.
- 8 World Development Report (1981). The World Bank, 92.
- 9 World Development Report (1981). loc. cit.
- 10 International Monetary Fund. 11th June 1981. Document SM/81/134. Saudi Arabia - Recent Economic Development, 1.
- 11 B.I. Mohyuddin (October 1984). Policy Structure for Promoting Manufacturing Industry: A Framework for the State of the Arabian Peninsula. The Arab Gulf Journal. London: M.D. Research and Services Ltd., 4: 13,14.
- 12 Carl T. Bazarian, op. cit., 8.
- 13 ibid., 9.
- 14 ibid., 9-10.
- 15 ibid., 365-400.
- 16 Economic Encyclopedia (1982). Kuwait. The Arab Information Centre, 126,227,334.
- 17 Carl T. Bazarian, op. cit., 293-264. See also International Monetary Fund. (Saudi Arabia). op. cit., 5,6,20.
- 18 Carl T. Bazarian, loc. cit. See also International Monetary Fund. 4th February 1982. Document SM/82/25. Kuwait - Recent Economic Development, 19.

Chapter 2 References continued

- 19 H. Clarkson and Co. Ltd. Publication. London: 1985.
- 20 Carl T. Bazarian, op. cit., 303. See also International Monetary fund (Kuwait) op. cit., 20.
- 21 The above publications show that the carrying capability of the Saudi and Kuwaiti fleets of crude oil and product carriers are the largest among 'OPEC' fleets. The carrying capacity of the Kuwaiti gas carriers' fleet is, however, the second largest after the Algerian.
- 22 Carl T. Bazarian, op. cit., 293-264.
- 23 A fourth airline established in 1985 owned by the Emirate of Dubai has started operation on a limited scale in 1986.
- 24 Carl T. Bazarian, loc. cit. See also International Monetary Fund (Saudi Arabia) op. cit., 20.
- 25 Edward Henderson (October 1981). Development in the Arab Gulf, The Arab Gulf Journal, 1: 35-44.
- 26 ibid., 39.
- 27 Adda Gueciouer (October 1982). Problems and Prospects of Economic Integration among the Member Countries of the Arab Gulf Co-operation Council. The Arab Gulf Journal, op. cit., 2(2): 44.
- 28 N.J. Dabdab and B.I. Mohyuddin (April 1983). Oil-based and Non-oil based Industrial Development in the Arab Gulf Region: The Arab Gulf Journal, op. cit., 3: 21-36.
- 29 For example, two huge projects for modernising and up-grading two refineries in Kuwait have been awarded in the early eighties for about US\$4 billion. See also Oil Refining Poised for Dramatic Growth. MEED Special Report on Saudi Arabia. July 1983. London: Meed, 96.
- 30 See supra note 1.
- 31 Y.A. Stournars (April 1985). Is the Industrialisation of the Arab Gulf a Rational Policy? The Arab Gulf Journal, op. cit., 5: 25. See also "Arab Banking and Finance" (June 1983). London: MEED, 2(4): 2-3.

Chapter 2 References continued

- 32 World Development Report, loc. cit.
- 33 International Monetary Fund (Kuwait) op. cit., 26.
- 34 International Monetary Fund (Saudi Arabia) op. cit., 21. See also Edward Henderson, loc. cit.
- 35 United Nations statistical abstract of the region of the Economic Commission for Western Asia. 1974-1983. Eighth issue.
- 36 International Monetary Fund (Saudi Arabia) op. cit., 9. See also International Monetary Fund (Kuwait) op. cit., 28.
- 37 Carl T. Bazarian, op. cit., 1.
- 38 World Development Report (1981). loc. cit.
- 39 World Development Report (1981). loc. cit.
- 40 United Nations statistical abstract of the region of the Economic Commission for Western Asia 1974-1983 Eighth issue.
- 41 World Development Report (1986). The World Bank, 28.
- 42 International Monetary Fund (Kuwait) op. cit., 31. See also International Monetary Fund (Saudi Arabia) op. cit., 32.
- 43 World Development Report (1981). op. cit., 92.
- 44 International Monetary Fund (Kuwait) op. cit., 33. See also International Monetary fund (Saudi Arabia) op. cit., 34.
- 45 Carl T. Bazarian, op. cit., 293-264.
- 46 Unified Arab Economic Report, 1984. Arab League, Arab Monetary Fund for Social and Economic Development, 97.
- 47 International Monetary Fund (Kuwait) op. cit., 38. See also International Monetary Fund (Saudi Arabia) op. cit., 36.
- 48 Commercial Companies Law No.15 of 1960 Article 68.
- 49 The Bahrain and Kuwait Bank, established in Bahrain on 16/3/71, ownership is equally shared between Bahrainis and Kuwaitis.
- 50 International Monetary Fund. (Saudi Arabia) op. cit., 40.

Chapter 2 References continued

- 51 International Monetary Fund (Kuwait) op. cit., 38.
See also International Monetary Fund (Saudi Arabia) op. cit., 36.
- 52 International Monetary Fund (Kuwait) loc. cit. See also International Monetary Fund (Saudi Arabia) loc. cit.
- 53 A.E. Moore (April 1982). Offshore Banking Units - A Progress Report. The Arab Gulf Journal, op. cit., 2(1). 29-38.
- 54 International Monetary Fund (Saudi Arabia) op. cit., 37.
- 55 International Monetary Fund (Saudi Arabia) op. cit., 37, 38.
- 56 R.J.A. Wilson, The Role of Islamic Banks in Financial Markets. The Arab Gulf Journal, op. cit., 4: 53-60.
- 57 International Monetary Fund (Kuwait) op. cit., 39.
- 58 International Monetary Fund (Kuwait) loc. cit.
- 59 I. Altherban (1982). Management of Kuwait Stock of Exchange.

3. LEGAL BACKGROUND

3.1 Nature of the Law

3.1.1 For a proper understanding of insurance in the Arab Gulf Area, one should view this issue within the entire frame of the Gulf communities in which insurance has been functioning and developing. These communities are an integral part of Arabia and, therefore, have gone, and are still going, through almost identical stages, albeit unevenly, of development. Being Arab with Islam as the predominant religion and code of secular life, all these countries share the same value system, orientation and perspectives¹. The legal development in these countries is just one manifestation of the changes that the Arab Gulf communities have been going through². Insurance as an old-new concept is a case in point. It is imperative therefore to touch upon these legal developments as it would be rather difficult to analyse and evaluate insurance, as a concept, industry and a contract, without placing it in the entire legal system and its development.

3.1.2 Muslim law

The Muslim law (in Arabic "Shari'a") has four main sources³. The Holy Book, known as the Koran, is the supreme source of the law. Being the divine word of God, it is equal, in modern terminology, to the constitution of a given state⁴. The Koran laid down the general principles governing, among other things, transactions⁵. These principles are not subject to changes, modifications or termination. The Koran delineates what is considered allowed (halal) or prohibited (haram). There can be no amendments or abrogations of these delineated transactions or actions.

- 3.1.3 The second source of Muslim law is the Sunna⁶, being the practices and utterances of Prophet Mohammad. This source is essential to understand the Koranic text as well as being supplementary to the legislative doctrines of the Koran. It should be pointed out that the Sunna has also introduced new legislative principles that were not incorporated in the Koran⁷.
- 3.1.4 After the death of Prophet Mohammad in 632 AD the Muslim community developed two other sources of Muslim law. They are Ijma' and Qiyas. The former is defined as the "consensus of Muslim jurists at a given time on a given subject matter"⁸. The consensus must be universal involving all Muslim jurists. Qiyas on the other hand, extends the legal doctrine beyond its original scope by reason of an effective common cause present in both cases⁹. The principle of Qiyas becomes operative where there is no clear-cut provision in the Koran or in the Sunna and no rule developed by Ijma'. Qiyas, in one sense, is analogous to the common law process where the new rules are derived, and developed from precedents.
- 3.1.5 One of the sources that has been playing a significant role in the development of Shari'a Law is the (Urf), or the Custom. "The customary commercial law of Mecca was enforced by the traders among themselves, in much the same way as was the Law Merchant in Western Europe"¹⁰. With the advent of Islam, "Mohammad had little reason to change the prevailing customary law, ..." ¹¹. The importance of urf as a source of Shari'a law has been manifested in the Majalla¹² which incorporated many rules that are exclusively based on customs and common usage¹³. It will be seen

later on¹⁴ that in the process of codification in various Arab countries, the rule of urf has become very crucial in determining the sources of the positive law.

3.1.6 Muslim schools of jurisprudence

Qiyas, being the most flexible legislative tool, gave birth to two main trends among Muslim Jurists. The first adhered closely to the first two sources of Shari'a law, the Koran and the Sunna¹⁵. It relied on Ijma' on certain matters but rarely on Qiyas. The second represented the liberal trend which utilised Qiyas as an important source of law¹⁶. The latter evaluated highly free opinion and reasoning. It is significant to note that the first trend prevailed in Arabia, where the socio-economic conditions were still simple, while the second succeeded in more developed communities like Iraq, Egypt and Syria¹⁷.

3.1.7 As a result of these two trends, four schools of jurisprudence developed with each school named after its founder. The Hanafi School is the most liberal while the Hanbalite School is the most conservative and orthodox¹⁸. Between these two extremes, there is the Maliki School which is close to the liberal trend and the Shafi'i School on the conservative side¹⁹. The predominant jurisprudence in Saudi Arabia is the Hanbalite School. In the other Arab Gulf States it is a mosaic of the four schools²⁰.

3.1.8 The tenth century witnessed the start of decentralisation in the Islamic governmental authority. Political fragmentation, which led to the creation of separate territorial units, was

the predominant feature of the Islamic Empire that expanded from India to Spain and consisted of various nationalities, languages, customs and concepts²¹. Hence, Ijma' of all Muslim jurists has become rather impossible or impractical. This factor led to the strong belief among jurists that Qiyas should be stopped as a source of law²². They apprehended that the absence of a centralised authority to control that mosaic society might lead to inadvertent abuse of Qiyas as a tool of adjudication and legislation. Ijma' and Qiyas therefore ceased to develop around that era of political disintegration. Under the Ottoman Empire the development of Muslim law was almost completely frozen²³.

3.2 Codification of Muslim and modern Gulf laws

3.2.1 The Ottoman Empire

The interaction between the Ottoman Empire and the Western world was manifested in several areas including that of law²⁴. The Napoleonic Code of 1804 was perhaps the symbol of modernisation and progression in the eye of the Sultan who decided to adopt the French model as a symbol of modernisation. The Sultan hence ordered in 1839 the issuance of what is called Tanzimat²⁵. Following the French-Code models, Tanzimat began with the Code of Commerce (1850)²⁶ followed by the Criminal Code, the Land Law (1858)²⁷, the Code of Commercial Procedures (1861)²⁸ and the Maritime Law (1863)²⁹. But Tanzimat fell short of incorporating a civil code like that of Napoleon. The Sultan, however, appointed a committee to draft a civil code for the Empire. In 1876, he approved the draft and put it into force under the name of "Majallat Al-Ahkam Al-Adliya" better known as the "Majalla" (Digest)³⁰.

3.2.2 The Majalla with its 1851 Articles is Western in form but Islamic in content. It was substantially a compilation of the Muslim law according to the liberal Hanafi School of Jurisprudence, albeit it incorporated some principles from other Muslim schools³¹. The Majalla followed the system of the modern codes by being divided into sixteen books, and sub-divided into chapters and sections. In addition, the Majalla was introduced by a preliminary chapter which sets forth the general principles guiding the courts in applying the text to the various cases. The contents of the Majalla covered contracts (sale and lease and hire), suretyship, transfer of obligations, pledge, trusts and trusteeship, gifts, servitude, partnership and agency. It also covered what is now known as the law of evidence, administration of oaths and the judiciary. The Majalla, however, did not specifically refer to insurance in any way³².

3.2.3 It should be pointed out that the drafters of the Majalla rejected all suggestions to include any Western legal rule; instead they strictly adhered to the Muslim law³³. Courts interpreted the Majalla provisions consistently in the light of the Koran and the Sunna. The Majalla was a digest of well-established rules and not a formulation of novel law. It was an exercise of law codification as an instrument of modernisation. That is perhaps the most significant feature of the Majalla³⁴.

3.2.4 Codifications in the Arab countries

The process of codification as an instrument of modernisation continued its march in the Arab countries that were detached from the Ottoman

Empire at the close of the first World War³⁵. Egypt enjoyed a semi-independent status under the Ottoman Empire and had strong contacts with France as a result of its occupation by the French in the late eighteenth century³⁶. It adopted the Napoleonic Code almost verbatim, in 1883³⁷. In practice, that Code was highly impractical as it departed sharply from the value system and practices of the community in which it purported to operate³⁸. In 1933, a new movement in Egypt emerged calling for the review of that Code and to bring it close to Egyptian society. This trend culminated in the Egyptian Civil Code of 1949³⁹.

3.2.5 Even though the new Civil Code remained under the strong influence of the French Code both in form and content, it succeeded in connecting the past legal background of Muslim law when it provided in its first article, the second paragraph, that -

In the absence of a provision of a law that is applicable, the Judge will decide according to custom and in the absence of custom in accordance with the principles of Muslim law ..."⁴⁰

In contrast, the old Civil Code omitted the Muslim law as being one of the guiding rules to the judge in his deliberation⁴¹.

3.2.6 The new Egyptian Code was considered a successful synthesis of traditional Muslim law and modern legal doctrines⁴². It has become a formula for the drafting of other civil codes in the other Arab countries. The Egyptian Civil Code was adopted, with various modifications, by Syria in 1949⁴³, Iraq in 1951⁴⁴, and Libya in 1953⁴⁵. Jordan adopted a similar draft in 1956 but it was not put into effect until 1976⁴⁶.

3.2.7 In addition to the fact that the Egyptian Code has been the "model" code for the other Arab countries, the Egyptian judges, judgments and legal literature have had a great influence on these countries. This impact is now being felt in some Arab Gulf States by a series of legislation that are close to the Egyptian example⁴⁷. The main feature of these codes is that all of them have considered the Shari'a law as a source of legislation and a tool of interpretation⁴⁸.

3.2.8 Codification in the Arab Gulf States

The process of codification started late in the Gulf Area. Kuwait passed its first Commercial Code in 1961, Bahrain enacted its Contracts Law in 1959, Qatar and Dubai in 1971 and Muscat in 1974. The United Arab Emirates is still at the embryonic stage of codification. Saudi Arabia kept on its traditional course of action⁴⁹.

(i) Kuwait

3.2.9 The experience of Kuwait in codification is perhaps the most interesting⁵⁰. Long before its independence, the Majalla was the mother code that governed all transactions and, hence, was applied by the Qadis (the judges). There was no court system as such, but the designated judges were bound to apply the Majalla.

3.2.10 The influx of oil wealth brought with it all the associated economic, social and financial complexities. The ruling elite felt that new legislation to meet the new circumstances was timely. However, it was not an easy decision to replace the Majalla which was jealously guarded by the religious community. The legislator adopted in 1961 a scheme involving the issuance of a code,

styled as "commercial" but so broad in its scope as to encompass the whole area of "obligations", which is typically the main chapter in a civil code. Hence, the legislature left the Majalla officially intact, while in fact it was largely neutralised. The new Commercial Code of 1961 was for all practical purposes a civil-commercial law⁵¹.

3.2.11 The Kuwaiti Commercial Code was primarily based on the Iraqi Code where some of Majalla provisions were adopted verbatim, and other provisions were modified and mixed with Western models⁵². The preliminary chapter identifies the sources of the law as being the provisions of the law itself, the contract itself, customs, and principles of equity. The Code, being labelled officially "Commercial" did not include Muslim law as one of its sources. In this, the Kuwait Code relied upon the Ottoman precedent which substantially adopted the Commercial Code of France in 1850. In the area of modern commerce, the Ottomans argued, the Muslim law was not being violated. The Kuwaiti legislature used the same device as it officially kept on Majalla as the civil code⁵³.

3.2.12 It is important to point out that the Kuwaiti Constitution of 1962 laid down the general principle of legislation in the State. It declared that the "Muslim Shari'a shall be a main source of legislation"⁵⁴. Hence, the Kuwaiti Constitution did not limit the authority of the legislature to the Muslim law only. This necessarily makes statutory enactments based on non-Muslim principles constitutional.

- 3.2.13 In 1980 Kuwait adopted a new Civil Code which conforms, more than the old Commercial Code, to the Muslim law⁵⁵. The new Civil Code came into effect on 25th February 1981. Like the Egyptian Code, it directs the judge, while adjudicating a case, to give priority first to the statutory provisions of the law; failing that, the judge should look into the prevailing customs; and in the absence thereof, he shall be guided by the Muslim Shari'a⁵⁶. Hence, the Code gives priority to customs over Shari'a⁵⁷.
- 3.2.14 Like a typical civil code, the new Kuwaiti law is considered the mother code which sets forth all general principles and fundamental rules. It covers all obligations arising from contracts, unilateral act, torts, unjust enrichment and the law. It also deals with rights, and fulfilment of obligations. Then the law goes on to deal with specific contracts such as sales, loans, gifts, lease, contract, agency, trust, guarantees, insurance, securities in kind and other rights pertaining to real property including mortgages⁵⁸.
- 3.2.15 In addition to the Civil Code, Kuwait has enacted a new Commercial Code, a newly revised Code of Civil and Commercial procedures, and for the first time, a maritime law. In that sense, Kuwait can be classified as a civil-law country; and as such, it is the only country in the Gulf Area that has such a complete system of law and a fully integrated and structured judiciary⁵⁹.

(ii) Other Arab Gulf States

- 3.2.16 Other Gulf States have common features in respect of their legal developments⁶⁰. The codification

processes are still fragmented; hence none of them has a fully integrated system of legislation. Nor do they have a sophisticated judiciary. Their basic legal system is still rooted in the Muslim law. However, their respective experiences of codification do reflect their tendencies to depart from Muslim law especially in commercial matters. Hence these States have recently introduced the distinction between commercial acts to be adjudicated before commercial courts and civil acts to be handled by Shari'a Courts.

3.2.17 The Sultanate of Oman stood out among these states by establishing an interesting precedent. The Commercial Companies Law of 1974 has been used as a model of codification⁶¹. In addition to the typical provisions governing the incorporation and liquidation of various types of commercial corporations, the Law expanded its scope to include provisions concerning the establishments of the Committee for the Settlement of Commercial Disputes⁶². The Committee is the only tribunal in Oman that has exclusive jurisdiction over "commercial acts". These acts include sale of goods and services, lease, banking and exchange transactions, transportation and warehousing, commission and brokerage, insurance services, commercial agencies, contracting, printing and exploitation of minerals.

3.2.18 The central provisions that are of relevance to this study are those spelled out in Article (179) of the Commercial Companies Law. This article dictates that the Committee is obliged to apply to any commercial dispute the applicable laws in force. If no law applies, it shall apply the terms and conditions of the contract. If the

contract is silent on a certain matter, the Committee shall resort to customs and practice. Failing that, it shall apply the general principles of justice and equity.

- 3.2.19 It is to be distinctly noted that this legislation did not direct the Committee to consult the Shari'a. This omission was probably deliberate. For if the legislator had intended to incorporate Shari'a, he would have done so expressly⁶³. Furthermore, considering the Kuwaiti precedent of 1961 which deliberately avoided a clear reference to the Majalla, the Omani legislation fits in this context.
- 3.2.20 Bahrain adopted in 1969 a Contracts Law which deals in depth with all elements and categories of contractual obligations⁶⁴. It defines certain contracts like guarantee, deposits, collaterals and agencies. Bahrain has also legislation concerning civil and commercial procedures, commercial agency law, company law and other laws that regulate certain areas of activities.
- 3.2.21 Qatar enacted its Law No. 16 of 1971 concerning civil and commercial matters⁶⁵. The Law governs all "commercial acts". It further directs the judge, while deliberating a case, to pursue the matter in accordance with the following priorities:

he will first look into the terms and conditions of the contract under consideration; then the provisions of the Law; failing that customs will prevail. In the absence thereof, the principles of Muslim law shall apply.

In all other aspects, the scope of this law is very similar to the old Commercial Law of Kuwait.

3.2.22 The United Arab Emirates, as a federal state, has not embarked on any significant codification process. Other than the Federal Constitution, there is hardly any law of relevance to this study that could be cited. The Emirate of Dubai, however, enacted a Contracts Law in 1971⁶⁶. It is very similar to the Bahrain Code in form and substance.

3.2.23 Saudi Arabia is perhaps the closest Gulf State to the traditional Muslim law. It does not have a constitution on the ground that Koran is the only constitution of the State⁶⁷. The Muslim law as based on the Hanbalite School of Jurisprudence is the law that governs all transactions. Needless to say, Saudi Arabia has issued some "Regulations" concerning certain areas of activities but none of these regulations were intended to evade the Shari'a law.

3.3 Insurance in Muslim and modern Gulf laws

3.3.1 Against this historical legal background of the Arab Gulf States and within the larger context of legal development in the Arab Countries, insurance may be dealt with in a better perspective. Historically, Arabia knew what may be called insurance from time immemorial. Before the advent of Islam, Mecca used to be the main centre of trade between Al-Sham (Syria, Palestine, Transjordan) and Yemen. Caravans used to cross the desert, with Mecca as the crossing point, to and from Yemen and Damascus. The traders involved in any one caravan used to hire guards to protect the caravan. Each trader's cost was proportionate to the value of goods he had in that caravan. If an attack took place and the goods were stolen the

losses (in Arabic "Awar")⁶⁸ used to be distributed proportionately to the value of the goods. The word "Awar" is the origin of the Italian word "Avar" which, in turn gave birth to the English "average", the presently known term connoting the insurance principle of "general average".

3.3.2 Insurance after Islam

With the advent of Islam, that practice of insurance was not discontinued but neither prohibited nor expressly allowed. However, Islam has introduced a radical change into the entire community's orientation and interactions. Islam is not regarded as a mere religion regulating the secular interrelationship between man and his God; it is more inclusive to cover the interrelationship between members of the community. It is viewed as a way of life. It deals with religious as well as secular matters. The legal regulations which have been introduced by Islam are considered of divine origin⁶⁹. This implies that any new contract, practice or concept should first be evaluated in the light of whether it is allowed (halal) or prohibited (haram) by the divine law⁷⁰. The doctrines of halal and haram still have a paramount influence on much legislation adopted by various Arab and Muslim countries, as well as on the judiciaries operating in these countries.

3.3.3 Insurance in the Muslim law

Muslim law, as evidenced in its four sources, has never dealt with insurance either as a concept or as a contract. As stated earlier, the old practice in pre-Islam Arabia was neither prohibited nor explicitly allowed by the new order. As such, Muslim jurists in the absence of Ijma' have

been debating the legality of insurance⁷¹. In their endeavour, they have been utilising Qiyas as a tool of analysis. One school holds the view that insurance is haram (prohibited from the Shari'a point of view)⁷² while the other maintains that it is halal (allowed)⁷³. There have been several conferences held by Muslim jurists to resolve this dispute and reach consensus, but to no avail⁷⁴. It appears however that the second school which legitimises insurance is gaining more ground even in Saudi Arabia⁷⁵.

3.3.4 The prohibiting school relies largely on the opinion given by a well-known Muslim jurist, Mohammad Ben Abideen⁷⁶. This nineteenth century jurist, who ironically belonged to the liberal Hanafi School, held the opinion that insurance as a contract does not come close to any of the previously known contracts so no one could draw the proper analogy, and that an owner of a damaged property shall not, as a matter of principle, be entitled to be compensated for his damage or lost property. Other jurists added that insurance involves an uncertain risk and the insured would be paying for the "unknown". This school of thought described insurance as wagering contracts or aleatory contracts⁷⁷.

3.3.5 The opposing view advances more convincing arguments. It says that since the Koran and Sunna did not prohibit insurance, or what could be called insurance, known in Arabia before Islam, this means that those practices are permissible⁷⁸. It further argues that insurance could be compared to an old type of contract that was known in Arabia before and after Islam as "mowallat"⁷⁹.

This type of a contract might involve one party, who does not have any heir, and the other party, who could be any person of age. The former will grant the other status of being his heir upon his death provided that the latter will underwrite all financial liabilities that may arise due to the first party's negligent acts towards third parties. By Qiyas, this view considers that mowallat has in it an element of insurance. This school also finds another analogy in another old "surety" contract. This contract involves a party saying to another person: "Follow this road and if you suffer anything (loss, damage, injury...), I am responsible". If the second party does follow these instructions and suffers as a result, the first party will be held liable for compensation⁸⁰.

3.3.6 In summation, insurance, from the Shari'a point of view has not as yet been accepted universally by Muslim jurists. This division in opinion has encouraged those who are inclined to adopt insurance or enter into insurance contracts to find an excuse in the writings of jurists who define insurance as being permissible.

3.3.7 Insurance in modern Gulf laws

Apart from Saudi Arabia, all Gulf States adopt the permissive school of thought. Insurance as a commercial act and as a contract is recognised in all Gulf countries other than Saudi Arabia. This recognition is manifested in all legislation valid in the Arab Gulf States. It is therefore useful to place insurance in its wider context as it relates to the law of contracts and to the law of torts.

(i) Insurance and the law of contracts

3.3.8

Invariably, existing laws in the Gulf States recognise that a contract becomes binding as and when three elements are present at the time of contracting⁸¹. The first element is consent. This necessarily means that there is an "offer" and a corresponding "consent"⁸². If the "consent" does not match the offer then it is considered a new "offer" which needs a new "consent" from the original "offeror"⁸³. Offer and consent do not need to be made in any special form; they could be made in writing or verbally, express or implied⁸⁴.

3.3.9

The second element of a contract is the "object". The object of a contract must be identified or identifiable at present or in the future. If the object is something impossible in itself, the contract is void⁸⁵.

3.3.10

The third element is the "consideration"⁸⁶. A contract is deemed void when the obligation assumed is without consideration or for a consideration contrary to public policy or morality. The law presumes that every obligation involves a lawful consideration even if not expressly stated, unless evidence to the contrary is produced⁸⁷.

3.3.11

The contract is the law of the parties concerned⁸⁸. It cannot be modified or terminated without the consent of its parties or for reasons provided for by law⁸⁹. Good faith in transactions is a cardinal principle in contracts⁹⁰. The law further recognises the principles of exceptional circumstances which warrant the intervention of the judge to mitigate the losses of the debtor. This principle is considered a

matter of public policy; therefore the parties cannot agree to waive it⁹¹. Furthermore, when a contract of adhesion⁹² contains objectionable conditions, the judge may modify these conditions or relieve the adhering party of the obligation, and any agreement between the parties to the contrary is void⁹³.

3.3.12 Under the old Kuwaiti Commercial Code of 1961, insurance was recognised as a commercial act, but it was not dealt with as a distinct contract. The new Civil Code of Kuwait has dealt with insurance in a more detailed manner⁹⁴ than any other Gulf State law and even more than the Egyptian Civil Code⁹⁵. However, the general principles governing contracts in general as spelled out in that law or under the new Civil Code, are applicable to insurance contracts as well. An insurance contract, like all other contracts, should meet these requirements. There must be consent, object and consideration.

3.3.13 Articles 773-809 of the new Civil Code deal with all types of insurance including life assurance. The insurance contract is defined as a contract by which the insurer, in return for a monetary consideration, whether paid in advance or in instalments, undertakes to pay to the insured or to the beneficiary, an amount of money, a pension, or any other monetary compensation, in case of the occurrence of the accident or the risk stated in the contract⁹⁶.

3.3.14 The law defines the obligations of the parties to an insurance contract. As to the insured, he must provide all accurate relevant information upon application so that the insurer can determine the

risk involved, inform the insurer immediately of all incidents or circumstances that will increase the risk, pay the premium, and notify the insurer of any accident that gives rise to the insurer's liability⁹⁷.

3.3.15 The insurance contract becomes voidable if the insured provided false information which misrepresented the extent of the risk covered⁹⁸. Should the facts become known to the insurer prior to the occurrence of the risk insured against, he would have the option either to terminate the contract within ten days following the service of a notice by registered mail or to ask for an increase in the premium⁹⁹. Should, however, the facts become known to the insurer after the occurrence of the risk insured against, the contract is not voidable but the sum insured is reduced by the proportion the rate of premium paid bears to the rate of premium that should have been paid had all the facts been advised to the insurer in the proper way¹⁰⁰.

3.3.16 The insurer is under obligation to pay the compensation or the agreed sum when the risk covered by the insurance contract takes place. The insurer shall settle such amounts within thirty days from the day on which the insured or the beneficiary submits all documents supporting his claim¹⁰¹. The indemnity paid by the insurer entitles him to obtain from the insured subrogation¹⁰² of all the rights and claims of the insured against the wrongdoer. However, the insurer's obligation towards the insured shall cease if the subrogation was frustrated by an action attributable to the insured.

3.3.17 As a matter of public policy, the law determines certain events where the insurance contract shall be deemed absolutely null and void. The law renders the insurance void if it is not based on a lawful economic interest or if the risk insured against has expired or materialised before ratification of the contract¹⁰³.

3.3.18 The law provides that certain provisions in the insurance contract could be void or unenforceable. Conditions rendering the policy void or dealing with lapse of time or arbitration are unenforceable unless they are markedly pointed out in a clear manner¹⁰⁴. Delay on the part of the insured in declaring the accident insured against to the authorities or in submitting the documents is of no effect if the delay was due to an acceptable excuse¹⁰⁵. Unless the exclusion in respect of unlawful acts is specific it is of no legal effect¹⁰⁶. A violation of a condition shall have no effect if such violation had no effect on the occurrence of the risk insured against¹⁰⁷.

3.3.19 It is to be pointed out that since insurance policies are generally made in printed forms it may be argued that the insured is not always free to negotiate some of these terms. Kuwaiti courts have therefore classified insurance contracts as contracts of adhesion¹⁰⁸ which gives the judge the right to adjust any objectionable condition therein¹⁰⁹.

ii. Insurance and the law of torts

3.3.20 Although Islamic law dealt with virtually all branches of law, tort was not a separate field of law. It rather came under the scope of the

criminal law (uqubat) which consists of both crimes and torts¹¹⁰. The distinction between them was too narrow to delineate and the criterion utilised for distinction was determined by the party to whom Shari'a grants the remedy: to the public or to the individual¹¹¹. Muslim jurists however laboriously wrote and debated to clarify and develop the distinctions between criminal liability and civil liability¹¹². Jurists held the universal view that civil liability is squarely predicated on the doctrine of compensation in accidental transgression. This is what is known as "daman"¹¹³. Thus, jurists used to refer to "daman" when compensation is due for a bodily injury, and to "civil liability" when damage is inflicted upon things.

3.3.21 Tort law was finally codified, albeit in a scattered form, in Majalla. Article 92 provides that a person who performs an act, even though not intentionally, is liable to make good any loss caused thereby. Article 93 deals with indirect causation whereby the doer inadvertently and indirectly caused the damage to be inflicted upon a thing. These two articles were further explained in Articles 887 and 888 respectively.

3.3.22 The Majalla dealt in Articles 912-916 with damage to property. Reading these provisions one can reasonably conclude that any person who destroys the property of another is liable for compensation, whether such action was intentional or otherwise. The Majalla even held that if someone destroyed a property that he had erroneously believed was his, he was still liable. More significant, the Majalla adopted the universal view among Muslim jurists that minors are held liable for their tort actions¹¹⁴.

- 3.3.23 For bodily injury, Shari'a introduced two types of compensation. In case of death, the wrongdoer is liable to pay what is called "Diyya"¹¹⁵. The value of Diyya varied depending on the market value of money. Originally, it was determined by the Prophet as being one hundred camels. During the era of Omar, the second Khalif, the Diyya was adjusted upward.
- 3.3.24 For bodily injuries other than death, the Shari'a determined a compensation called "Ursh"¹¹⁶. If a person suffered injuries in his arm, leg or eye, he is entitled to recover "Ursh" which is a percentage of Diyya estimated according to the nature of wounds or damaged organ. It would vary according to whether the damaged organ is single or in pairs (one nose, two arms, two eyes ... etc.) or whether the accident left scars on the face of a female or male.
- 3.3.25 All the above principles of tort law have been invariably in force in the Arab Gulf States. Some countries however were more susceptible to adopting additional Western concepts than others. Bahrain, for example, adopted the Civil Contravention Act of 1970 which was modelled on Western laws of tort. Kuwait continued to hold a close position to the Majalla even when it began its codification process in the 1960s.
- 3.3.26 The enactment of the new Civil Code in Kuwait could be viewed as a model code for the future legal development in the Arab Gulf countries. The provisions relating to the law of tort represent a successful marriage between Shari'a law and modern concepts¹¹⁷.

- 3.3.27 Chapter Three of the Kuwait Civil Code (Articles 227-261) has fairly comprehensively covered legal doctrines governing various forms of tort. The first section deals with liability arising from personal acts; the second with liability arising from the acts of others, and the last with liability arising from things.
- 3.3.28 Liability arising from personal acts is very broad in scope and cannot be limited to certain specified events or cases. The law provides that any person who causes by his fault injury to another, is obliged to make reparation whether the action was directly or indirectly committed¹¹⁸. The doer is also obliged to make good such injury whether he is an adult or a minor¹¹⁹. It should be pointed out that "fault" in this respect is not "presumed" to have been committed by the doer. The injured party must establish that the doer was in fault¹²⁰. The doer can, on the other hand, defend himself by establishing that there was no nexus between the fault and the ultimate damaging result, or that he acted in self defence, or that the damage was a result of an event beyond his control¹²¹.
- 3.3.29 The law recognises the contributory negligence doctrine¹²² and provides that if the injured person contributed to the happening of the damage, his compensation will be proportionately reduced¹²³. The exception to this doctrine is that when the injured person contributed to the happening of the event and sustained bodily injuries or lost his life, the total amount of Diyya¹²⁴ or any proportion thereof, depending on the injuries sustained, becomes due and payable notwithstanding the percentage of fault in proportion to that of the defendant.

- 3.3.30 Compensation for damages is calculated on the basis of the losses incurred and profit lost¹²⁵. These two items must be, in order to be recognised by a court of law, a direct result of the fault committed by the doer¹²⁶. The law does not recognise "contingent loss" and claim to profits that "might have been realised"; they must be realised or realisable. The underlying principle in compensation is that it is not "punishment" but simply to "compensate" for actual losses¹²⁷.
- 3.3.31 The Kuwaiti law then deals with liability arising from the acts of others and provides that a person who is, by law or agreement, entrusted with the supervision of a person who, on account of his minority or his mental or physical condition, requires supervision, is liable for damages caused to a third party by unlawful acts of the person under his supervision¹²⁸. The person in charge of supervision however, can escape such liability if he were able to establish that the damage would have happened even though he was exercising due care¹²⁹.
- 3.3.32 The Kuwaiti law defines the minor¹³⁰ and has introduced for the first time the provision that the State or the owner of the school underwrites the responsibility of the school teacher¹³¹. Neither the State nor the school owner is allowed to reclaim from the teacher whatever compensation is paid unless the teacher is found at fault¹³².
- 3.3.33 The law further provides that a master is liable for the damage caused by the unlawful act of his servant when such act was performed by the servant in the course, or as a result, of his employment¹³³. Should the master pay compensation to

the injured party, he can claim back from his servant or the person under his supervision all such compensations¹³⁴.

3.3.34 The law holds the tenant liable for damages caused to others by the falling or throwing the objects from the place occupied by such tenant¹³⁵. If the wrongdoer happens to be a person other than the tenant but the unlawful action was committed while he was visiting the tenant, the tenant is still liable to the injured party with a right to claim back all monies paid from such person¹³⁶.

3.3.35 Liability arising from things and animals is dealt with under one heading in the law as the distinction between them has become immaterial¹³⁷. In this context the law provides that a person "in charge of" a thing the supervision of which requires special care to prevent the happening of damage occurring therefrom, is liable for the damages that caused by it¹³⁸. Things the supervision of which requires special care are, for example, vehicles, planes, machinery, vessels, weapons, electrical installations, animals, buildings and the like. The Kuwaiti law holds liable the person who is "in charge of" the thing. This does not necessarily mean that the owner is always exonerated; it simply implies that the person "in charge", be it the owner, charterer, tenant, guard... etc. is the one to be held liable in case of wrongdoing¹³⁹.

3.3.36 Compensation for damages resulting from tortious acts is generally determined by the judge except for bodily injuries which are defined in the law¹⁴⁰.

3.3.37 The principle governing compensation is that compensation should be made in kind¹⁴¹. This means that if a person destroys the property of another, the latter can claim that the offending party should restore the damaged property to its original condition. If this is not possible, compensation will be determined in terms of money¹⁴². Compensation is not and should not be viewed as "punishment" or a form of penalty; it is rather to compensate for the damages sustained. Any agreement of the parties involved to remove this responsibility whether wholly or in part is not permissible if such agreement takes place before the happening of the event that causes the damage¹⁴³.

3.3.38 The law determines compensation in case of bodily injury. Following the Shari'a doctrines, Diyya becomes due in case the person suffers an assault on his body whether it led to his death, the loss of limbs or other less serious injuries such as fractures¹⁴⁴. The amount of Diyya is set by the law at Kuwaiti Dinars ten thousand¹⁴⁵, which becomes due and payable in case of death, or various forms of total and permanent disability, including loss of any of the senses or memory or sexual capabilities¹⁴⁶. Half Diyya becomes due if the injured person lost one of the eyes or ears, one of the feet or palms or one breast¹⁴⁷. A certain portion of the Diyya becomes due in case of other injuries such as loss of teeth, loss of thumb (15%) and any other finger (10%)¹⁴⁸. It is worth mentioning that if a person lost, for example, his two legs and the sight in both eyes he would be entitled to two Diyyas.

- 3.3.39 Diyya, or any percentage thereof, is due to the injured party irrespective of age, sex, nationality or religious affiliation¹⁴⁹. Diyya does not preclude the court from determining other compensation for the injured person, his heirs or dependants who can claim compensation for loss of income or other material and moral damages¹⁵⁰. In the case of liability from things, the Diyya, whether in full or in part would be due whether there is a fault on the part of the person in charge or not¹⁵¹. Additional compensations however are only payable if there is some fault giving rise to liability.
- 3.3.40 The law introduced a new doctrine of compensation in case of bodily injuries. Article 256 adopts an old Shari'a rule which provides that if the wrongdoer is not known or cannot be identified, the State shall pay the Diyya. By doing so, the rights of the injured party will devolve to the State by virtue of Article 260 of the law and the State's rights in this respect have a privileged status towards the wrongdoer if and when he becomes known¹⁵².
- 3.3.41 Finally, the law deals with issues relating to the statute of limitation or time bar. The law provides that no claims concerning compensations due as a result of tortious acts shall be filed after the lapse of three years from the date upon which the victim knew of the injury and the identity of the person who was responsible for that act¹⁵³. Any such action for damages is prescribed in any case after fifteen years from the date on which the unlawful act was committed¹⁵⁴. However, if the claim arises out of a criminal action, such claim does not lapse so long

as the criminal action is pending, notwithstanding the above mentioned periods of limitation¹⁵⁵.

3.3.42 Claims in respect of compensation involving bodily injuries are prescribed after three years from the date on which the unlawful act was committed¹⁵⁶. However, in cases where the rights of the injured party devolved to the state, the claim by the state against the wrongdoer lapses after 15 years¹⁵⁷.

3.4 Contractors' and employers' legal liabilities

3.4.1 The legal liabilities of contractors and employers arising out of the execution and maintenance of a construction project emanate from two main sources:

- a. contractual liabilities expressed or implied by conditions of the contract signed by both parties, and
- b. legal liabilities arising by operation of the laws of the country in which the project exists.

3.4.2 The extent of contractual relationship differs from one contract to another. If an international construction contract is considered, the F.I.D.I.C., for example, as the most frequently used form of a contract in the Arab Gulf Area, it will be noticed that the contract regulates the relationship between the contractor and the employer through his agent, the engineer. Generally, the contractor, in return for payment of an agreed amount by the employer, undertakes to execute and maintain the works with due care and diligence to the satisfaction of the engineer. In

the course of carrying out his obligations under the contract, the contractor is made liable, by the terms of the contract, to repair and/or reinstate any loss and/or damage to the workers and to pay for claims arising out of injury or damage to persons and/or property of third parties including those of the employer. He is also required, by the terms of contract, to indemnify the employer against claims made by third parties or by employees of the contractor, against the employer. The contractor is however required by virtue of the insurance requirement clauses in the contract conditions, to insure the works, his liabilities towards third parties and his employees, but by complying with this requirement, the contractor's responsibilities under the contract are not by any means diminished¹⁵⁸.

3.4.3 The employer on the other hand is made liable, by the terms of the contract, for the cost of repair and/or reinstatement of any loss and/or damage to the works due to the excepted or special risks detailed in the contract. Among other liabilities he is also made responsible by the terms of the contract, for his actions or the actions of his agents or servants resulting in loss, damage or injury to persons or property of third parties including the employees of the contractor. In line with a general legal principle the employer is made liable for any loss, damage or injury resulting from any act or default of his agents or servants including the engineer.

3.4.4 In many contracts the liability clauses may not impose on either party any more than the normal liability as spelled out by the laws of the country. Penalties or similar liabilities are

however found in many contracts and are sometimes considered necessary to urge a party, such as the contractor, to take care in order not to delay the completion of the work and cause the employer consequential losses. Although penalties should normally be as accurate a pre-estimate as possible of the losses¹⁵⁹ the party receiving them would likely to suffer, it is not so accurately calculated in many contracts. Liability insurance policies normally exclude contractual liabilities unless such liabilities would have accrued in the absence of the particular contract condition.

3.4.5 Legal liabilities emanating from the laws of the country in which the project is being constructed may be divided into two main types:

- a. Liabilities based on the law of tort, and
- b. Liabilities based on the labour laws.

3.4.6 Liabilities emanating from the law of tort in the Arab Gulf Area have been described earlier¹⁶⁰. However, one may add here, the liability of the contractor and/or the designer, each for his own work, for a period of ten years after completion of the construction, for any defect in their respective works that may affect the safety of the construction.

3.4.7 The emphasis here is focused on a new form of liability that was never codified in any law in the Gulf area, i.e. decennial liability. This innovation has been finally codified by the new Civil Code of Kuwait. The Code came, in many aspects, to codify existing practice that has developed through many years of construction works in both public and private sectors. This practice

did not have roots in the Majallah or in the old Commercial Code. One may trace decennial liability in the standard forms of contracts used by the Kuwaiti Ministry of Electricity and Water (the form used for civil construction works) and the Ministry of Public Works, both agencies being heavily involved in huge contracts. Clause 64(4) of the 1971 forms for both ministries reads as follows:

"... the contractor shall remain responsible for a period of ten (10) years for the safety of the construction and for any defect or default which may be attributed to execution."

The latest forms of contract conditions used by the aforementioned Kuwaiti ministries still contain the same clause¹⁶¹.

- 3.4.8 It is to be noted that the above provision confines decennial liability to contractors rather than engineers; that it is based on the principle of assuming strict liability of the contractor, and that it is based on contractual rather than legal obligations.
- 3.4.9 When the new Civil Code was being drafted, that practice had become universal. Hence it found its way into the new Code, with wider scope of applicability. Article 692 provides that the contractor and the engineer shall be jointly and severally liable for the total or partial collapse or defects in construction for permanent works erected and/or designed by them for ten years after completion of the works.
- 3.4.10 That provision has not as yet become the subject matter of a court of arbitration case in Kuwait.

Yet one may easily deduce that the new Code has codified the already existed practice. It adopts the strict liability concept, but covers both the contractor and the engineer. It sets the ground of liability on a legal rather than a contractual basis.

- 3.4.11 Neither the Kuwaiti Civil Code nor any of the contract conditions forms mentioned above require the contractor or the engineer to insure their decennial liability.
- 3.4.12 Liabilities of contractors and employers to their respective employees are dealt with under the labour laws. Each of the Arab Gulf States has its own labour law¹⁶² which may broadly be described as regulating the relationship of the employer with his employees. The part of this law that concerns insurance cover is that part dealing with the compensation payable to the employee or his heirs following bodily injury causing death or permanent or temporary disablement arising out of the work. The said compensation differs from one state to the other. In some states compensation for death or permanent disablement is connected with the amount of the "Diyya" (described earlier). In other states compensation is based on the salary of the employee at time of injury. These laws, in all of the Gulf States, require the employer to pay such compensation, as provided in the law, without proof of fault by either the employer or the employee.
- 3.4.13 The amount of the aforementioned compensation in Kuwait, is highest among Gulf States. The present law in Kuwait provides in cases of labour accidents or occupational diseases that the compensation is to be paid on the following basis:

- i. In case of death: The full remuneration of 1500 working days, with a minimum of KD.10,000.
- ii. In case of total permanent disablement: The full remuneration of 2000 working days, with a minimum of KD.13,333.
- iii. In case of partial permanent disablement: A proportion of (ii) above, equivalent to the percentage of disablement as fixed by the medical doctor/committee.
- iv. In case of temporary total disablement: The salary of the first 6 months in full, then half salary until cure or death or the permanent disability percentage is ascertained.
- v. Compensation under item (iv) above is payable in addition to compensation under items i, ii and iii above.

3.4.14 It is interesting to note that in certain circumstances as for low salaried employees the law of tort as explained above appears to be more generous than the labour law, when compensation is at stake. Under the former, a person who suffers injuries because of a tortious action, as for example in a car accident, could collect several Diyyas. While if the same person sustains similar injuries because or as a result of his employment, the maximum he could get in compensation is the total salary of 2000 days with a minimum of KD.13,333. This contradiction appears to be inequitable and unfavourable to employees in such circumstances. It is therefore possible that some injured employees will try, while filing their

claims, to base their arguments on tort law rather than on labour law if the difference in compensation so warrants.

- 3.4.15 The labour laws as described above do not require the employer to insure such liability. Insurance is left to the discretion of each employer. In the case of a contractor, if he is not required to insure by virtue of a condition in his contract with the principal, he may choose not to insure, and shoulder the liability himself. It is possible therefore for a contractor to insure a portion of his liability under the law such as to pay losses resulting from fatal accidents only. All other losses being borne by the contractor.
- 3.4.16 When a policy is issued stating that compensation thereunder will be paid in accordance with the provisions of the labour law of the country and the employee claims under the law of tort an amount exceeding the amount he would have received under the labour law then the employer will find himself shouldering the difference, in the compensation, between the two laws. It is a rare case in practice to find an employer is fully covered up to the higher compensation limit.
- 3.4.17 If the employer is a government then his employees may not be subject to the terms of the labour law in the same manner as the employees of the contractor or sub-contractors. Government employees in the Arab Gulf Countries are subject to different sets of rules and regulations. Therefore these employees may be covered under the general liability policy issued by the contractor covering his activities in the project. The cover in this case is limited to his proven negligence which has

caused the injury to the employer's employee. Compensation is then payable according to Sharia' or torts law provisions. Injury which is not due to the fault of the contractor is still the liability of the employer (government) which in the Arab Gulf Area is traditionally self-insured.

3.5 Summary

- 3.5.1 Muslim law (in Arabic "Shari'a) alone, prevailed in the whole area until the late fifties and early sixties when Bahrain and Kuwait began their codification process of modern laws. With the exception of Saudi Arabia the other Gulf states followed suit but Muslim law remains, however, a main source of legislation in all the Gulf states after codification.
- 3.5.2 Pre-Islam Arabia knew an old practice which may be called insurance. This practice was neither prohibited nor explicitly allowed by Islam, in fact Muslim law has never dealt with insurance either as a concept or as a contract. Muslim jurists have, therefore, been debating the legality of insurance ever since it was introduced to the Arab and Muslim countries. It is a fact however, that the school which legitimises insurance is gaining more ground.
- 3.5.3 At present, insurance as a legal issue and as a contract is officially recognised by the State in all the Arab Gulf countries except Saudi Arabia, though recent developments in that country indicate a positive change in the official attitude to the subject. Recognition of insurance in modern Gulf laws is manifested in legislation ruling in the area and in the incorporation of

insurance companies, licensing insurance companies and agents to operate and obliging them to file periodical returns of their activities to the authorities. The new civil code of Kuwait for example, contains a whole section to deal with all types of insurance in a fairly comprehensive manner.

3.5.4 Legal liabilities of contractors and employers arising out of the construction contract shape the liability portion of the insurance covers taken in connection with a construction project. These liabilities emanate either from the contract conditions between the contractor and the employer or by operation of the laws of the country. They cover the liabilities of the contractor and the employer towards each other, towards third parties and toward their employees. Decennial liability is also a new form of liability which has recently been codified by some laws in the area.

Chapter 3 References

- 1 The preamble to the Basic Instrument of the GCC emphasizes the joint value system as predicated on Islam and the common aspiration for co-operation and co-ordination. See text in the Official Gazette of Kuwait, No.1367. The GCC countries signed in 1982 the Unified Economic Agreement which is modelled on the European Economic Agreement. Text in the Official Gazette of Kuwait No.1443 dated Nov. 7, 1982. For a general appreciation see William Van Orden Gnichtel, The Arab States Gulf Co-operation Council = Unified Rules for Trade and Industry, The International Lawyer (1986) 20(1), 309-318.
- 2 See the proceedings of the Conference on the Unification of the GCC laws, under the auspices of the Journal of the Gulf and Arabian Peninsula (of Kuwait University) held in Kuwait on December 21-23 (1987).
- 3 The ensuing text is based on M. Az-Zarqa, Al-Fiqh Al-Islami Fi Thawbihi Al-Jadid, 1(1): 31 and passim (in Arabic, Damascus, 1961). For English source material, see also S.G. Vesey-Fitzgerald, Nature and Sources of the Shari'a (1955) in Khadduri and Liebesny Law in the Middle East. Washington D.C.: The Middle East Institute, 85-112. See also J. Schacht, An Introduction to Islamic Law (1964). Oxford: Clarendon Press, 15-18, 57-68.
- 4 Az-Zarqa, op. cit., 32; see also Vesey-Fitzgerald, op. cit., 87-90.
- 5 Az-Zarqa, op. cit., 32. Professor Az-Zarqa noted that the generality of these rules has helped in interpreting them according to various circumstances and to adapt to different developmental stages of the community.
- 6 Az-Zarqa, op. cit., 34.
- 7 For example, the Prophet held that a grandmother should be included as one of the heirs, while this ruling has no genesis in the Koran, Az-Zarqa, op. cit., 35. See also Vesey-Fitzgerald, op. cit., 90-95.

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- 8 Az-Zarqa, op. cit., 36-38. See also Vesey-Fitzgerald, op. cit., 95-96.
- 9 ibid., 38-47.
- 10 Schacht, Pre-Islamic Background and Early Development of Jurisprudence in Khadduri and Liebesny, op. cit., 29.
- 11 ibid., 31.
- 12 See *infra*. para. 3.2.1.
- 13 Az-Zarqa, op. cit., 113.
- 14 See *infra*. para. 3.2.5.
- 15 This school was known as the "Sunna School", See Az-Zarqa, op. cit., 143.
- 16 This trend was called the "Opinion School" ibid., 143-144.
- 17 The ensuing text is based on J. Schacht. The schools of law and later developments of jurisprudence, in Khadduri and Liebesny, op. cit., 68-70. See also Khadduri, Nature and Sources of Islamic Law (1953). George Washington University. Law Review 22: 17-18.
- 18 Schacht, An Introduction to Islamic Law op. cit., 66-67.
- 19 ibid., 63-66.
- 20 ibid., 68-70.
- 21 Az-Zarqa, op. cit., 162-163.
- 22 ibid., 152-153. See also Sheikh Mohammad Abu Zahra, Possession and the Theory of Contract in Islamic Shari'a (undated) (in Arabic) 38-39. Sheikh Abu Zahra was a leading authority on Shari'a Law in Cairo University Law School.
- 23 Az-Zarqa, op. cit., 153-155.
- 24 This interaction was attributed to the fact that the Ottoman Empire became the "The Sick man of Europe." See H.J. Liebesny, Religious Law and Westernization in the Near East. (1953). Am. Comp. L.J. 2, 495.
- 25 E.U. Mardin, Development of the Shari'a under the Ottoman Empire, in Khadduri and Liebesny, op. cit., 279-288.

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- 26 ibid., 288.
- 27 ibid., 285.
- 28 ibid., 289.
- 29 ibid., 289.
- 30 S.S. Onar, The Majalla, in Khadduri and Liebesny, op. cit., 292 and *passim*. Also see Az-Azrqa, op. cit., 174-176.
- 31 Onar, op. cit., 292. Onar noted that the Majalla "was one of the important means of preserving Islamic institutions while the Ottoman Empire was changing from an Islamic to a Western society".
- 32 For the Arabic text and the annotation of the Majalla, see Rustum Baz, The Majalla Annotated (3rd ed., Beirut, 1923), Al Adabyia Press.
- 33 Onar, op. cit., 295.
- 34 S.S. Onar, op. cit., 292 and *passim*.
- 35 The ensuing text is based on Anis F. Kassim. The Kuwait Commercial Law: A Comparative Study (unpublished thesis submitted to the University of Miami Law School, Florida, 1968 for Masters in Comparative Law), 29-52.
- 36 ibid., 30.. In 1875, it should be recalled, Egypt witnessed the introduction of the Mixed Civil Code along with the Mixed Courts. This era of "Capitulations" gave foreigners residing in Egypt the privilege of being subject to the Mixed Courts which were staffed with a majority of foreign judges. See Liebesny, The Development of Western Judicial Privileges, in Khadduri and Liebesny, op. cit., 332.
- 37 Kassim, op. cit., 30.
- 38 Kassim, loc. cit. See also G.M. Badr, The New Egyptian Civil Code and the Unification of the Laws of the Arab Countries, (1956), 30. 300. Tulane L. Rev.
- 39 Kassim, op. cit., 31. Badr, op. cit., 301.
- 40 The Egyptian Civil Code, (English Translation by Perrott, Fanner and Sims Marshall) (undated, The New World Publisher-Cairo).

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- 41 For general comparison, See Liebesny, op. cit., 140.
- 42 A. Qowatly, Introduction to the civil Law, (1960) I,
93 (in Arabic, Damascus University. Professor Qowatly
was a law professor at Damascus University - Law
School).
- 43 ibid., 87.
- 44 Z.E. Jwaideh, The New Civil Code of Iraq, (1953), 22,
George Washington L. Rev. 178.
- 45 Badr, op. cit., 303.
- 46 See the Official Text in Arabic as published by the
Jordan Bar Association (1976).
- 47 This is based on an interview with Dr. Anis F. Kassim,
a practising lawyer in Kuwait since 1975. The
interview was on March 5, 1984.
- 48 Anis F. Kassim, loc. cit.
- 49 See, Encyclopedia of Comparative Laws, Legislation and
Orders (Abdul Khaliq and Al-Nakeeb eds. in Arabic,
1978 - Kuwait). M. Al-Nakeeb est., hereinafter
"Encyclopedia".
- 50 Kassim, op. cit., 44-55.
- 51 Kassim, loc. cit.
- 52 ibid., 46. See also the Explanatory Note of the Law,
278.
- 53 ibid., 45-46.
- 54 Art. 2. See also Kassim, op. cit., 51-52.
- 55 See the Kuwaiti Minister of Justice Introduction to
the New Civil Code of 1981. 12. The Kuwaiti Cabinet
resolved on Feb. 19, 1977 to establish committees for
the revision of Kuwaiti Laws which must be drawn after
Muslim Shari'a.
- 56 Art. 1.
- 57 Sharaf Ed-Din, A. Moslim Shari'a as a Source of the
New Civil Code of Kuwait, The Legal Advice and
Legislation Department Magazine, (which belongs to the
Kuwaiti Cabinet) (1983), 3. 11.

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- 58 It is unfortunate there has been no official English translation of this important and most modern Civil Code. Unofficial translations are neither readily available nor complete.
- 59 Kassim, on Kuwait in D. Campbell (ed. 1986). Legal aspects of doing business in the Middle East. 5: 135. Kluwer Law and Taxation publishers: Netherlands.
- 60 Reference to laws herein is based on a compilation of Gulf laws titled, Encyclopedia of Comparative Laws, Legislation and Order, Abdul Khaliq and Al-Nakeeb eds. (in Arabic 1978). Mohamoud Al-Nakeeb Est. Kuwait. op. cit.
- 61 See The Laws of Commercial Acts in Oman (in Arabic and English - official Translation, July 1974).
- 62 See Steven Cake, Settlement of Commercial Disputes in the Sultanate, Middle East Executive Report, Mar. 1987, 16-17. See also L.G.R. Spoliansky. Modern Business Law in the Sultanate of Oman. The International Lawyer (1979), 101-117.
- 63 See T.W. Hill, The Commercial Legal System of the Sultanate of Oman. The International Lawyer, (1983) 507, 509-510.
- 64 Encyclopedia, 4, 63.
- 65 Encyclopedia, 5, 172.
- 66 This law is superseded by the new Federal Civil Transactions Code which was issued in December 1985.
- 67 See A.M.N. Al-Hafnawi, The Principles of Legislation in Saudi Arabia (in Arabic, undated, Saudi Arabia). The author noted that legislation in Saudi Arabia is officially called Nizam not laws because the source of legislation is the Koran, which is the word of God. Man cannot legislate, but make "Ordinances" or Nizam.
- 68 See The Oxford Universal Dictionary Illustrated (1973 edition), 137.
- 69 Az-Zarqa, op. cit., 37.
- 70 Az-Zarqa, loc. cit.

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- 71 Az-Zarqa, The Insurance System - Its Origins and the Shari'a View (in Arabic) (1984). Beirut: Al Resala Inst. This is perhaps the most objective analysis of insurance presented by one of the leading contemporary jurists in Shari'a Law. Professor Az-Zarqa pointed out the three trends among Shari'a jurists - those who are against insurance, those who are for it, and the trend that accepts certain types of insurance and rejects others. Az-Zarqa himself is an advocate of the second trend. (hereinafter, Az-Zarqa Insurance).
- 72 ibid., 25.
- 73 ibid., 27.
- 74 ibid., 5-6.
- 75 Please refer to paragraph 4.1.7 of chapter four.
- 76 ibid., 21-23.
- 77 Sameer Nawfal, Insurance and the Islamic Alternative (June 1981). Journal of Islamic Banks, Egypt's issue 18. 56. See also E.J. Vaughan, Fundamentals of Risk and Insurance (1982). 3rd ed. New York: John Wiley and Sons, 169.
- 78 Az-Zarqa, Insurance, op. cit., 33 and passim.
- 79 ibid., 28-30.
- 80 ibid., 58.
- 81 The ensuing text is based on A.R. Al Sanhuri, Sources of Obligations (in Arabic) (1964). Egypt, 1. The reason that I relied on this treaties is that Dr. Al-Sanhuri is the leading Egyptian jurist who was responsible for and played a constructive and outstanding role in drafting the codes in Egypt, Libya, Iraq, Syria, Jordan and Kuwait. His works are widely quoted and relied upon by judges, jurists and lawyers alike.
- 82 ibid., 220.
- 83 ibid., 225.
- 84 ibid., 163 and 223-224.
- 85 ibid., 409-422.
- 86 ibid., 451 and passim.

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- 87 e.g. Article 177 of the Kuwait Civil Code.
- 88 ibid., 149 e.g. Articles 31 and 196 of the Kuwait Civil Code.
- 89 ibid., 696-699 e.g. Article 196 of the Kuwait Civil Code.
- 90 ibid., 700-703. See Article 195 of the Kuwait Civil Code.
- 91 Article 198 of the Kuwait Civil Code is typical in virtually all Arab countries' laws. See Al-Sanhuri, op. cit., 703 and *passim*, where he compares this principle in various Arab legislation.
- 92 E.J. Vaughan, op. cit., 169.
- 93 Article 81 of the Kuwait Civil Code.
- 94 See Articles 773-809 inclusive.
- 95 See Articles 747-771 inclusive.
- 96 For definition of the insurance contract see E.R. Hardy Ivamy (1979). General Principles of Insurance Law. London: Butterworths, 3.
- 97 Article 790 of the Kuwait Civil Code.
- 98 Article 791/1.
- 99 Article 791/2.
- 100 Article 791/3.
- 101 Article 799.
- 102 Robert E. Keeton (1971). Basic Text on Insurance Law. USA: West Publishing Co., 147 and *passim*. See also John Birds (1982) Modern Insurance Law. London: Sweet and Maxwell, 252 and *passim*. See also Article 801 of the Kuwait Civil Code.
- 103 Articles 776-777, 784.
- 104 Article 782.
- 105 Article 783.
- 106 Article 784/1.
- 107 Article 784/2.
- 108 E.J. Vaughan (1957). loc. cit. See also E.W. Patterson, Essentials of Insurance Law. 2nd ed. New York: McGraw Hill Book Co. Inc., 3.

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- 109 Article 81.
- 110 Riyad Maydani, Uqubat: Penal Law, in Khadduri and Liebesny, op. cit., 223 and passim.
- 111 Maydani, loc. cit.
- 112 S. Mahmasani, Transactions in the Shari'a in Khadduri and Liebesny, op. cit., 179, 188-191.
- 113 See the Explanatory Note to the Kuwait Civil Code, 229.
- 114 The explanatory note, loc. cit. See also Article 238.
- 115 ibid., 240-241 and Articles 248-251.
- 116 ibid., 241.
- 117 This premise was clearly explained in the Explanatory Note. ibid., 215-216.
- 118 Article 227/1.
- 119 Article 227/2.
- 120 See the Explanatory Note, op. cit., 218.
- 121 Articles 233, 235-236.
- 122 Robert E. Keeton, op. cit., 55-56.
- 123 Article 234, and the Explanatory Note, op. cit., 224-225.
- 124 The Kuwait Civil Code set the Diyya at KD. 10,000. See Article 251/1.
- 125 Articles 245-254, Articles 230-231.
- 126 The Explanatory Note, op. cit., 222.
- 127 Generally see Al-Sanhuri, op. cit., 969 and passim.
- 128 Article 238.
- 129 Article 238/1.
- 130 Article 238/2 defines a minor as the person who is below 15 years old, or has reached that age but is still under the custody of whoever is in charge of his upbringing.
- 131 Article 238/3.
- 132 Article 239.
- 133 Article 240. It should be pointed out here that the injured party has the option to sue the master or the servant. However, he cannot collect from both for the same damage so sustained. See the Explanatory Note, op. cit., 232-233.

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- 134 Article 241. See also the Explanatory Note, op. cit., 233.
- 135 Article 242.
- 136 The Explanatory Note, op. cit., 233-234.
- 137 ibid., 235.
- 138 Article 243/1.
- 139 The Explanatory Note, op. cit., 237.
- 140 Article 245. See also supra notes 125 and 127.
- 141 The Explanatory Note, op. cit., 239.
- 142 Article 246.
- 143 Article 245 and the Explanatory Note, op. cit., 239.
- 144 Article 255.
- 145 Article 251/1.
- 146 According to Article 251/2, a schedule of rates was to be issued to determine the scale of compensation for limbs. This schedule was issued on January 21, 1981. See the Official Gazette of Kuwait, No. 1340, 20.
- 147 Official Gazette, loc. cit.
- 148 Official Gazette, loc. cit.
- 149 Article 248. See also the Explanatory Note, op. cit., 241.
- 150 Articles 245 and 248.
- 151 Article 255. See the Explanatory Note, op. cit., 245.
- 152 The Explanatory Note, op. cit., 246-247.
- 153 Article 253/1.
- 154 Article 253/1.
- 155 Article 253/1.
- 156 Article 256/2.
- 157 Article 260/2 and also Article 438 which in effect is related to the former article. Article 438 prescribes the general time bar period by 15 years.
- 158 For a brief description of the liability, indemnity and insurance requirement clauses in the F.I.D.I.C. form (1977 ed.) please refer to paragraphs 6.1.4-6.1.11.
- 159 Marsh, P.D.V. (1981) Contracting for Engineering and Construction Projects. Great Britain: Gower, 148.

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- 160 See paragraphs 3.3.20-3.3.42 of this chapter.
- 161 Book of Tender, Document II General Conditions, Document II-I Legal Clauses and Conditions (1971). May 1985 Kuwait: Ministry of Public Works. General conditions of contract. Conditions of adjudication and instructions to tenderers participating in the Ministry of Electricity and Water tenders calling for civil works (undated) Kuwait: Central Tenders Committee.
- 162 See supra note 60.

4. LOCAL INSURANCE MARKETS

4.1 Composition and classes of business written

4.1.1 Due to the increased economic activities which needed insurance protection, insurance business has become an important sector of the financial system in the Arab Gulf Area. Until the late fifties national insurance companies did not exist. The insurance market was composed of branches and agencies of foreign companies only¹. In time the number of these offices increased attracted by the new wealth and encouraged by the liberal policy adopted by the local governments. This resulted in some areas of the gulf becoming overcrowded with offices of foreign insurance companies.

4.1.2 In the sixties and seventies some Gulf States started regulating the insurance markets and restricted the establishment of new insurance offices to national companies². Kuwait was the first Arab Gulf State where national insurance companies were established. In 1960 and 1962 the first three national insurance companies in the Arab Gulf Area were established in Kuwait by Kuwaiti nationals as public shareholding companies³. The Kuwaiti Government did not own any shares therein at the time of establishment⁴. Soon thereafter these companies received governmental support in the form of a directive to give priority to the national companies in insuring governmental projects and assets. This support greatly enhanced the national companies' growth and in a few years they were able to attract most of the business generated in the market⁵.

- 4.1.3 The Kuwaiti model has been largely adopted by the other Arab Gulf States. National insurance companies now exist in each of these states⁶ and government support to these companies, although taking different forms from one state to the other, has greatly assisted these companies to achieve rates of growth that they would not have achieved in the absence of such support⁷.
- 4.1.4 The Kuwaiti Law prohibits any foreign interest in the capital of any national insurance company, hence all such Kuwaiti companies are 100% owned by Kuwaitis⁸. Some other Arab Gulf States hold more liberal views in this respect and therefore some of the insurance companies established in these states are not wholly-owned by nationals of the state⁹.
- 4.1.5 The formation of national insurance companies, though it deprived the foreign offices of their freedom to be the sole insurers in the area, did not drive these offices out of the market in any of the Arab Gulf States. These foreign offices are still more in number, in each of these states, than the national insurance companies therein¹⁰. Their freedom however, to write all types of risks varies from one state to the other. In Abu Dhabi and Kuwait¹¹ for example, foreign offices are not allowed to insure governmental projects or assets, whereas in Saudi Arabia and some parts of the United Arab Emirates they write all types of risks.
- 4.1.6 In Saudi Arabia the insurance market is not officially recognised by the State¹², although in practice it is largely composed of similar segments to those constituting the insurance market in the other Gulf States. Insurance

companies in Saudi Arabia operate under the umbrella of trading firms¹³. Being not officially recognised, insurance companies are not licensed to operate in isolation from other commercial activities of the agent, who is usually a merchant or a trader. In recent years new insurance companies with a majority of Saudi interest have been established and registered outside Saudi Arabia¹⁴, though almost all of their operations are within Saudi Arabia. These companies are referred to hereinafter as "national" companies. Foreign insurance offices are still operating side by side with the newly formed "national" insurance companies. Due to the absence of any official form of statistics on the Saudi insurance market¹⁵ and the absence of any official record of the number of insurance companies in Saudi Arabia, and due to the fact that various foreign offices enter or leave the market without any governmental supervision, the size of the market is still unknown. Judged, however, by the whole economic activities therein it is estimated to be the largest market, not only in the Arab Gulf Area, but also in the whole Arab World.

4.1.7 In Saudi Arabia, pessimism with regard to official recognition of insurance activities that prevailed in the sixties and seventies seems to have lost a lot of ground. It has been superseded by optimism due to many reasons. In practice almost all government projects are now insured in compliance with a requirement in the contract conditions between the owner and the contractor to insure the works, constructional plant and the liabilities¹⁶. A more tangible turning point in the official attitude towards insurance was the announcement made by the government early in 1985 of the establishment of a state-owned insurance company

with an authorised capital of SR. 500,000,000 (US\$ 143,000,000 appx.) and which commenced operation during 1986¹⁷. It is not clear yet whether this company will concentrate on insuring local government projects and assets or will extend its activities to the local and neighbouring countries' private sector business as well. Whatever the future policy of the newly established company will be, it is a clear indication of a remarkable change in the Official attitude towards encouraging insurance activities in the years to come.

4.1.8 The following table shows the number of national and foreign insurance companies in the Arab Gulf States as at 31.12.1984

Table 4.1

Number of National and Foreign Insurance Companies in the Arab Gulf States as at 31.12.1985

	<u>No. of National Ins. Cos.</u>	<u>No. of Foreign Ins. Cos.</u>	<u>Total</u>
KT	4*	15	19
UAE	8	139	147
BN**	5	11	16
SA***	34	Unknown	Unknown
ON	1	16	17
QR	3	4	7

* Not including a national reinsurance company.

** Not including offshore companies.

*** All insurance companies operating in Saudi Arabia are registered in foreign countries. Companies with a majority of Saudi interest in their capital are referred to as national companies. Due to the lack of official record of the number of foreign insurance companies operating in the country the exact number of these offices is unknown. Estimates place the number over 100¹⁸.

4.1.9 Two national reinsurance organisations exist in the area. The first is a pure Kuwaiti firm as a closed share-holding company owned by the national insurance companies, banks and investment companies in Kuwait¹⁹. The second is a multi national organisation based in the Free Zone of Bahrain but owned equally by the governments of Kuwait, United Arab Emirates and Libya²⁰. The two organisations accept business only by way of reinsurance from the local and international markets although the second is allowed also to write direct business by its memorandum of association. In practice many other foreign and local insurers accept reinsurance business in the area.

4.1.10 Brokers operating in the area may be divided into two main categories; local brokers and international brokers. Local brokers consist mainly of individuals who are either part timers or full timers. In some states local insurance brokerage offices have been established but their scope of activities is still very similar to the individual full time brokers. On technical matters they refer to the insurance companies as they are not equipped with the required expertise to handle most such matters.

4.1.11 International brokers are not represented in all the Gulf States, their offices in the area are mostly found in Saudi Arabia²¹, Dubai²² and Bahrain²³. Their scope of activities covers both insurance and reinsurance business. Some of them are associated with foreign insurance offices operating in the area.

4.1.12 Insurance agents are common in the Arab Gulf Area. Most of the foreign insurers transact business in the area through local agents. Some of the national insurance companies transact business in the other states through agents also, such as a national Kuwaiti company having an agency in Saudi Arabia or in the Emirates. Sometimes the agent of an insurance company is only a sponsor with no actual authority in writing business, in which case the insurance office is more like a branch run by employees hired by and reporting directly to the head office of the company. By law, such a branch is established by an agency agreement between the insurance company and the agent who is either an individual or a company of the other state²⁴.

4.1.13 Many national and some foreign companies operating in the area write both life and non-life business. It has been noticed that of those which write life business few employ actuaries on a full time basis. The national companies' experiences and capabilities vary largely. Experience has shown that the larger and older ones are able to write and service almost all classes of insurance supported by their well arranged automatic facilities provided by well-known and reputable reinsurers. Many others depend largely on their brokers, especially in rating and placing most of the business, and in particular the more sophisticated covers such as aviation, marine hull, construction or erection all risks, professional liability etc. covers. In the states where foreign companies are not allowed to insure governmental projects or assets their activities are limited to the private sector business only. In some states the foreign companies are not even

able to attract much of the private sector business²⁵. Generally they write mainly marine cargo, motor, small fire and accident business. In Saudi Arabia and some parts of the United Arab Emirates national and foreign companies are treated alike. The difference is that in Saudi Arabia insurance companies need not be specially licensed to operate in the country whereas in the Emirates insurers must be licensed to operate²⁶. Due to the special nature and length of commitment of life assurance business, most of the foreign companies limit their activities to non-life covers.

4.1.14 It is, however, important to note that indigenous insurance selling in the area is still significantly below required levels. This fact is manifested in the number of personal insurances, such as individual life, personal accident, householders or homeowners insurance policies issued compared with the number of people and houses in each state²⁷. Most of these individual policies are, in fact, sold and not bought. The majority are the accomplishment of brokers, agents and producers and the result of tedious, lengthy and hard work in marketing various classes of insurance business in an area where insurance was almost unheard of by the individual some thirty years ago. Other than motor traffic liability cover, if required by the law of the state, hardly any other insurance protection is bought by the individual on his own. In addition, resistance by the individual to insurance protection in general and to insurance of the person in particular is still felt, though to varying degrees, in all the Gulf countries. Those who criticise insurance, base their arguments on certain interpretations given to some religion principles²⁸.

4.2 Governmental support and growth of the national companies

4.2.1 It is a fact that without governments' support in most of the Arab Gulf States the national insurance companies could not have grown to their present size. Under Table 2.5 (Chapter Two) it is shown that governments' expenditure on development and capital projects represents a major part of the total governments' expenditure. These projects need to be insured, the majority are in fact covered against the various risks by different types of insurance policies. These covers include, marine, contractors' all risks, construction machinery, workmen's compensation, third party liability, motor, fire etc. The national airlines and maritime fleets for oil, gas and dry cargo are also covered by the relevant aviation or marine policies. All these insurance covers in most Gulf States are effected with the national insurance companies.

4.2.2 With regard to insurance of construction projects, some of the aforementioned covers are issued consecutively to cover the same project at different stages. E.g. A marine policy is issued to cover materials during ocean or air transportation. During construction/erection the project is insured by a CAR/EAR policy. Workers engaged in the project are covered by a workmen's compensation policy. After completion of construction/erection/testing and handing over, the owner may decide to insure the project against operational risks.

4.2.3 Since governmental expenditure forms the major part of the total expenditure in the area, it follows that premiums generated by the national companies from insurance of governmental projects

and assets form a sizable part of the total premium income of these companies. This steady and secured flow of business has allowed the national companies to expand steadily and to be able to attract Arab and non-Arab expertise, which, in turn, has enhanced their ability to handle properly the increasing business. It has also enabled them to acquire most of the insurance business in the local market including that of the private sector for which they compete with the foreign insurance offices.

4.2.4 Being the first to establish national insurance companies in the area²⁹, the State of Kuwait realised early the importance of governmental support to the newly formed national companies. The start was a requirement in the tender conditions of governmental projects to give priority in insurance of these projects to the national insurance companies provided their rates did not exceed those of the other insurance companies by more than ten per cent³⁰. This was the first indication of a trend to direct insurance covers for governmental institutions, corporations, authorities etc. to the national insurance companies. The trend grew stronger when after few years the ten per cent margin was removed from most governmental tender conditions and the requirement was altered to restrict insurance covers required in the tender documents to a national insurance company³¹. In the meantime, and following government's decision to restrict insurance of any governmental asset to the national companies, all semi governmental companies, public shareholding companies, many big merchants, contractors etc. forming the major portion of the private sector followed suit and

entrusted the national insurance companies with their insurance needs.

4.2.5 The following table shows the total non-life direct premium income of the Kuwaiti market during the period 1978-1985 split between national and foreign companies:

Table 4.2

Non-life direct premiums split between national and foreign insurance companies in Kuwait

Year	Total KD.	Foreign Companies KD.	National Companies KD.	National Companies as % of total
1978	39,866,000	9,492,000	30,374,000	76.2
1979	41,144,000	8,899,000	32,244,000	78.4
1980	48,357,000	8,895,000	39,462,000	81.6
1981	57,444,000	8,625,000	42,819,000	83.2
1982	58,703,000	8,861,000	49,842,000	84.9
1983	59,690,000	7,940,000	51,750,000	86.7
1984	64,093,000	8,795,000	55,297,000	86.3
1985	54,762,000	8,374,000	46,388,000	84.7

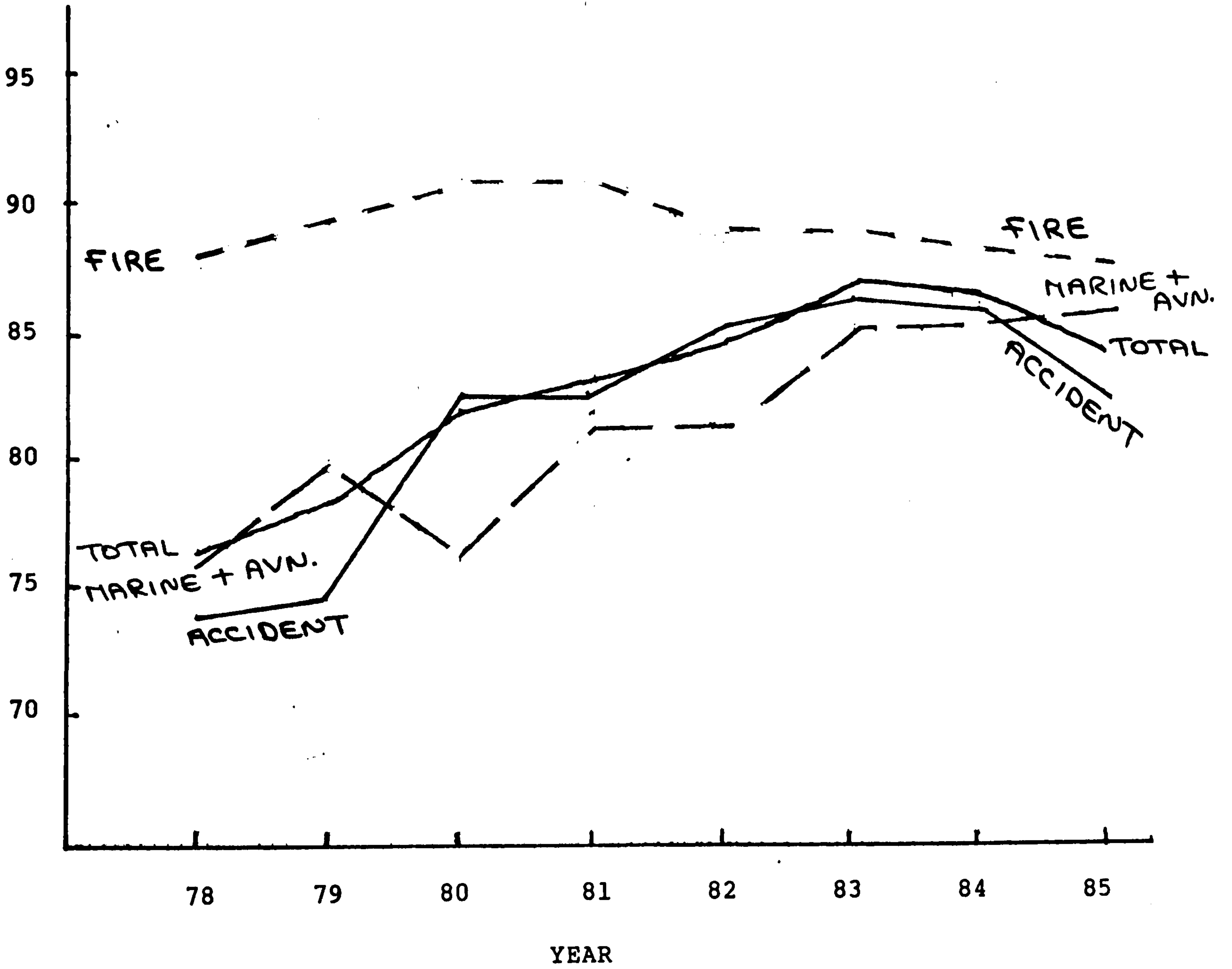
Source: - Ministry of Commerce and Industry - Kuwait.
- Figures do not include premiums under policies issued outside Kuwait.

4.2.6 The investigation is taken a step further and the total premium income is broken down into the main three classes of business, i.e. Fire, Accident and Marine/Aviation. The resultant figures show the performance of the national companies in comparison with that of the foreign companies in each of the aforementioned classes. This is best displayed in the following graph (Figure 4-1) showing

figure 4-1

Business written by Kuwaiti national companies in each of the three classes and in the total shown as a percentage of the total premium in each class and in the aggregate

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the business written by the national companies in each of the main three classes and in the total as a percentage of the total premium in each of the classes of business and in the aggregate.

- 4.2.7 The graph shows that in each year investigated the highest percentage of business written by the national companies is in the fire branch. This is mainly due to the fact that all the oil and petrochemical risks which are fully owned by the government are insured by the national insurance companies. It is to be noted that the oil and petrochemical risks generate a major part of the market fire premium income. It is also worth mentioning that almost all other industries and assets owned by public shareholding companies or partly owned by the government are insured by the national insurance companies.
- 4.2.8 The marine and aviation branch may be split into two parts: marine hull and aviation risks and transportation risks (cargo transported by sea, air and land). Almost 100% of the premiums generated under the former part is written by the national companies. The latter part is the field where foreign offices are very active and have been able to compete with the national insurance companies and attract a sizable portion of the market, especially from medium and small size merchants.
- 4.2.9 On the accident side the foreign offices are active in all classes other than insurance of governmental projects. Governmental projects have constituted a sizable portion of the accident premium income. Because the value of such projects showed continuous increase over the period of investigation, the premium income generated thereunder, whether under CAR/EAR policies or W.C. policies, has

caused the percentage of premium written by the national companies to show continuous increase.

4.2.10 To compare the performance of the national companies in the Kuwaiti market with another gulf market, the United Arab Emirates presents a unique example where government support exists in a part of the market and does not exist in the other part. The following table shows the total non-life premium income of the UAE market from 1978-1985 split between national³² and other companies.

Table 4.3

Non-life premiums split between national and foreign insurance companies in the UAE³³

Year	Total DH.	National Cos. DH.	Other Cos. DH.	National Cos. as % of Total
1978	415,556,000	253,024,000	162,532,000	60.9
1979	444,691,000	264,840,000	179,852,000	59.6
1980	636,915,000	349,988,000	286,927,000	55.0
1981	742,702,000	419,624,000	323,078,000	56.5
1982	839,921,000	513,803,000	326,118,000	61.2
1983	928,210,000	611,672,000	316,538,000	65.9
1984	883,295,000	626,717,000	256,578,000	70.9
1985	896,115,000	604,294,000	291,821,000	67.4

Source: United Arab Emirates - Ministry of Planning,
Central Statistical Dept.

4.2.11 From Table 4.3 it can be seen that the percentage of the market written by the national companies in the U.A.E. is not as high as it is in Kuwait (Table 4.2), nor does the pace of increase of the said percentage from year to year, a phenomenon

which may be partly attributed to the issues referred to in paragraph 4.2.10 as compared with those given in paragraph 4.2.4.

4.2.12 If the figures relating to the Emirate of Abu Dhabi (where local regulations provide government support similar to that in Kuwait) are segregated and compared with the figures of the Kuwaiti market in respect of the years 1979 and 1980³⁴, the result can be seen in the following table which displays the two markets' performance as a percentage of the total premium income in each of the three main classes of business.

Table 4.4

Percentage of national companies' share of non-life premiums split into the main three insurance classes in Kuwait and Abu Dhabi in the year 1979 and 1980

	<u>Kuwait</u>		<u>Abu Dhabi</u>	
	1979 %	1980 %	1979 %	1980 %
FIRE	89.4	90.8	91.1	86.2
ACCIDENT	74.7	82.0	71.2	66.8
MAR/AVN	79.7	76.4	93.6	91.1
	<u>81.3</u>	<u>83.1</u>	<u>83.3</u>	<u>81.4</u>

Source: Ministry of Commerce and Industry - Kuwait.
Ministry of Planning - UAE.

4.2.13 It is clear that the two sets of figures are very close to each other. It is, however, to be noted that in 1980 the Kuwaiti national companies improved their position in relation to 1979 in the fire and accident classes, whereas in Abu Dhabi the opposite occurred in all the classes.

4.2.14 The construction/erection all risks premium income in Kuwait and the UAE from 1978-1985 is shown in the following table as split percentages between the national and foreign companies.

4.2.15 The foregoing shows that government support to the national companies in the Arab Gulf Area is a main factor in their growth and capability to handle the increasing premium income emanating from the local market.

Table 4.5

CAR/EAR premiums as split percentages between national and foreign companies in Kuwait and the UAE

<u>Year</u>	<u>National Cos.</u>		<u>Foreign Cos.</u>	
	<u>KUWAIT</u>	<u>UAE</u>	<u>KUWAIT</u>	<u>UAE</u>
1978	99.3	89.2	0.7	10.8
1979	99.5	78.2	0.5	21.8
1980	99.3	77.0	0.7	23.0
1981	99.0	76.3	1.0	23.7
1982	99.3	80.8	0.7	19.2
1983	99.2	79.1	0.8	20.1
1984	96.2	81.7	3.8	18.3
1985	85.1	81.8	4.9	18.2

Source: Ministry of Commerce and Industry - Kuwait.
Ministry of Planning - UAE.

N.B. The table does not show figures for the years preceding 1978 because figures are not available for the UAE.

4.3 Insurance of construction projects

4.3.1 The size of the construction insurance market in the Arab Gulf Area showed a remarkable growth during the past decade or so³⁵. In Kuwait for example, the total CAR/EAR premium income of the

market, which in 1974 was about US\$ 2,300,000, increased continuously until it reached about US\$ 25,000,000 in 1984, i.e. an increase of more than 10 times³⁶.

4.3.2 The above figures, when converted into percentages of the total market non-life premium income, represent a very high ratio compared with similar percentages in a developed country. Table 4.6 hereunder shows a comparison of these percentages in the UAE, Kuwait, W. Germany and Italy during the period 1975 to 1985.

Table 4.6

Percentage of CAR/EAR premiums to non-life direct premiums in the UAE, Kuwait, W. Germany and Italy

<u>Year</u>	<u>UAE Pct.</u>	<u>Kuwait Pct.</u>	<u>W. Germany Pct.</u>	<u>Italy Pct.</u>
1975	NA	5.50	0.61	
1976	NA	7.85	0.42	
1977	NA	6.90	0.63	
1978	13.58	7.15	0.66	
1979	13.04	6.32	0.65	
1980	12.46	6.78	0.63	0.31
1981	10.59	4.83	0.56	0.28
1982	10.24	7.94	0.56	0.32
1983	8.65	9.19	0.59	0.48
1984	8.15	11.81	0.59	0.45
1985	9.80	7.45	0.55	-

Source: Annual Insurance Statistics - Ministry of Planning - (UAE).

Ministry of Commerce and Industry - (Kuwait).

Verband Der Sachversicherer E.V., Koeln - (W. Germany).

International Machinery Insurers' Association, Munich - (Italy).

4.3.3 It is clear that CAR/EAR insured activities in the UAE and Kuwait expressed as a percentage of the non-life direct premiums in the country represent many times the same percentage in W. Germany and Italy. Hence the CAR/EAR insurance business gains its importance in the whole Arab Gulf Area where similar environment to the UAE and Kuwait prevails.

4.3.4 With the increase in value and number of projects, insurance of these projects gained more importance and prestige among insurance companies. In the race to win as many insurance contracts as possible on these construction projects insurers, reinsurers, brokers and agents competed severely³⁷, bearing in mind that insurance of a construction project is not limited to the cover in respect of the works on site. The winner of the CAR/EAR cover is in many cases certain of obtaining the other insurance covers which he hopes may compensate for concessions made on the CAR/EAR cover.

4.3.5 An insurance program for a construction project usually covers the following³⁸:

- The goods, materials, equipment, plant, machinery etc. during transportation by sea, air or land to the site.
- The works under construction and the works completed including materials etc. whilst being stored until completion and handing over to the owner.
- Constructional plant, equipment and machinery used in connection with the works.
- Temporary buildings and their contents, such as offices, labour camps, stores, workshops etc.
- The liability toward others for bodily injury or property damage arising out of the execution of the project including the use of constructional plant, equipment and machinery.

- Motor vehicles used in connection with the project including liability arising out of the use of such vehicles.
- Loss of money during transit and whilst kept in safe or on the premises.
- Dishonesty of accountants, cashiers, store-keepers, purchase officers etc.

In addition to the above, the program may include group life or personal accident cover to senior staff and householders' comprehensive policies in respect of residences of expatriates. In many other cases the private insurance of the employees such as motor, householder's, personal accident, travel, baggage etc. are also directed automatically towards the insurer of the project.

4.3.6 The practice in the local markets is that the contractor requests the insurers qualified by the tender conditions to quote for the main insurance covers, i.e. CAR/EAR, third party liability and workmen's compensation. With regard to the CAR/EAR cover the size of the project is the major factor in the decision of the insurer to prepare a local quotation or to consult his reinsurers. Usually a combined quotation in respect of the CAR/EAR and T.P. covers is presented to the contractor. In few cases where the T.P. limit of liability is very high the insurer may find it more suitable to reinsure separately the whole or part of the T.P. cover.

4.3.7 If the total sum insured can be absorbed by the insurer's automatic reinsurance facilities then it will be entirely for the insurer to decide on the scope of cover, rates and other conditions including mode of payment etc. On the other hand,

if the total sum insured exceeds the insurer's automatic capacity, the amount of the excess decides the course of action. The excess may be so small that the insurer may decide to treat the case as if it would be absorbed by his capacity and is confident of reinsuring the excess at same terms quoted by him. If, however, the excess is a large portion of the risk or if the risk is of a complicated nature then the insurer normally consults reinsurers to secure their support before quoting to the contractor. Consultation may be done directly or through broker(s).

4.3.8 If the project is prestigious or attracts the interest of reinsurers they may be inclined to quote attractive terms. In other cases the relationship between the reinsurer and the insurer has a bearing on the case such as a special support given due to other important business ties. In most important projects the contractor's name and reputation are taken into consideration when preparing an insurance quotation in respect of CAR/EAR/TPL cover³⁹, whereas this factor has much less bearing upon the insurance quotation in respect of transportation cover if the carrier is not the contractor.

4.3.9 In some cases the contractor might have an annual open cover in respect of all his imports or in respect of all his employees and labourers irrespective of the project. In these cases it is sometimes possible that the CAR/EAR cover is won by an insurer other than the insurer of the transport or workmen's compensation covers. Careful consideration to possible gaps in the overall coverage⁴⁰ or to certain legal aspects such as right of recourse between the insurers⁴¹ is sometimes overlooked.

- 4.3.10 The usual practice in the local market is to insure all employees and labourers engaged in a project under a master policy. But in the case where the main contractor or any of his sub-contractors is already covering his labourers under an annual policy some complications may occur, especially if the insurer of the annual cover is not an eligible insurer under the terms of the contract conditions for that particular contract.
- 4.3.11 In recent years a tendency has been noticed in the local markets to share the main insurance covers of important and prestigious projects by the national insurance companies within the state. The national companies in the State of Kuwait started this system in the sixties and the system is still in operation⁴². The system helps the market as a whole to retain as much as possible out of each risk. It also assists all the companies in the market to have a more balanced portfolio and a better distribution of the risks covered. It may, however, cause some difficulty to the reinsurer who participates in the reinsurance treaties of more than one national company in the same market due to possible accumulation of shares of the same risk from more than one source.
- 4.3.12 Claims under CAR/EAR and TPL covers are usually assessed and adjusted by independent loss adjusters who are scattered in the Arab Gulf Area either as local companies and individuals or as branches of international offices. Transport insurance claims are normally adjusted by the insurance company's staff unless an independent opinion is required when the use of independent

loss adjusters is made. Workmen's Compensation claims are settled with the least problems. Amounts are easily calculated in accordance with the benefits set forth in the local labour laws in all the Gulf states.

4.3.13 The experience of the local markets in the area in connection with insurance of construction risks will be investigated in the CAR/EAR section only. Other sections such as transportation, workmen's compensation etc. risks are included under the relevant main sections in the accident or other departments of the insurance companies. Thus the published figures reflect the whole business in the particular class of which the portion relating to construction projects cannot be estimated without a thorough study of each company's detailed records. This is, however, not feasible.

4.3.14 No statistics are available on the insurance market in Saudi Arabia⁴³. The second largest two markets in the area are Kuwait and the United Arab Emirates.

4.3.15 The following two tables show the market experience of the CAR/EAR insurance business in Kuwait and the United Arab Emirates separately during the years 1979-1985 shown in original currency.

Table 4.7

CAR/EAR insurance business in Kuwait
Market Experience

<u>Year</u>	<u>Written Premiums KD.</u>	<u>Claims Paid KD.</u>	<u>Settle ment Ratio</u>	<u>Earned Premiums KD.</u>	<u>Incurred Claims KD.</u>	<u>Loss Ratio</u>
1979	2,601,000	1,277,000	49.1%	2,635,000	1,300,000	49.3%
1980	3,279,000	1,315,000	40.1%	2,962,000	1,970,000	66.5%
1981	2,773,000	1,154,000	41.6%	2,900,000	1,564,000	53.9%
1982	4,661,000	1,740,000	37.3%	3,756,000	2,474,000	65.9%
1983	5,488,000	1,754,000	32.0%	4,667,000	3,732,000	80.0%
1984	6,945,000	2,530,000	36.4%	5,899,000	3,070,000	52.0%
1985	3,794,000	2,946,000	77.6%	5,064,000	(10,000)	(0.2%)
Total	29,541,000	12,716,000	43.0%	27,883,000	14,100,000	50.6%

Source: Ministry of Commerce and Industry - Kuwait.

Table 4.8

CAR/EAR insurance business in the United Arab Emirates
Market Experience

<u>Year</u>	<u>Written Premiums DH.</u>	<u>Claims Paid DH.</u>	<u>Settle ment Ratio</u>	<u>Earned Premiums DH.</u>	<u>Incurred Claims DH.</u>	<u>Loss Ratio</u>
1979	57,972,000	28,964,000	50.0%	52,777,000	30,634,000	58.0%
1980	74,279,000	25,091,000	33.8%	63,910,000	35,830,000	56.1%
1981	78,682,000	45,762,000	58.2%	72,439,000	66,744,000	92.1%
1982	86,021,000	73,928,000	85.9%	80,420,000	107,126,000	133.2%
1983	80,282,000	91,213,000	113.6%	81,431,000	130,421,000	160.2%
1984	72,018,000	44,609,000	61.9%	77,212,000	(4,754,000)	(6.2%)
1985	87,786,000	59,413,000	67.7%	81,691,000	67,201,000	82.3%
Total	537,040,000	368,980,000	68.7%	509,880,000	433,202,000	85.0%

Source: United Arab Emirates - Ministry of Planning, Central Statistical Department.

4.3.16 The settlement ratio, shown in the two tables above, being claims actually paid during the year divided by premiums written during the same year, does not contain any element of estimation such as earned premiums or outstanding claims. It simply monitors the cash flow arising out of premiums and claims, subject of course to certain changes such as acquisition cost, initial and running expenses. For these reasons it was necessary to take the investigation a step further and a more technical index for the experience, namely the loss ratio, which is the ratio between the incurred claims and earned premiums, was calculated and included in the two tables above. The method adopted in calculating the earned premiums is explained in detail in the following paragraphs.

4.3.17 The earned premiums in the non-marine classes of insurance are traditionally taken as 60% of the premiums written during the year under study plus 40% of the previous year's premiums⁴⁴. This formula is acceptable if the average period of insurance under the policies issued during the period of investigation is one year or so. But since CAR/EAR policies are taken separately the percentage of 40% cannot be sufficient to cover the unexpired risk at the end of the year. This is due to the fact that CAR/EAR policies are normally issued to cover the period of the contract which, in almost all medium and big size projects, exceeds one or two years.

4.3.18 To be able to give a more reasonable estimate of the percentage of unearned premium in a given year, all CAR/EAR policies issued during the whole year in a major national insurance company operating in the area have been analysed and a pro-rata temporis basis adopted for each policy, and the results added up.

4.3.19 The premiums written in a given year, say 1980, were found to be earned as follows:

48% in the year 1980
30% in the year 1981
17% in the year 1982
5% in the year 1983

Hence, the unearned premium at the end of the first year is 52%. But only 30% of it is earned during the next year and the balance of 22% is considered unearned and so on.

4.3.20 Therefore, the earned premium in a given year, say 1980, is calculated as:

48% of the premium written in the year 1980
plus 30% of the premium written in the year 1979
plus 17% of the premium written in the year 1978
plus 5% of the premium written in the year 1977

4.3.21 The incurred claims in any given year are traditionally calculated as:

The claims paid during the given year
plus claims outstanding at the end of the year.
less claims outstanding at the beginning of
the same year.

This method is applicable to CAR/EAR business in the same way as to other insurance business.

4.3.22 The weighted average settlement ratio in the years 1979-1985 in Kuwait and UAE is 43.0% and 68.7% respectively, whereas the weighted average loss ratio during the same period is 52.0% and 85.0%. It is, however, important to add that the aforementioned figures represent the result of the business without taking into consideration the expenses incurred by the insurance companies to

acquire and service the account. If such expenditure is accounted for the result of the Kuwaiti CAR/EAR business would still be profitable, whereas that of the UAE would not show profitable results.

4.3.23 It is moreover important to note that the figures may not reflect the actual experience under the CAR/EAR reinsurance treaties of the companies operating in the area. The aforementioned figures reflect the whole market result taking into account all projects, whether fully absorbed by the automatic reinsurance facilities of the companies or not.

4.4 Summary

4.4.1 The insurance market in the area and its activities, especially in relation to insurance of construction projects, was described in this chapter. Insurance business has become an important sector of the financial system in the Arab Gulf States. All general insurance classes are written in the market which comprises national and foreign insurance companies, brokers, agents and producers. Two national reinsurance companies also exist at present. Some gulf markets are now closed to any new insurance company whether national or foreign, although foreign companies exceed in number the national companies in each of the gulf states. Experience and capabilities of the insurance companies vary largely, in a market where insurance, which was unheard of some 30 years ago, is still a hard commodity to sell. Other than motor traffic liability cover, if required by the law of the state, hardly any other insurance protection is bought by the individual out of his own initiative.

- 4.4.2 In some parts of the Arab Gulf Area the national insurance companies are supported by the state in a manner which ensures that government assets and projects are insured only by the national companies in the state. Government support to these companies, although taking different forms from one state to the other, has greatly assisted these companies to achieve rates of growth that they would not have otherwise achieved. As an example, a study of the performance of the Kuwaiti insurance market during the years 1978-1985 was conducted, showing a split of the whole market premium income between the national and foreign companies in each of the three main classes of business (Fire, Accident and Marine/Aviation) in each year. The study was repeated in another gulf state (The United Arab Emirates) where government support to their national companies exists but not in the whole state, i.e. unlike Kuwait. The results of both studies were compared to show the effect on the performance of the national companies of the variation of government support.
- 4.4.3 The size of the construction insurance market in the area showed a remarkable growth during the past decade or so. When converted into percentages of the total market non-life premium income it represented a very high ratio compared with similar percentages in developed countries. Comparisons have been carried out between these percentages in the UAE, Kuwait, W. Germany and Italy.
- 4.4.4 With the increase in value and number of construction projects insurance of these projects gained more importance and prestige among insurance companies. In the race to win as many insurance contracts as possible on these construction

projects insurers, reinsurers, brokers, agents etc. competed severely, bearing in mind that the winner of the CAR/EAR policy is in many cases certain of obtaining the other insurance policies needed for the project which the insurer hopes may compensate for concessions made on the CAR/EAR cover. Each insurer endeavours to alleviate the result of severe competition in his own way, but particular market conditions prevailing in each state, which also have their bearing on the results, cannot be ignored.

4.4.5 The investigation was taken a step further and the actual results of the CAR/EAR business, during the years 1979-1985, in Kuwait and in the United Arab Emirates where government support is very similar (in part of the country), have been compared showing the variation in the loss ratio and in the trend in each state in the years of study.

Chapter 4 References

- 1 Basim A. Faris (1983). Insurance and Reinsurance in the Arab World. Great Britain: Kluwer Publishing. UAE p.102, SA p.113, Kuwait p.122, Bahrain p.132, Oman p.140, Qatar p.146.
- 2 ibid., UAE p.103, Kuwait p.122, Qatar p.146.
- 3 Kuwait Insurance Co. established in 1960.
Gulf Insurance Co. established in 1962.
Al-Ahleia Insurance Co. established in 1962.
- 4 Memorandum of association of each of the three national insurance companies.
- 5 Ministry of Commerce and Industry - Kuwait - Annual Publications.
- 6 See Table 4.1 of this chapter.
- 7 See section two of this chapter.
- 8 Law No.24 of the year 1961, part III, article 4. (amended by law 13/62).
- 9 For example see Ministry of Planning - UAE - Annual Publications.
- 10 See Table 4.1 of this chapter.
- 11 Basim A. Faris op. cit., 122-123.
- 12 ibid., 114.
- 13 ibid., 113.
- 14 ibid., loc. cit.
- 15 ibid., 114.
- 16 See chapter 6 for a Contract Conditions Form used in Saudi Arabia.
- 17 National Company for Co-operative Insurance.
- 18 Basim A. Faris, loc. cit., 113. See also Consideration of the Arab Markets (April 1983). Reinsurance, 652.
- 19 Kuwait Reinsurance Co. established in 1972.
- 20 Arab Insurance Group incorporated in 1980.
- 21 e.g. "F.B. Hall" and "Alexander & Alexander".
- 22 e.g. "Willis Faber & Dumas Ltd".
- 23 e.g. "Stewart Wrightson (Middle East) Ltd".
- 24 e.g. Article 9 of Federal Law No.9 of 1984 concerning insurance companies and agents - UAE.

Chapter 4 References continued

- 25 Ministry of Commerce and Industry - Kuwait - Annual Publications.
- 26 Article 8 of Federal Law No.9 of 1984 concerning insurance companies and agents - UAE.
- 27 In UAE total number of life policies in force at 31.12.83 was 9529 (individual and group policies). In Kuwait total number of life policies in force at 31.12.83 was 16223 (individual and group policies). No. of personal accident and house-holders' or house-owners' policies are not available separately from other classes in both countries.
Source: Annual Insurance Statistics 1983 UAE.
Annual Statistical Abstract 1985 Kuwait.
See also "experiodica", Economic studies No.6 (June 1983). Zurich: Swiss Reinsurance Company: pages 2 and 3 referring to the Gulf States. The article states: "Insurers operating in this area have been prompted in the last years to mainly deal with infrastructure projects and marine cargo risks, there being practically no mass consumer market for Fire, Burglary, Accident, Life and Motor branches."
- 28 Edmund O'Sullivan, Middle East Economic Digest, The Policies that are still hardest to sell, Times 10.3.82.
- 29 See paragraph 4.1.2 of this chapter.
- 30 Ministry of Electricity and Water Contract conditions for supply and installation.
- 31 Ministry of Public Works contract conditions.
- 32 National companies are companies 100% owned by nationals of the UAE.
- 33 Available statistics do not show separately premiums under policies issued outside the UAE.
- 34 Other years' figures are not available separately for Abu Dhabi.
- 35 Peter Bedford (6th October 1978). Competition for Brokers in Middle East Construction Insurance. The Review, 75-77.
- 36 Ministry of Commerce and Industry - Kuwait - Annual Publications.

Chapter 4 References continued

- 37 Peter Bedford, loc. cit.
- 38 F.N. Eaglestone (1979). Insurance for the Construction Industry. London: George Godwin Ltd., 7.
- 39 Peter Bedford, loc. cit. See also Report by Advanced Study Group No.208A of the Insurance Institute of London (1985). Construction and Erection Insurance, 103,104.
- 40 ibid., 29.
- 41 ibid., 89,90.
- 42 The system is governed by a series of gentleman's agreements covering various classes of insurance relating to a specific sector of the market.
- 43 See supra note 15.
- 44 B. Benjamin (1977). General Insurance, special edition London: Heinemann, 60.

5. SOME IMPORTANT FACTORS AFFECTING THE DEMAND FOR INSURANCE COVERS IN CONNECTION WITH CONSTRUCTION PROJECTS IN THE ARAB GULF STATES

5.1 Planning and tendering for a construction project

- 5.1.1 Contracting is virtually reflected in the utilisation of available resources such as know how, labour, material, money and time in such a way that the employer and the contractor obtain the maximum possible benefit from the resources expended¹.
- 5.1.2 Planning on the part of the employer normally starts when he initiates a project. It includes identification of the objectives to be achieved, estimation of time and resources required and those available, the establishment of the most economic method by which the objectives can be achieved and the study of the method by which the contractors for the project are to be chosen².
- 5.1.3 The preparation of a contracting plan is an essential step in the execution of any project. The plan represents a trade-off between conflicting interests such as shorter time against lower capital cost, unified responsibility resting with the contractor against retention of control by the employer etc.³. The same criteria apply when preparing the insurance plan for the project, i.e. a trade-off between conflicting interests such as higher premiums against restricted coverage etc.
- 5.1.4 It is, however, worth mentioning that the ultimate responsibility for the project always rests with the employer no matter what he delegates to his

consultants or contractors⁴. Since the employer initiates the demand to which the contractor responds it is the employer or his consultants/managers who convert the plan into action by making the necessary enquiries, preparing the contract conditions and choosing the contractor to execute the work⁵.

5.1.5 Contractors may be divided into two main categories according to the nature of their responsibilities. The first category includes those employed to design the project. Their responsibilities may also extend to supervising the execution of the works. The second category includes those employed to do the actual construction or erection of the works. In a turnkey contract⁶, a main contractor undertakes the entire responsibility for the project from design through construction and commissioning to the turning of the key. This type of contract allows the owner to shift the risk for construction, financing, delays etc. to the contractor whose bid in this case is bound to be based on assumptions involving great deal of uncertainty⁷. Sometimes, instead of, or in addition to the turnkey main contractor and the use of consulting engineers in their traditional role, a managing contractor is employed by the principal to be responsible for the various sections of the works, establishing the project programme, coordinating all site activities, inspecting the work and recommending issue of completion certificates etc.⁸.

5.1.6 Tendering may take many forms. Among the most commonly used forms are⁹:

- Open competitive tendering by advertisement (not common in the Arab Gulf Area)
- Competitive tendering from a selected list (widely used in the Arab Gulf Area)
- Selection of a single contractor with whom negotiation takes place (some projects have been awarded in the Arab Gulf Area through this method).

5.1.7 For the contractor, tendering is a vital opportunity to present himself, his products, know how, capability etc., not just for the particular job in question but for the future as well. Therefore a competent contractor covers various areas of interest before finally submitting his bid¹⁰. Before presenting his bid the contractor must plan his tender in the same way as an employer must plan his project. A careful study of the inquiry documents is the A.B.C. of proper planning¹¹. The contractor is concerned to submit an offer which as far as possible:

- is the most attractive to the employer;
- reduces the contractor's risks and potential liabilities; and
- leaves the contractor with a reasonable margin of profit.

These objectives do not always run parallel. There are times when they will be in conflict with each other and the inevitable result will be a compromise¹². As it usually turns out, the first objective attracts most of the attention of the contractor, followed by the third and thus compromises are often exercised on the second objective which includes, among other things, a proper protection plan involving safety measures and adequate insurance covers.

5.1.8 Experienced contractors are aware that it is prudent to insure adequately¹³. Therefore one of the most important steps to minimise their risks and potential liabilities is a proper planning of the various insurance covers that are necessary for the project. In the same manner that they use the services of specialists and experts such as engineers, accountants, administrators etc. to tackle the various aspects of the project, they must use the services of insurance experts to advise them properly on the important subject of how to minimise and protect against the risks and liabilities through adequate insurance covers¹⁴. However, many, if not most, contractors in the Arab Gulf Area depend entirely on their technical or commercial staff to negotiate and agree the terms and scope of insurance covers they deem suitable. Because in the absence of an insurance manager, engineering, finance and labour/material supply problems attract almost all the attention of the management, insurance matters slip to the bottom of the list of priorities and do not attract their share of the required attention. Thus the insurance covers demanded in such circumstances are unlikely to be adequate for risks associated with the particular project.

5.1.9 It is normal for oil based countries to have a great potential for construction prospects, hence the enormous growth in the construction and engineering business in the area attracted many of the leading construction companies of the world¹⁵. Contractors operating in the Arab Gulf Area may be divided into two main groups:

- a. Local contractors
- b. International contractors

Local contractors range from the individual to well organised bodies. Some have entered into joint venture or management agreements with international contractors. Many individual contractors are foreigners licensed to reside and work in the country. Their assets and resources are very limited and their scope of activities is restricted to jobs in connection with the construction of private dwelling houses. With the increasing number and size of construction works many new contracting firms have been established. International contractors are usually engaged in government and big private projects¹⁶. Generally speaking, they are well equipped with qualified and experienced management and staff, but few of them employ insurance or risk managers though some use the services of insurance brokers. Hence the demand for adequate insurance covers varies, sometimes considerably, from a contractor to another.

5.1.10 In compliance with the insurance requirement clauses in the contract conditions the project management invites quotations from a few underwriters for the main covers required in general terms by these conditions. Insurers' rates in most cases vary and if insurers use different terms of cover varying in scope, deductible etc., their rates may vary widely. The management with lack of experience in insurance may decide in favour of the lowest bid. Due to the fact that the insurance clauses given in the contract lack clarity¹⁷, parties to the contract may be confused by the various explanations given to such clauses if they are referred to for the purpose of checking the insurance policies.

5.1.11 Practice has shown that under-estimation of the risk involved arising from a contractor's limited experience, or lack of experience in the area, such as the case of an international contractor on his first project in the area, is an important factor in deciding on the scope of cover. As aforementioned, if no insurance expert exists among the management staff, insurance matters are given secondary attention and possibly incorrect ideas about the higher premium levels. This may lead to resorting in part to self insurance in spite of the fact that it is well-known to those working in the Arab Gulf States that insurance markets in the area are highly competitive¹⁸.

5.1.12 It has been found out in all the small insured projects and in the majority of medium and big projects that although at the time of preparing his bid the contractor checks market prices of materials to ascertain the correct figures to be included in his bid, insurance cost is estimated either arbitrarily or by comparison with a previous project insured at some time in the past, without proper consideration of differences in the risk or the limits etc. With the tendency to endeavour to present the most competitive bid, the result would be that estimation of the insurance cost is in most cases on the low side and is not really sufficient to buy an adequate insurance cover. The inevitable outcome is squeezing insurers to reduce the premium, which frequently results in cutting corners and restricting coverage.

5.1.13 In the absence of properly worded insurance requirement clauses in the tender conditions and with lack of following up and checking of the

policies, the documents submitted by the contractor to certify insurance coverage are taken in most cases as adequate and complying with the requirements. It has been noticed that in many small projects insurance cost is neglected altogether at time of bidding. This obviously affects the demand for adequate insurance covers and results in a desire to minimise spending on insurance and to restrict cover taken to a bare minimum. Self insurance¹⁹, whether partial or total, often occurs in such cases, which negatively affects the demand for insurance covers.

5.2 Project insurance initiated mainly by insurance requirement clauses in contract conditions and through some regulations

5.2.1 Just as the contractor is interested to complete the work and leave the site, the employer is similarly interested to see the work completed and the contractor off the site in the shortest possible time. In the course of eliminating factors that may disturb smooth site operations, insurance presents itself as an efficient and reliable tool of protection. Insurance does not prevent the occurrence of the event insured against, but helps in restoring the subject matter to its condition before the occurrence of the said risk and in catching up with the work program, hence minimising the actual financial loss of the contractor and employer.

5.2.2 Planning the proper insurance coverage is initially the responsibility of the employer²⁰. Most experienced employers normally ensure that the project is insured against the risks that could seriously affect its completion, such as

loss or damage by fire, explosion, flood etc. The contract conditions issued on behalf of those employers therefore contain clauses that deal with the insurance covers required in connection with the project.

5.2.3 Conditions of contract are either 'general' or 'special'. General conditions are those which are set out in standard forms prepared either by one of the engineering institutions²¹, or by a major customer such as a government department. Special conditions are modifications or extensions which are prepared specially, either for the particular contract or to meet the peculiar circumstances of the project. In fact, conditions of contract are a reflection of the practicalities of the contract work, express the relationship between the employer and the contractor, and define explicitly what is to happen should that relationship be disturbed by the failure of either party to fulfil his obligations²². The part that concerns this thesis is that which deals with the contractor's responsibilities to take care of the work, materials etc. on the site, until the project is completed and handed over. It is also that part which deals with the liabilities of the contractor and the owner towards third parties and towards the workers, in case of bodily injury and/or property damage arising out of the works. Most standard forms of these conditions, though issued by the employer or their consultants, make it the responsibility of contractors to arrange the insurance covers required by the relevant clauses therein²³. These insurance covers required, basically aim at covering the aforementioned responsibilities and liabilities in case of a happening to the works, materials, plant, etc.

and/or to third parties or to the workers arising out of the execution of the contract. It is, however, to be noted that the contractual agreement evidenced in the wording of the conditions of contract greatly influence the allocation of risk in a project²⁴ between the employer and the contractor. This might have a bearing on the demand for insurance covers by the contractor.

5.2.4 The insurance requirement clauses in the aforementioned forms should be prepared by insurance experts to ensure that they are properly worded to cover the various fields of protection that the contractor and his employer need in the course of execution of the works. The services of insurance experts are therefore needed not only on the part of the contractor but also on the part of the employer and the consulting engineer. Insurance experts are able to study and identify the various risks that the employer, consultant or contractor may be exposed to and to recommend suitable covers in respect thereof. They may also advise on other insurance matters connected with the project such as follow up and settlement of claims with insurers and monitoring any material change in the risk so as to ensure that appropriate adjustments to the insurance cover are made in time. An insurance expert must also be consulted whenever the insurance requirement clauses in the standard forms are to be modified²⁵.

5.2.5 In the Arab Gulf Countries the most important employers are the governments. They actually initiate and finance almost all important projects. The practice is that certain governmental departments look after these projects according to their specialisation, e.g. public

works ministries supervise civil construction work and so on. Whilst these departments have now gained enough experience to handle the job of supervision of most small and medium size normal projects, it is the usual practice to employ the services of consulting engineers to make use of their expertise in most medium and big projects or any project of a special nature.

5.2.6 Many of these government departments have their own standard forms of contract conditions²⁶. These standard forms are used for the majority of projects such as projects of a recurring nature and all other projects with no peculiar characteristics or projects which do not require specially worded contracts. Although these standard forms contain clauses that deal with the insurance covers thought suitable for these projects, frequently these clauses are worded in a vague and ambiguous manner which clearly suggests that no insurance experts were consulted at the time of their preparation. Thus, most of the insurance covers demanded in compliance with such clauses do not provide adequate coverage.

5.2.7 The bodies supposed to follow up and check the insurance policies submitted by the contractors are in many cases an accounts section in the government department that looks for a document called "insurance policy" to complete the file before the first payment is authorised. In most cases the scope of cover under these policies is never checked, sometimes because of absence of a specific system of check up but almost always because of insufficient or even total lack of experience to do so. In an endeavour to overcome this shortfall one of the important government

departments²⁷ issues a letter to the insurer after the receipt of the insurance policies, that the department considers the policies to cover all the risks that the contractor is made liable for under the terms of their contract with the contractor. Clearly this is an additional complication because the letter assumes that the policy provides a cover which the insurer neither intended to provide nor asked for by the contractor at time of issue of the policy. In the absence of a properly worded contract and a policy that adequately reflects the intentions of the parties involved, insurers, contractors and employers cannot easily resolve among themselves such problems.

5.2.8 In many cases insurance of the project is left to the last moment when the submission of a "policy" is required to authorise the first payment to the contractor. Because of lack of time then available to both parties the insurer and the contractor take hasty decisions, which may lead to accusations later on, of non-disclosure²⁸ or misrepresentation²⁹. Without in-house proper advice on insurance matters the engineering or accounting staff of the contractor who usually handle insurance matters cannot fully appreciate the needs of the insurer to obtain full details of the project. Their experience and background in such matters are limited and their natural behaviour is to save in every expenditure and in particular in the insurance premium which they believe to be unnecessary, or for which there may appear to be no immediate return³⁰.

5.2.9 Most of the small private projects in the Arab Gulf Area are not given the necessary attention, as far as risk evaluation and insurance are

concerned. The employer's main concern is to find a contractor who will do the work at a low cost. No uniform mode of relationship exists between employers and contractors. In many cases no written agreement is made. The basis of the contract ranges from the turnkey job to a labour supply contract. In some cases the employer carries out all the work from a to z including the labour supply. In such cases insurance covers are neither demanded in compliance with a contract conditions, as is the case with properly written contracts, nor demanded through the initiative of the employer or the contractor due to lack of insurance awareness.

- 5.2.10 Projects with peculiar characteristics and many of the big projects are normally awarded to international contractors who have been pre-qualified to bid for these types of projects. The employer or his consultants may find it suitable to introduce alterations to their standard forms of contract or they may use a form particularly tailored for the project in question. These contracts normally contain insurance requirement clauses based on an International form³¹.
- 5.2.11 Insurance covers in many Gulf States are not obtained through obligations emanating from laws and/or regulations. Legal requirements for having insurance covers vary from one state to the other.
- 5.2.12 In Saudi Arabia no legal requirement for any insurance cover exist.
- 5.2.13 In Bahrain, Qatar, United Arab Emirates and Oman³², the only legal requirement with regard to insurance is to cover motor traffic liability³³.

5.2.14 In Kuwait the insurance covers legally required are a) motor traffic liability cover³⁴, b) all risks, workmen's compensation and third party liability covers for buildings under construction. The regulations also require a professional indemnity policy in respect of certain buildings under construction³⁵.

5.2.15 The insurance covers under (b) above were initiated in Kuwait by the increasing number of uninsured losses in small private projects, the increasing demolition and reconstruction works in congested areas without any form of insurance, the increasing awareness of the risks involved, which drew the attention of the authorities to the necessity of insurance covers. Decisions were therefore taken to make it compulsory for construction works to be insured. The contractor has now to obtain a permit from the Municipality before commencing building work on the site. Such permit is not given unless the contractor submits the policies referred to in (b) above. In fact Article 8 of the "Decree Regulating Building Works" issued in Kuwait on 27.5.1979 reads:

"No construction permit shall be awarded unless the applicant for permit submits an all risks insurance policy for the building covering the period of construction up to the date of issue of the electricity installation certificate.

Insurance shall also be effected for the soundness of the design prepared by licenced engineering offices for buildings that are big or of complicated constructive design, as well as the design prepared in accordance with engineering theories recognised by the Municipality."

5.2.16 Due to lack of adequate definition of the scope of the cover required in the above text most of the insurance policies submitted did not provide

adequate cover, though they were recognised by the Municipality as sufficient for the issue of a permit to the contractor for commencing work on the site.

5.2.17 On 14.4.1985 "Decree No. 30 Regulating Building Works" was issued requiring for the first time a cover for the workers and for third parties in addition to the CAR cover. It reads:

"Insurance shall be effected for the soundness of the design prepared by licenced engineering offices for all building complexes and for other big buildings of complicated constructive design assessed by the department concerned.

Land boundaries shall not be marked and construction shall not be permitted until the contractor submits an insurance policy covering the building against all risks, the labourers, the pedestrians and the neighbours during the period of construction until the issue of the electricity installation certificate."

5.2.18 In an endeavour to find out if similar municipal or other legal requirement for construction insurance covers exist in Europe two countries have been checked for this purpose; they are West Germany and Italy. Confirmations have been received from both countries that no such requirement exists other than in respect of public/state owned enterprises in Italy that are obliged to obtain a CAR/EAR cover prior to proceeding on civil or mechanical construction³⁶.

5.2.19 An instance of legislation which indirectly imposes a virtual compulsion to insure in respect of liability is the U.K. Finance (No.2) Act 1975. To deal with the problem of possible tax evasion in the construction industry the Act, by regula-

tions, imposes a set of requirements which, if not fulfilled, will oblige a principal to deduct tax from payments for work under construction contracts unless an income tax exemption certificate has been issued by the Inland Revenue.

One of the requirements before the issue of such a certificate is that there must be in force a policy covering the applicant's relevant public liability in respect of bodily injury or disease. The cover must not be less than £250,000 in the aggregate. Property damage is not required to be covered³⁸.

5.2.20 Construction insurances in the Arab Gulf Area are therefore mainly initiated by the insurance requirement clauses in the contract conditions wherever properly written contracts exist. In almost all other cases the demand for such insurances depends entirely on the initiative and awareness of the principal and/or the contractor. The State of Kuwait stands out as an exception in the area with governmental experience and foresight evidenced in municipal intervention to require various types of insurance in connection with building projects. In doing so the Municipality seems to have taken full consideration of the prevailing practices and environment and have taken practical and gradual steps to educate the public about the importance of insurances in connection with these projects.

5.3 Identifying risks connected with a construction project

5.3.1 The contractor is usually made responsible, by the terms of his contract with the employer, for the

safety and stability of all operations connected with the project. He is required to make good any loss or damage to the works due to any risk other than certain specified risks. His knowledge of the possibility of encountering difficulties due to the various risks is an important factor affecting his demand for adequate insurance covers. For proper understanding of the various risks that may affect the works, these risks are divided into two main types:

- The first includes those that may cause direct material loss or damage to the works, constructional plant, materials or temporary buildings. Such risks will be referred to as "physical hazards".
- The second includes those that may disturb the work programme without necessarily causing a direct physical loss or damage. Such risks will be referred to as "other hazards".

5.3.2 Examples of "physical hazards" that may affect construction operations:

- hazards of accidental nature, such as fire, explosion and impact;
- hazards of intentional nature, such as arson, theft, burglary and malicious damage;
- hazards of uncontrollable nature, such as war, revolution and act of foreign enemy; and
- hazards caused by an elemental peril, such as earthquake, storm, tempest, flood and lightning.

5.3.3 Examples of "other hazards" that may affect construction operations:

- moral hazards such as bad management, incompetence and inefficiency;

- commercial and financial hazards such as market fluctuation, inadequate contract price, loss of money, dishonesty of employees and consequential losses;
- political hazards such as nationalisation and confiscation; and
- liability hazards such as liability to third parties and/or to workers for property damage and/or bodily injury.

5.4 Planning the system of protection

5.4.1 The experienced contractor is aware that any protection plan against the aforementioned hazards must basically consider what can reasonably be insured against. In practice these hazards are either:

- insurable under the customary covers issued by insurance companies and similar organisations;
- insurable by specialised institutions such as the E.C.G.D. (Export Credits Guarantee Department) in the U.K. and I.A.I.G.C. (Inter Arab Investment Guarantee Corporation) in the Arab Gulf Area; or
- uninsurable in principle.

5.4.2 Hazards that are insurable under customary covers issued by insurance companies are basically of accidental nature but include also a wide range of other risks.

Examples are:

- Fire, explosion, impact;
- Theft, burglary, malicious damage;
- Earthquake, storm, tempest, flood, lightning;
- Loss of money, dishonesty of employees, consequential loss;

- Strikes, riots and civil commotion as extension to basic cover is in respect of land-based property;
- War, strikes, riots and civil commotion during transportation of materials, equipment etc.

- 5.4.3 It is worth pointing out that through special arrangements with the A.W.R.I.S. (The Arab War Risks Insurance Syndicate), war etc. risks during inland transport, in respect of the vehicle and goods, are now covered by the national insurance companies of the Arab Gulf Countries. This new development in the insurance practice in the area is an extension to the customary covers.
- 5.4.4 Hazards that are insurable by specialised institutions include:
- Revolution, war on land, etc.;
 - Nationalisation, confiscation of land-based property.
- 5.4.5 Hazards that are uninsurable in principle include:
- Arson (if caused by the insured himself);
 - Bad management, incompetence, inefficiency;
 - Market fluctuations, inadequate contract price.
- 5.4.6 It is, however, to be noted that uninsurable hazards are sometimes the indirect cause of an insurable one. For example, bad management on the site reflected in inadequate safety measures may cause serious fire damage or encourage theft and burglary. Incompetence of the contractor evidenced in bad workmanship may result in collapse, explosion etc. in the contract works.
- 5.4.7 Contract conditions normally require in general terms the contractor to insure against the major

part of the hazards that such conditions make him liable for and that are insurable under customary covers issued by insurance companies; these covers may be grouped under three main headings³⁹:

- All risks cover in respect of the works, the materials and the constructional plant, equipment and machinery;
- Third party liability cover in respect of bodily injury and/or property damage to third parties;
- Workmen's Compensation insurance covering the liability of the employer at law for death and/or bodily injury to employees in the course of their work.

5.4.8 . It is obvious that the intention of the insurance requirement clauses in the properly worded contract is to require the widest possible insurances which if properly arranged would cover a wide range of perils which a project may be exposed to and for which the contractor is made liable by the terms of his contract with the employer. In the Gulf Area however, and particularly in connection with projects owned by individuals and small partnerships, it is usually left to the initiative of the contractor to:

- Arrange for a very limited cover only, referred to as the basic cover, and self-insure a portion of the risk; or
- Arrange for an adequate protection under those main covers specifically requested in general terms by the insurance clauses in the contract conditions; or
- Draw up a more comprehensive protection plan by covering also the balance of risk not specifically requested by the contract conditions such

as the risk of loss or damage to materials, equipment, machinery etc. during transportation by sea, air or land to the site, and such as loss of money, dishonesty of employees etc.

Unfortunately, in many cases the initiative of the contractor falls short of demanding adequate insurance covers, partly due to lack of proper advice and insurance awareness and partly due to his desire to save in the insurance premiums.

5.4.9 The contractor is, however, relieved from any responsibility for loss and/or damage caused by any of the excepted risks listed in the contract conditions⁴⁰, but he is not relieved from responsibility for loss and/or damage due to any other risk even if such other risk is uninsurable⁴¹. The employer however, in his search to protect himself also, normally requires the contractor to submit a performance bond for a certain percentage of the contract value but valid during the whole construction and maintenance period⁴². This bond is issued by banks or insurance companies and guarantees a certain amount to be payable to the employer in certain cases as specified in the bond. Such cases include, for example, the inability of the contractor to complete the work due to reasons not beyond the control of the contractor, such as inadequate contract value resulting in bankruptcy of the contractor.

5.4.10 The method by which planning the system for protection is arranged has an important bearing on creating a demand for adequate insurance covers. It is also an exercise involving not only the contractor and the employer but also the consult-

ing engineers and project managers. Professional indemnity insurance covering the liability of these parties for any loss and/or damage due to professional negligence in design and/or supervision is an important part of the plan⁴³.

Reasonable adequate limits of liability for insurance purposes depend largely on the nature and size of the project.

- 5.4.11 Insurance of the project, for a number of years after completion and handing over, against the risk of collapse or threat of collapse is a rare case in the Arab Gulf Area. In Kuwait the contractor and the designer, each for his work, are made liable for these risks if occurred within ten years from completion and handing over of the project, but neither the Kuwaiti law which spells out the obligation nor any standard contract conditions form used in the area require the contractor or the designer to insure such liability⁴⁴. Hence, decennial liability insurance policies issued for projects in the area are seldom required.

5.5 Summary

- 5.5.1 Insurance covers for construction projects must provide a reasonably adequate protection. A study of the factors affecting the demand for such adequate insurance covers starts from the time of planning and tendering for the project. The contractor who is concerned to submit to the owner of a project the most attractive offer that will also leave him with a reasonable profit, finds himself achieving his goal through neglecting methods that would reduce his risks and potential liabilities.

- 5.5.2 Experience has shown that most contractors, employers and consulting engineers operating in the area do not employ insurance managers or use the services of insurance experts. When it comes to effect the insurance cover contractors depend entirely on their technical, commercial or administrative staff to negotiate and agree the terms and scope of insurance covers they deem suitable.
- 5.5.3 Insurance of construction projects in the Arab Gulf Area, other than Kuwait, is not mandatory. It follows that if the contract conditions do not contain insurance requirement clauses, as is the case for most small private projects, insurance is left to the initiative of the contractor or the owner. Practice has shown that such initiative is almost always below the required level. In Kuwait a decree issued by the Municipality in 1979 requiring the submission of an insurance policy covering the building to be constructed against all risks, was amended in 1985 to require also insurance of labourers, pedestrians and neighbours during the period of construction. The submission of this cover is a condition precedent to the issue of the construction permit, but it seems that the requirement is not fully adhered to, and most of the policies submitted do not provide adequate cover.
- 5.5.4 Risks connected with a construction project have been identified and categorised according to which are insurable under customary covers issued by insurance companies and which are insurable by specialised institutions, such as the E.C.G.D. in the U.K. and I.A.I.G.C. in the Arab Gulf Area, and those which are uninsurable in principle.

5.5.5 The study concerns the first group, i.e. risks insurable under customary covers. It briefly describes how they are dealt with under the insurance requirement clauses in the contract conditions and how in practice contractors handle them. The study also emphasises the importance of planning a proper system for protection which is a major factor affecting the demand for adequate insurance covers.

Chapter 5 References

- 1 P.D.V. Marsh (1981). Constructing for engineering and construction projects. Great Britain: Gower, 3.
- 2 ibid., 3-10.
- 3 ibid., 49,50.
- 4 ibid., 26.
- 5 See Supra note 2.
- 6 P.D.V. Marsh op. cit., 19-21.
- 7 R.W. Hayes (1985). Management of Risk in Engineering: Risk Allocation through Contractual Approaches. The Geneva Papers on Risk and Insurance, 10 (No. 37 Oct. 1985), 306-312.
- 8 J.D. Lambert and L. White (1982). Handbook of Modern Construction Law. USA: Prentice-Hall Inc., 198 and passim. See also John Uff (1981). Construction Law. London: Sweet and Maxwell, 109-111. See also P.D.V. Marsh, op. cit., 19-23.
- 9 P.D.V. Marsh, op. cit., 29,30. For competitive bidding see J.D. Lambert and L. White, op. cit., 30 and passim.
- 10 P.D.V. Marsh, op. cit., 46,47.
- 11 P.D.V. Marsh, loc. cit.
- 12 P.D.V. Marsh, op. cit., 49,50.
- 13 ibid., 65.
- 14 Alonzo Wass (1972). Construction Management and Contracting. New Jersey USA: Prentice-Hall Inc., 76.
- 15 Constructive Growth. Re Actions. Dec. 1982, 39,40.
- 16 A.B. Zahlan (1984). The Arab Construction Industry. London Croom Helm Ltd., 27.
- 17 See section 2 of chapter six.
- 18 Constructive Growth. Re Actions. December 1982, 39.
- 19 James L. Athearn, op. cit., 41-43. But self insurance practised in the area is not part of a scheme for handling the risk. It is a result of lack of insurance awareness and under-estimation of the risks involved.
- 20 Harold J. Rosen (1974). Construction Specification Writing, Principles and Procedures. New York: John Wiley and Sons Inc., 89. For "insurance planning" see also J.D. Lambert and L. White, op. cit., 164-166.

Chapter 5 References continued

- 21 e.g. Institution of Civil Engineers (I.C.E.),
Fédération Internationale des Ingénieurs - Conseils
(F.I.D.I.C.).
- 22 Marsh, op. cit., 85. See also J.D. Lambert and
L. White, op. cit., 27-28.
- 23 P. Madge (1982). The Conditions of Contract: Who is
Responsible for what? A paper presented at
International conference "Indemnity and Insurance
Aspects of Construction and Engineering Contracts"
London: Grosvenor Conferences.
- 24 R.W. Hayes. loc. cit.
- 25 Rosen. op. cit., 88.
- 26 e.g. Ministry of Electricity and Water - Kuwait -
Standard forms of contract condition issued by the
Central Tenders Committee for:
1. Civil works tenders
2. Supply and erection tenders.
- 27 Ministry of Public Works - Kuwait.
- 28 E.R. Hardy Ivamy. General Principles of Insurance
Law. op. cit., 132 and passim. A case of relevance
in fire insurance is Cf. Quin v. National Assurance
Co. (1939), Jo. and Car. 316, Ex. Ch.
The obligation to disclose all material facts applies
to the insurer as well, see Carter v. Boehm (1966) 3
Burr. 1905 (marine insurance).
- 29 ibid., 171 and passim.
- 30 Policies for builders (September 1980). Insurance
Mail, 210.
- 31 e.g. Conditions of Contract (International) for Works
of Civil Engineering Construction (F.I.D.I.C.).
- 32 Bahrain: The Bahrain Motor Vehicles (Third Party
Insurance) Regulation 1957, replaced by law
No. 3 of 1978.
Qatar: The relevant law is not issued yet, but in
practice the traffic department requires a
motor third party policy at time of
registration of a motor vehicle.

Chapter 5 References continued

- UAE: Motor Traffic Law of 1968.
- Oman: Law of motor vehicles compulsory liability insurance (not yet gazetted but in full force since 1st January 1983).
- 33 For compulsory motor insurance see E.R. Hardy Ivamy (1978). Fire and Motor Insurance. London: Butterworths, 292 and passim.
- 34 Law No. 67 of 1976.
- 35 Decree No. 30 of 1985 Regulating Building Works.
- 36 Confirmation regarding the W. German market has been received from the Munchener Ruck (Munich) and regarding the Italian market from the Assicurazioni Generali S.P.A. Trieste.
- 37 Eaglestone, op. cit., 47,48.
- 38 Eaglestone, loc. cit.
- 39 e.g. Conditions of Contract (International) for Works of Civil Engineering Construction (F.I.D.I.C.) March 1977 Clauses 21, 23, 24. (See Appendix A).
- 40 ibid., clause 20(2).
- 41 ibid., clause 20(1).
- 42 J.D. Lambert and L. White. op. cit., 134-135. See also Eaglestone. op. cit., 144-149. See also The Problems of Design and Construct Policies. Post Magazine. 8th August 1985: 2098,2099.
- 43 Eaglestone. op. cit., 83-92.
- 44 Kuwait Civil Code Articles 692-697.

6. ANALYSIS OF THE INSURANCE COVERS REQUIRED BY
THE CONTRACT FORMS MOST FREQUENTLY USED IN
THE ARAB GULF AREA

6.1 Forms of contract most frequently used in the area

6.1.1 The vast majority of medium and big size construction/erection works in the Arab Gulf States are governmental or semi-governmental projects. It follows that a few governmental departments throughout the whole area control most of the important projects. Each department usually adopts more or less the same contract conditions for the majority of the projects it controls. Where specialisation in the types of projects for a department has taken place, some sort of a standardisation in contract conditions has resulted for that sector. This has helped in reducing the number of different forms of wording used throughout the area. For instance, in Kuwait the Ministry of Public Works controls almost all civil engineering projects other than housing projects which is now controlled by the Ministry of Housing. The Ministry of Electricity and Water controls all projects in connection with power plants, desalination plants, electrification projects and the like, whereas the Ministry of Communication controls all telecommunication and telephone installation projects.

6.1.2 In addition to the local standard forms of contract conditions used by some government departments, contract conditions most frequently used in Arab Gulf States have been found to be based on the following international form:

"Conditions of Contract International
for works of
civil engineering construction"

Known as the F.I.D.I.C. conditions. This form has been approved by members of the following organisations:

- Fédération Internationale des Ingénieurs-Conseils;
 - Fédération Internationale Européenne de la Construction;
 - International Federation of Asian and Western Pacific Contractors' Associations;
 - Inter American Federation of the Construction Industry;
 - The Associated General Contractors of America.
- The F.I.D.I.C. form has been defined as "the form of contract used most frequently in overseas construction"¹.

6.1.3 Many of the forms examined that are used in the area are based on the 1973 edition of the aforementioned conditions with some based on the 1977 edition. Certain alterations have been noticed in the original version of the said conditions varying in importance reflecting each principal's/consultant's view of what is thought best to fit his needs. However such alterations in general have not materially improved the basic insurance requirements in the original form.

6.1.4 The liability, indemnity and insurance requirement clauses in the aforementioned conditions are briefly described hereunder:

6.1.5 The Contractor is made liable:

- To provide and maintain lights, guards, fencing and watching for the protection of the works and for the safety of others;
- To take full responsibility for the care of the whole of the works from commencement thereof until the date stated in the certificate of completion, and for any outstanding work undertaken by him to finish during the maintenance period;
- To repair and make good any damage, loss or injury occurring to the works due to any cause whatsoever other than the excepted risks detailed in the clauses, whilst the contractor is responsible for the care thereof;
- To hand over the permanent works at completion in good order and condition and in conformity with the requirements of the contract and the engineer's instructions;
- If required by the engineer, to repair and make good at the cost of the employer any damage, loss or injury happening from any of the excepted risks;
- For any damage to the works occasioned by him in the course of any operations carried out by him for the purpose of completing any outstanding work or complying with his obligations under the maintenance and defects clauses;
- To indemnify the employer against all losses and claims in respect of injuries or damage to any person or material or physical damage to any property whatsoever which may arise out of or in consequence of the execution and maintenance of the works and against all claims proceedings etc.;

- To indemnify the employer against any damages or compensations payable at law in respect of or in consequence of any accident or injury to any workman or other person in the employment of the contractor or sub-contractor and against all claims proceedings etc.

6.1.6 The Contractor is relieved from liability:

- If the loss, damage, or injury to the works is caused by an excepted risk as detailed in the clauses;
- If the destruction of or damage to the works or materials on or near or in transit to the site or any other property of the contractor used or intended to be used for the purpose of the works or to property whether of the employer or third parties or for, or in respect of, injury or loss of life which is the consequence of any special risk as defined in the clauses;
- If the loss, damage or injury to the works occurs after the date stated in the certificate of completion and not caused by the contractor in the course of his operations for the purpose of completing any outstanding work or complying with his obligations under the maintenance and defects clauses;
- To indemnify the employer against loss and claims for injuries or damage to persons or property in certain specified cases detailed in the clauses;
- To indemnify the employer against any damages or compensation payable at law in respect of or in consequence of any accident or injury to workman or other person in the employment of the contractor or sub-contractor if such accident or injury results from any act or default of the employer, his agents or servants.

- 6.1.7 The contractor shall be indemnified by the employer against all claims proceedings, damages, costs, charges and expenses in respect of matters referred to under 6.1.6 above.
- 6.1.8 It is obvious that the aforementioned clauses cover in addition to what the employer and the contractor would be liable for under the laws of the country, certain contractual liabilities necessitated by the nature of the contract between the parties.
- 6.1.9 To satisfy the employer that the contractor will be financially supported to complete the work in case of unforeseen occurrences that might affect his ability to continue the execution of the contract and for which the contractor is made liable the insurance requirement clauses in this form are designed to make the contractor responsible to insure:
- The works for the time being executed to the estimated current contract value thereof;
 - The materials for incorporation in the works at their replacement value;
 - The constructional plant and other things brought on to the site by the contractor to their replacement value;
- against all loss or damage from whatever cause arising, other than the excepted risks, for which he is responsible under the terms of the contract. The period of cover starts from the commencement of the works until the date stated in the certificate of completion and also during the maintenance period for any loss or damage occasioned by the contractor in the course of any operations carried out by him for the purpose of complying with his obligations under the maintenance and defects clauses.

- His liability, for at least the amount stated in the appendix to the tender, for any material or physical damage, loss or injury which may occur to any property including that of the employer or to any person including any employee of the employer, by or arising out of the execution of the works or in the carrying out of the contract, otherwise than due to matters detailed in the clauses. This cover shall include a provision to indemnify the employer for any claim for which the contractor would be entitled to receive indemnity under the policy but compensation is sought from the employer.

- Liability for any damages or compensation payable at law in respect or in consequence of any accident or injury to any workman or other person in the employment of the contractor or sub-contractor except an accident or injury resulting from any act or default of the employer, his agents or servants.

6.1.10 By effecting the insurance covers required, the contractor is still not fully relieved from all liabilities he shoulders according to the terms of the said conditions.

6.1.11 The conditions authorize the employer to effect and keep in force any such insurance and pay such premium as may be necessary and deduct the amount so paid "from any monies due or which may become due to the contractor" if the latter shall fail to effect and keep in force the insurances referred to above.

6.1.12 The relevant "general obligations" clauses which include the insurance requirement clauses in the aforementioned conditions (F.I.D.I.C.), 1977 edition, are reproduced in appendix (A) for ready reference.

6.2 Some general deficiencies in the international contract conditions most frequently used in the area

6.2.1 Clauses 19,20,22,24(1) of the F.I.D.I.C. form deal with the liability of the contractor to protect and take care of the works and to repair and make good any loss or damage thereto from any cause whatsoever and to indemnify the employer against all losses and claims in respect of injuries or damages to persons including the workers of the contractor or sub-contractor and to property whatsoever which may arise during the execution and maintenance of the works.

6.2.2 The contractor is, however, not made responsible for loss or damage to the works by any of the excepted risks listed under clause 20(2) and is relieved from liability for loss, injury or damage to persons or property in certain specified circumstances detailed in these clauses, including those arising out of any of the special risks as defined in clause 65.

6.2.3 The clauses that detail the extent and scope of insurance covers required to be taken by the contractor are clauses 21,23 and 24(2). Clause 21 requires the contractor to insure:

- the works;
- the materials for incorporation in the works;
- the constructional plant and other things brought on to the site by the contractor.

6.2.4 It will be noted that sub-clause 20(1) which deals with the contractor's obligations, restricts the contractor's responsibility to the works and ignores his obligations for other responsibilities such as care of materials, constructional plant and other things brought on to the site for the purpose of the work. This sub-clause seems to be content with the word "works" whereas it is clear from the requirement to insure the works, materials and constructional plant under clause 21 that the contractor's obligation to insure is inconsistent with and actually extends beyond the scope of the wording of sub-clause 20(1). This situation is partially altered in a form of contract issued by a governmental department in Kuwait² in that it provides for the contractor to be liable for materials supplied or owned by the principal or material and constructional plant owned by sub-contractors in case of loss or damage resulting from "theft, fire, deterioration or atmospheric hazards... etc.". It is, however, to be noted that this particular form requires the contractor to insure the works and temporary works, the materials, the constructional plant and other things brought on to the site by the contractor, but does not specifically require the contractor to insure his specific liability in respect of materials supplied by the principal and kept in the custody and care of the contractor for incorporation in the works. In *Waters V. Monarch Fire and Life Assurance Co.* (1856) it was held that:

"A bailee has an insurable interest in goods deposited with him for he is in danger by reason of an express or implied contract with the bailor, of being prejudiced by their destruction"³.

6.2.5 Clause 20(2) lists the excepted risks. Clause 21 requires the contractor to insure (a) the works, (b) the materials for incorporation in the works and the constructional plant and other things brought on to the site by the contractor. It is possible to argue that as the excepted risks are stated in a sub-clause relating to the permanent works only, they do not apply to materials stored on the site and to the constructional plant and other things brought on to the site inconsistent with clause 21 which requires the contractor to effect an insurance excluding the excepted risks not only for the works but for the materials for incorporation in the works and the constructional plant and other things brought on to the site by the contractor.

6.2.6 Under sub-clause 24(2) a sub-contractor is specifically allowed to insure his workmen separately from the main contractor provided his cover indemnifies the employer in respect of liability for such persons. This is inconsistent with the requirement under clauses 21 and 23 dealing with insurance for the works, materials, constructional plant and third party. The said clauses do not mention that a sub-contractor is allowed to insure separately, with the implication that the main contractor under these covers must effect on behalf of his sub-contractors some of the insurance covers required by the conditions, irrespective of whether they have in force adequate insurance covers, which may result in double insurance. If the word "contractor" in this context is meant to include "sub-contractors" also, this is not so understood by many contractors and employers, because many policies in the Arab Gulf Area are issued covering constructional

plant owned or hired by the main contractor only leaving each of the sub-contractors to shoulder the risk or insure his plant separately with possibly different insurers at different terms and facing the subsequent problems of taking action against each other in case of damage to their plant caused by other sub- contractors.

6.2.7 The wording of sub-clause 23(1) requires the contractor to insure, against his liability as laid down by clause 22, in respect of injury to any person and damage to any property whatsoever by or arising out of the execution of the works. This requirement as far as injury to any person is concerned is wide enough to include a cover for the contractor's own workmen⁴, and is inconsistent with the requirement under clause 24(2) that specifically requires the contractor or sub-contractor to insure their liability as laid down by sub-clause 24(1) in respect of their workmen for damages or compensation payable at law in respect of or in consequence of any act or default of the employer, his agents or servants.

6.2.8 The wording of the liability insurance requirement clauses does not specifically require the liability cover to be issued in the joint names of the employer and the contractor in a manner similar to the property insurance requirement clauses. It is clear in clause 23 that the cover is required in respect of the contractor's liability for any material or physical damage, loss or injury which may occur to any property including that of the employer or to any person including any employee of the employer. It is obvious that the wording requires the insurance policy to cover the employer's existing property

on the site under the liability section and not under the property section⁵. Whilst this may seem more equitable to the contractor in that he is not made liable for the employer's property unless he causes the loss or damage, many insurers would not wish to give this cover in the manner requested. Further, it is not always easy to prove that the loss of or damage to existing property in the care, custody and control of the contractor was not due to his fault. The requirement opens the door for litigation and lengthy proceedings which can be avoided if the requirement shows clearly that the liability cover is required to be issued in the joint names of the owner and the contractor and that it should include employer's property not in care, custody and control of the contractor. This can be achieved by including under the liability cover, the cross liability extension. Taking into consideration that one policy is normally issued in respect of the property and liability insurance covers the issue of the policy in the joint names applies to both sections of the cover if not specifically mentioned otherwise. Other employer's property on the site in the care, custody and control of the contractor is more properly covered as an additional item to the property insured under the policy.

6.2.9 In a case⁶ which was before the High Court in the U.K. in Nov. 1980 involving a dispute between Rowlinson Const. Ltd. and Insurance Company of North America, the contractor lost his claim for damage to a retaining wall on the site of the works which the contractor was supposed to maintain, repair and renew. The court decided that the retaining wall was not part of the

temporary or permanent works. The claim was not submitted under the third party section of the policy and it is not clear what the position would have been in such a case. If, however, the value of the retaining wall had been added to the value of the property insured under the policy the problem would not have arisen.

6.2.10 Careful attention must, therefore, be paid to the wording of the insurance requirement clause when incorporating such requirements, so that clarity and practicality are achieved⁷ and the exact scope of cover intended is precisely drawn up.

6.2.11 Clause 21 specifically requires the insurance of the works, materials, constructional plant and other things brought on to the site to be "covered during the maintenance period for loss or damage arising from a cause occurring prior to the commencement of the period of maintenance". Clause 23 however, does not set any limit as to the duration of the cover⁸ and does not specifically require the third party insurance to be valid during the maintenance period. It merely requires the contractor to:

"insure against his liability for any material or physical damage, loss or injury which may occur to any property including that of the employer or to any person including any employee of the employer by or arising out of the execution of the works or in the carrying out of the contract".

If the aforementioned underlined phrase is meant to include the maintenance period also, it is not so understood by many contractors, employers or insurers, and in fact many policies issued in the Arab Gulf Area do not provide third party

liability cover during the maintenance period. It would, therefore, be clearer if this cover were specifically required for third party liability section as required for the works etc. section.

6.2.12 Ambiguity also arises in respect of the cover required during the maintenance period under the wording of clause 21. The cover required needs to be more clearly set out for the works on the one hand and for the constructional plant on the other. The wording treats both items similarly by implying that the cover required during the maintenance period is identical for the works and for whatever from the constructional plant is left on the site. The wording rightly limits the cover for the works during the maintenance period to loss or damage arising from a cause occurring prior to the commencement of the period of maintenance and to any loss or damage occasioned by the contractor in the course of any operations carried out by him for the purpose of complying with his obligations under the maintenance and defects clauses 49 and 50. On the other hand, the wording does not clearly state what seems to be necessary for the constructional plant cover during the maintenance period, that it should be the same as that during the construction period⁹. This may account for the fact that contractors do not insure their plant/machinery used in connection with the project during the maintenance period, as shown in chapter nine.

6.2.13 Conditions of a contract issued by some governmental departments in Kuwait¹⁰ reverse the aforementioned situation and require the insurance cover for the works and the constructional plant to continue covering the same risks during the

construction and maintenance periods until final acceptance. In practice, this type of requirement has not been adhered to. Yet another form issued by the same governmental department in Kuwait¹¹ extends the period of cover to commence from the time of shipment of the "equipment" or the time it becomes the property of the owner, whichever shall first occur, until final acceptance. The risks to be insured against are, "deterioration, fire, theft, and ocean perils or other risks". It is obvious that such form is ambiguous and far from clear that it provides the customary covers, though it provides for a marine cover neglected by most other forms of contract conditions used in the area.

6.2.14 Clause 21 requires the contractor to insure "... against all loss or damage from whatever cause arising, other than the excepted risks, for which he is responsible under the terms of the contract...". Some ambiguity may arise due to the fact that certain standard policy wordings extend the cover to include some of the excepted risks referred to in the said clause¹². A question may then arise whether the contractor has an insurable interest¹³ in such cases, particularly as he has no responsibility by virtue of specific wording in the conditions of his contract with the principal. In *Lucena V. Craufurd* (1806) it was held that "A person has an insurable interest in a thing if he will be prejudiced by its loss"¹⁴.

6.2.15 The insurance requirement clauses do not touch upon the important problem faced in practice in connection with parts of the work completed and put into use before a certificate of completion is issued¹⁵. This frequently occurs in road

construction projects. Impracticability of the wording is apparent in the requirement to keep the contractor responsible for the works until the date shown in the certificate of completion and exclude from such responsibility use or occupation by the employer if, such use or occupation has caused the loss or damage. To prove that the cause of loss/damage was solely due to the use or occupation of the employer may in practice be difficult. It would be more in line with practical needs to commence the operational insurance on the part of the works completed if used or occupied by the employer irrespective of the date stated in the certificate of completion. It is worth pointing out that under most CAR policies the liability of the insurer automatically expires in respect of any part of the work put into use by the employer even if a completion certificate is not issued yet.

6.2.16 Insurance requirement clause 21 requires the works to be insured

"to the estimated current contract value thereof or such additional sums as may be specified in part II in the Clause numbered 21, together with the materials for incorporation in the Works at their replacement value"¹⁶.

The clause also requires the constructional plant etc. to be insured to their replacement value. In addition to the obvious inconsistency in the requirement to insure the works for the current contract value thereof, whereas the materials for incorporation therein and the constructional plant for their replacement value, it may be found that the current contract value is not an adequate limit for insurance purposes. If the term

"current contract value" is intended to recognise the escalation of values¹⁷ this is not so understood by employers and contractors, as in fact the policies issued in the Area do not reflect this meaning and the cover thereunder is specifically limited to the contract value. Most contracts in the Arab Gulf Area are fixed price contracts. It follows that in contracts covering a period of some years the contract value does not necessarily represent the replacement value of the works, particularly towards the end of the contract period. In such cases a loss at such time would not be fully compensated by the insurance. It is, therefore, more practical to cover the works at the replacement value thereof irrespective of the contract value¹⁸. In almost all cases the contract value is affected by competition among contractors and by market value of materials at the time of bidding. Although an inflation factor should have been included in the calculation of the contract value, it is still arguable that it is extremely difficult to forecast accurately inflation percentages for periods of contracts extending up to three or four years or even more.

- 6.2.17 In a report prepared by a working party on CAR and EAR insurance in developing countries by the International Machinery Insurance Association, several points have been raised on the subject of the "contract value" among which are¹⁹:
- a. In the case of contracts of long duration, some positive means must be provided for, to uplift the sum insured.
 - b. Re-assessment of value with adjustment of sum insured and premium at 6 or at most 12 monthly intervals and certainly prior to testing, i.e. the time when full value is at risk, should be insisted upon.

- 6.2.18 Some of the forms of contract used in the area have altered this requirement for the insurance of the works²⁰. These forms require the contractor to insure full value with no mention of the contract value or the method of estimation of the full value throughout the contract period.
- 6.2.19 Insurance requirement clause 21 requires the cover for the works, material and construction plant to be effected "for the period stipulated in clause 20(1)". The said period starts "from the commencement of the Works until the date stated in the certificate of completion for the whole of the Works". If this phrase is construed to mean from the start of the actual construction on the site²¹, it should be borne in mind that in many cases materials and plant are stored on the site for some time before the commencement of the works. In many cases the principal issues to the contractor a letter of intent a few weeks before the actual signing of the contract and commencement of the work. Soon after the issue of such letter the contractor usually starts preparing and transporting to the site materials and other things necessary for the works, including tools, plant etc. All these items are normally stored on the site. It is not practical to leave such material and plant uncovered by insurance until the contract is signed and the work actually commences. Even if the phrase "from the commencement of the works" is construed to mean from the commencement of unloading the materials etc. on the site, then transportation to the site whether by land, sea or air is not specifically required to be insured leaving the requirement for insurance short of the practical need. Further, problems can be faced in practice in respect of

loss or damage to materials etc. if such loss or damage is discovered on the site with no clear evidence when the loss or damage occurred, i.e. during transportation to or storage on the site. It is, therefore, more practical to require the cover to include transportation of materials etc. from the time such material etc. commences the trip to the site.

- 6.2.20 A form used by the Ministry of Electricity and Water in Kuwait for works of civil construction states under clause (2-20) that the period of cover should run from "before the stipulated date for the actual commencement of the works on site... and during the whole construction and maintenance period". Another form used by the same ministry for supply and erection works also states that the cover should continue "... until the date of final acceptance", which date is actually at the expiry of the maintenance period. These forms extend the cover required during the construction/erection period up to the end of the maintenance period without recognising that the scope of insurance cover during the latter period is different from that during the construction/erection period.
- 6.2.21 As mentioned earlier, the insurance requirements clauses referred to above seem to ignore insurance requirements for off site operations such as inland transit of goods²² as well as transport of material, plant etc. by sea, air or land to the site²³. Loss or damage to such items during transport may have the same effect on the work programme and on the contractor's capability to complete the work as when the said loss or damage occurs on the site. Transport insurance for

materials, plant etc. should be valid from the time of acquiring the insurable interest²⁴ thereof by the contractor or by the principal. Insurance cover during marine or air transport may include the risk of war, strikes, riots and civil commotions, thus relieving the principal from such risks at meagre premium for areas not subject to extra war premiums.

- 6.2.22 In fact the form used by the Ministry of Electricity and Water in Kuwait, for supply and erection requires the contractor to insure "the equipment" (referring to goods to be erected on site) "... for the benefit of himself and the owner for its full value against deterioration, fire, theft and ocean perils or other risks, from the date of shipping or the date it becomes the owner's property (whichever comes first) until the date of final acceptance". The wording clearly requires insurance cover during transport, but it is not clear whether the phrase "... or other risks" includes the risks of war etc.
- 6.2.23 It is, however, to be noted that the form used for works of civil construction by the same ministry does not contain the same aforementioned provision. It merely requires the insurance to commence from "... before the stipulated date for the actual commencement of the work on site...". The wording in this case is so vague and incomplete that it can hardly be construed to include transportation risks to the site.
- 6.2.24 Materials, plant etc. stored outside the site for the purpose of the works are not specifically required to be insured. In many cases the site is small and there is no area for storage or for

building thereon a workshop necessary for the repair or maintenance of constructional plant, machinery etc. In such circumstances these stores and other facilities would be sought off the site. Fire damage to an off site store could be as injurious to the works on the site as a fire on site. Insurance cover should be extended to cover off site storage, offices, workshops etc.

6.2.25 The impression obtained from studying the clauses dealing with the liability, excepted risks, and insurance, is that off site operations and their relative insurance covers are not given the necessary importance. This may, for example, cause doubt over the cover required by clause 23 "third party insurance" and whether it should include a cover for motor traffic liability which cover is usually taken separately from the general third party liability cover in connection with site operations²⁵.

6.2.26 Motor traffic liability is an obligatory cover in all the Arab Gulf Area with the exception of Saudi Arabia²⁶. This cover is not specifically required in forms of conditions most frequently used in the area nor in the original F.I.D.I.C. form. Motor traffic liability can involve huge amounts as in Kuwait, where the liability is unlimited by law for bodily injury as well as for property damage²⁷. In some Gulf States compensation for bodily injury is payable without proof of fault²⁸. In some of the Gulf states obligatory insurance does not cover property damage. It is, therefore, desirable that motor traffic liability insurance covering property damage as well as bodily injury be required by contract conditions.

6.2.27 Motor vehicles and other pieces of machinery used on and off the site are not specifically required to be covered whilst being off the site. In fact, almost all insurance policies covering the works and the constructional plant, equipment etc. limit the cover for the plant and equipment to the site only. If the batching plant, for example, is located away from the site of the works, a transit mixer is not required to be covered during the journey from the batching plant to the site. Its cover commences once it enters the site and expires when it leaves the site. It would seem more prudent to require a comprehensive insurance on all pieces of machinery off the site as well as on the site if used for the purpose of the work on site, or, alternatively, to extend the basic cover provided by the main policy covering site operation to include such pieces of plant and machinery when they are outside the site. It may be argued that motor vehicles licensed for road use are not to be considered as constructional plant even if used in connection with the work on the site. This is supported by an exclusion to this effect in many CAR policies. Therefore, a separate clause dealing with an insurance requirement for such vehicles may sometimes seem necessary.

6.2.28 Money insurance is also not required by any form of contract conditions. Cash in transit and cash in safe need to be insured to secure smooth operation on site²⁹. During weekly or monthly wage payments large amounts of cash are in transit or kept in offices overnight. If the contractor does not take the initiative to insure this risk, no cover is required to be taken by any form of contract condition used in the area.

6.2.29 Fidelity guarantee insurance³⁰ cover for cashiers, store-keepers purchase officers etc. is another cover ignored by all forms of contract conditions used in the area.

6.2.30 The contractor who is responsible for the design and construction of the work should be required to insure his professional liability as well. This cover is not required by any of the form of contract used in the area. The usual CAR policy, which includes liability cover does not insure the contractors professional liability for loss or damage to the works³¹.

6.2.31 It is, however, to be noted that the insurances specified in the aforementioned contract conditions are not necessarily an exhaustive list that the contractor should effect in his own interest. They are intended to be a list of insurances that the employer requires the contractor to effect:

- a. to protect the employer against possible liabilities;
- b. to ensure that the contractor does not become insolvent and thus unable to fulfil the contract.

It follows that while it may be acceptable if a large rich contractor decides not to insure in respect of damage to his own vehicles, it should not be acceptable if he decides not to insure in respect of the liability for bodily injury or property damage to third parties that may attach arising out of the use of such vehicles.

6.2.32 Careful consideration of the principles laid out in the preceding paragraph lead to another

important insurance cover completely neglected by all contract conditions used in the area. Decennial liability insurance is neither required explicitly nor implicitly in any form. It may be important to mention that the Kuwait Civil Code 1980 deals with this subject and makes the contractor and the engineer, each for his work, liable for the collapse or default whether total or partial of any building or fixed structure within ten years from the date construction is completed. The law goes on to say that any condition, relieving the engineer or the contractor of this liability or restricting it, is void³².

6.3 Contract forms analysed: field and scope

6.3.1 In section two of this chapter, some general deficiencies in the insurance requirement clauses in the F.I.D.I.C. form have been discussed. To understand and evaluate clarity, adequacy and practicality of the present insurance requirements in the other contract forms most frequently used in the area, compared with the F.I.D.I.C. form (1977 edition), the insurance requirement clauses in all these forms have been analysed and compared and the operating differences between each form and the others recorded.

6.3.2 In selecting the forms to be analysed, particular stress has been placed on those adopted by the governmental departments/ministries that are principals of most of the construction projects in the area. From Kuwait, the three forms used by the Ministry of Public Works and the Ministry of Electricity and Water have been analysed; the former ministry uses one form whilst the latter uses two sets of forms, one for supply and

erection contracts and the other for civil works contracts. In fact, under these three sets of forms the two ministries control in the State of Kuwait the majority of the projects in number and size. A similar position holds in the United Arab Emirates where the form used by the Public Works Department and the form used by the Water and Electricity Department have been analysed. In Bahrain the two forms most frequently used have been included in the study and it appeared that one of the two forms is the F.I.D.I.C. form 1973 edition with minor alterations, whilst the other is its 1977 edition without any changes. From each of Saudi Arabia, Qatar and Oman the form most frequently used in the country has been taken for analysis.

6.3.3 Other forms in use in the area conform more or less to those analysed. Exceptions are not considered of much weight for the purpose of this study.

6.3.4 The insurance requirement clauses in each of the forms investigated have been divided into four main sections as follows:

- The first is the requirement to insure the materials and plant during transportation to the site.
- The second is the requirement to insure the works, materials and constructional plant on the site.
- The third is the requirement to insure liabilities to third parties.
- The fourth is the requirement to insure the workers.

6.3.5 The requirement under each of the main sections has been examined closely and sub-divided into its various components, such as name of the insured, extent of cover, sum insured or limit of liability, period of cover etc. A comparison has then been made between the requirements and their components in all the aforementioned forms, showing the characteristics of each and its points of similarity and difference with the other forms.

6.3.6 To facilitate the reference to the forms studied the following simple code has been adopted hereinafter throughout the chapter.

	<u>Form</u>	<u>Code</u>
i.	The form adopted in Kuwait by the Ministry of Public Works.	KT 1
ii.	The form adopted in Kuwait by the Ministry of Electricity and Water for supply and erection contracts.	KT 2
iii.	The form adopted in Kuwait by the Ministry of Electricity and Water for civil contracts.	KT 3
iv.	The form adopted in the U.A.E. by the Public Works Department.	UE 1
v.	The form adopted in the U.A.E. by the Water and Electricity Department.	UE 2
vi.	The form adopted in Bahrain based on the F.I.D.I.C. 1973 edition.	BN 1
vii.	The form adopted in Bahrain based on the F.I.D.I.C. 1977 edition.	BN 2

vii.	The form adopted in Saudi Arabia.	SA
ix	The form adopted in Qatar.	QR
x.	The form adopted in Oman.	ON
xi.	The F.I.D.I.C. form 1977 edition.	FC

6.3.7 The insurance requirement clauses in the forms KT 1, KT 2, KT 3, UE 1, UE 2, BN 1, SA, QR and ON are reproduced in appendices B, C, D, E, F, G, H, I and J respectively for ready reference. The relevant clauses in the forms BN 2 and FC constitute part of the clauses reproduced in Appendix A.

6.4 Transport insurance requirements

6.4.1 The insurance cover during transportation of materials etc. to the site is normally the first cover the contractor needs after agreement with the principal. In contracts to supply and erect factories, power plants and the like, involving heavy machinery that needs months of fabrication and sometimes special methods of transportation, transport insurance is frequently negotiated long before erection/construction insurance.

6.4.2 In order to be adequate this insurance should cover all risks as far as customary and practicable and should commence from the time the goods leave the manufacturer's/seller's premises until they are unloaded on the site at final destination³³, although in certain circumstances the cover should commence when the goods are still at the manufacturer's/seller's premises. The transport operation may involve more than one stage of transportation and the insurance should cover all such stages as well as any temporary storage en route.

6.4.3 Practice has shown that many of the covers taken fall short of the aforementioned principles. Covers may commence at the time of loading on the conveyance and/or expire at the time of unloading at the harbour or airport at the country of destination³⁴, leaving the goods not insured during inland transportation and/or temporary storage in the country of origin and/or in the country of destination, with the consequent problems that arise in allocating at which stage of the transport operation a damage discovered after arrival occurred.

6.4.4 It is obvious that the insurance cover during transportation is as important as the erection/construction cover. Huge amounts may be involved in each shipment which, if lost uninsured, would possibly cripple the contractor. Yet seven out of the eleven forms under study do not require the contractor to effect this type of cover. In addition, practice has shown that even when this cover is required by the contract conditions, it is not always followed up to make sure that it has been taken up, or that, if it has been taken up, it covers all the perils that should be insured against.

6.4.5 The forms that contain a requirement to insure materials, plant etc. during transportation are those used by:

- The Ministry of Electricity and Water in Kuwait (in one of the two forms used thereby) -KT 2-
- The Water and Electricity Department in the UAE -UE 2-
- The Government of Qatar -QR-
- The Government of Oman -ON-

- 6.4.6 As aforementioned, the Ministry of Electricity and Water in Kuwait uses two different forms. The requirement for transport insurance is given only in the form used for contracts involving supply and erection, -KT 2- whilst the other form, used for civil works, -KT 1- does not contain any such requirement. The requirement in the former, is not given explicitly or separately. It appears under the clause dealing with the insurance of the "Equipment" on site, through fixing the period of insurance to commence "... from the date of shipping or the date it becomes the owners' property (whichever comes first) ..." No specific conditions applicable to the transport insurance are given in the form. The implication gathered from the wording is that this cover is to insure against the same risks and in the same manner as the erection cover on site.
- 6.4.7 The requirement under each of the forms QR and ON is a part of the clause dealing with the insurance of the works and although it is set out separately from the insurance requirement for the works and the plant on site, yet in the absence of specific conditions applicable thereto, the cover required appears to be to insure against the same risks and in the same manner as the erection/construction cover on the site.
- 6.4.8 In contrast with the above three sets of forms, the requirement for transport insurance appearing under the form UE 2 is given in a separate section detailing in clear terms the extent of cover required, the method of fixing the sum insured as well as the commencement and termination of the cover.
- 6.4.9 The other seven forms do not contain any explicit or implicit requirement for transport insurance.

- 6.4.10 The requirement in the aforementioned four sets may be divided into five components dealing with:
- Name of the insured
 - Interest to be insured
 - Extent of cover required
 - Sum insured
 - Commencement and expiry dates of the cover
- 6.4.11 The forms QR and ON require the cover to be in the joint names of the contractor and the employer, the UE 2 form does not contain any requirement in this respect and since it is the responsibility of the contractor to insure, it would be in order to infer that the contractor thereunder is allowed to insure in his name alone. The form KT 2 requires the contractor to "insure the equipment for the benefit of both himself and the owner". Due to the fact that in practice the ministry requires instead the policy to be issued in the joint names of the contractor and the employer, this requirement is to be taken as if it meant "in the joint names...". In practice however, this is not adhered to in most cases of transport insurance.
- 6.4.12 The forms QR and ON require the cover to be against all loss or damage from whatever cause arising (other than the excepted risks) for which the contractor is responsible under the terms of the contract. This requirement is more or less in line with that under the form UE 2 which, in more professional language, requires the cover to be subject to Institute Cargo Clauses "All Risks"³⁵.
- 6.4.13 The form KT 2 requires the "Equipment" covers to be against "deterioration, fire, theft, ocean perils or other risks". Although the cover against "ocean perils" is associated with marine

insurance, yet the jargon of such a set of risks as a whole is not common in the transport insurance field. It may be considered ambiguous and difficult for the contractor/insurer to comply with if a dogmatic construction of the words "deterioration" and "other risks" be attempted.

- 6.4.14 The interest to be insured under the four forms is described as either the "Equipment" or "All equipment and materials" or "All plant, equipment and materials". From the wording of the relevant clauses it can be seen that the three descriptions mean the same thing. It is, however, to be noted that the wording does not extend to include constructional plant, tools, machinery and the like which are not incorporated in the works³⁶.
- 6.4.15 The requirement dealing with the sum insured differs from one form to the other. The form KT 2 requires the cover to be for the full value of the equipment without specifying the basis of estimating such value, whilst the form UE 2 requires it to be "... for 110% of the C and F part of the contract price of the equipment and material to be supplied". The form ON requires the sum insured to be "the replacement value", whereas the form QR does not specify any basis for fixing the sum insured.
- 6.4.16 The commencement and expiry dates of the cover are given in different terms in each of the aforementioned forms. Form KT 2 states that cover should run "... from the date of shipping or the date it becomes the owner's property (whichever comes first) until the date of final acceptance". It is clear that no gap should exist between the

covers provided under the transport and erection policy.

- 6.4.17 The form ON requires the cover to commence "... from the time such equipment, material and other things are taken over by the contractor at the port, workshop or place of manufacture as the case may be". If the aforementioned phrase is construed to mean from the time the contractor assumes interest in the goods then it may be more proper if the wording states that the commencement date is the time the contractor acquires an insurable interest³⁷ in the goods. The form QR however contains the same requirement as the form ON with the addition of "... until delivery to the site and thereafter in accordance with sub-paragraphs (a) and (b)". Sub-paragraphs (a) and (b) deal with the insurance of the works and constructional plant on the site.
- 6.4.18 The form UE 2 is more comprehensive and clearer than the other forms in this aspect. It requires the cover to commence "... from ex-factory to jobsites till the beginning of erection, including storage period(s)". It goes on to say under the erection insurance requirement, "the insurance coverage between the transport and the erection all risks insurance shall be without any interruption".
- 6.4.19 It is, however, to be noted that the risks of war, strikes, riots and civil commotion or any other risk of similar nature are not required to be insured against by any of the aforementioned forms. These risks are shown as part of the excepted risks shouldered by the employer and for which the contractor is not made liable. It is a

well-known fact in the insurance field that these risks are insurable during the sea or air transport and the insurance rate of premium in normal circumstances is meagre and does not constitute a burden on either the contractor or the employer.

6.4.20 Summing up, a table has been prepared showing how each of the forms under study deals with the subject of transport insurance in general and with the various components of the requirement (where applicable) in particular. The exact wordings of the alternative requirements for each component under the various forms have been shown in sets under each component, giving at the same time in the table the particular form to which each alternative requirement belongs.

Table 6.1

Comparative analysis of the transport insurance requirements under the forms of contract most frequently used in the area

INSURANCE REQUIREMENTS		KUWAIT			UAE		BAHRAIN	SAUDI ARABIA	QATAR	OMAN	F.I.D.I.C. 1977	
		MPW	MEW		PMD	WED						
			S&E	CIVIL								
		KT1	KT2	KT3	UE1	UE2	BN1	BN2	SA	QR	ON	FC
Name of insured	i) Contractor and employer		KT2							QR	ON	
	ii) No requirement to insure in the joint names					UE2						
Extent of cover	i) Against all loss or damage from whatever cause arising for which the contractor is responsible under the contract (the requirement links this cover with the EAR cover)									QR	ON	
	ii) Against deterioration, fire, theft, ocean perils or other risks		KT2									
	iii) Against all risks according to "I.C.C. All Risks" including theft, pilferage, loss and/or damage caused by sea-fresh-rainwater, condensation, hooks, mud, oil and/or other cargo, fire; including ordinary breakage; including bonding, denting and twisting; including rust and/or oxidation however caused						UE2					
Interest	i) The equipment		KT2									
	ii) All equipment and materials					UE2						
	iii) All plant, equipment and materials for incorporation in the works									QR	ON	
Sum insured	i) For its full value		KT2									
	ii) For its replacement value										ON	
	iii) For 110% of the C and F price of equipment and material					UE2						
	iv) No specific method of valuation given									QR		

Table 6.1 (continued)

INSURANCE REQUIREMENTS		KUWAIT			UAE		BAHRAIN		SAUDI ARABIA	QATAR	OMAN	F.I.D.I.C. 1977
		MPW	MEW		PMD	WED						
			S&E	CIVIL								
Period of cover		KT1	KT2	KT3	UE1	UE2	BN1	BN2	SA	QR	ON	FC
		i) From the date of shipping or becoming the owner's property (whichever comes first) until the date of final acceptance (the requirement links this cover with the EAR cover ii) From the time of being taken over by the contractor iii) From the time of being taken over by the contractor until delivery to the site iv) From ex factory till the beginning of erection including storage periods		KT2								
						UE2				QR	ON	

- 6.5 The works, materials and constructional plant insurance requirements
- 6.5.1 All the forms under study contain a requirement to insure the works. In a few of these forms the requirement does not specifically mention the materials or the constructional plant.
- 6.5.2 The requirement for the insurance of the works, materials and constructional plant in the aforementioned forms may be divided into eleven components dealing with:
- Name of the Insured
 - Extent of cover
 - Period of full coverage
 - Cover during the maintenance period
 - Description of the works
 - Sum insured of the works
 - Cover for additional expenses
 - Insurance of the materials
 - Sum insured of the materials
 - Insurance of the constructional plant and machinery
 - Sum insured of the constructional plant and machinery.
- 6.5.3 The reason for splitting the cover during the whole contract period into a "period of full coverage" and "cover during the maintenance period" is that some of the forms require the comprehensive cover to extend beyond the date of completion and provisional handing over of the works until the date of final handing over which takes place at the end of the maintenance period.
- 6.5.4 The component "Insurance of the materials" is shown separately from the "description of the works" though the materials brought on to the site are normally for incorporation in the works. The

reason is that in some cases the materials or part thereof do not constitute part of the contract price, as when the employer provides the contractor with some materials of particular specifications to be incorporated in the works. The value of such materials should be added to the contract price for the purpose of the insurance cover.³⁸

- 6.5.5 The form UE 2 is the only form that requires the name of the engineer to be added as an additional insured, to the names of the contractor and the employer under this section of the cover. All the other forms are content with the joint names of the contractor and the employer.
- 6.5.6 The form KT 2 requires the cover to be against "deterioration, fire, theft and ocean perils or other risks". As explained under the "transport insurance", the jargon of this set of risks as a whole is not common in the insurance market. It may be considered ambiguous and difficult for the contractor/insurer to comply with if a dogmatic construction of the words "deterioration" and "other risks" be attempted.
- 6.5.7 The forms KT 1, KT 3 and UE 2 require the insurance cover for the works to be against all risks whatsoever. The wording of the requirement does not even exclude risks for which the contractor is not made liable under the terms of the contract. In practice, this requirement cannot be adhered to literally and its amendment seems to be necessary.
- 6.5.8 The rest of the forms require the cover to be against any loss or damage from whatever cause arising (other than the excepted risks) for which

the contractor is made liable under the terms of the contract.

6.5.9 The form UE 2 requires the aforementioned all risks cover to run "... during the various periods of construction, erection, commissioning and testing on completion". In cases where the certificate of completion under this form is issued after the commissioning and testing then this requirement conforms fully with the requirement under the other forms UE 1, BN 1, BN 2, SA, QR and FC. These other forms require the all risks insurance cover to run during the period of construction, which should conform with the period during which the contractor is liable for the works and described in contracts as either "... from the commencement of the works until the date stated in the certificate of completion", or "... from the commencement to the completion of the works".

6.5.10 The form ON however, specifically requires the all risks insurance cover for the works to run "... from the date of the commencement thereof until a date not exceeding 14 days from that stated in the certificate of completion". This requirement is not a normal F.I.D.I.C. form requirement and is taken from the ICE form used in the UK.

6.5.11 In contrast with all the aforementioned forms, the three forms KT 1, KT 2 and KT 3 require the all risks insurance cover for the works to continue beyond the completion date stated in the certificate of completion until the date of final acceptance which is at the end of the maintenance period. This is an unusual requirement and

practice has shown that in most cases it has not been adhered to.

- 6.5.12 The form SA conforms with the other forms as aforementioned under paragraph 6.5.9 during the period of construction but contains a peculiar wording when it describes the cover required during the maintenance period. The other forms' requirement during the maintenance period is for a cover against loss or damage from a cause occurring prior to the commencement of the period of maintenance and for any loss or damage occasioned by the contractor in the course of any operation carried out by him for the purpose of complying with his obligations under the contract. The SA form materially changes this concept and requires the cover during the period of maintenance to be against "loss or damage arising from a cause occurring prior to the termination of the period of maintenance". This requirement clearly means that the loss or damage during the maintenance period is covered whether or not caused by the contractor in the course of his operations in complying with his obligations under the contract. This form coincides in such requirement with the three forms KT 1, KT 2 and KT 3 with the application of the same remarks as under paragraph 6.5.11.
- 6.5.13 The form UE 2 requires the cover during the maintenance period to be against "... all acts, defaults, negligence and/or omission whatsoever of the contractor". It does not specifically require a cover "against loss or damage arising from a cause occurring prior to the commencement of the period of maintenance". This ambiguity may be construed as an omission rendering the maintenance

cover under the aforementioned form more limited in scope than similar covers under any other form included in the study.

6.5.14 The main item of the interest to be insured under the eleven forms is the works, described as,

"The works and temporary works executed"

or

"The Equipment"

or

"All supplies and services under the contract"

In practice the three descriptions are, in fact, used for the same subject matter of insurance.

6.5.15 The requirement for the sum insured on the works appears under the eleven forms in four different concepts as follows:

"To the current contract value"

or

"For its full value"

or

"To 110% of the full contract price"

or

"To the estimated contract price"

6.5.16 The BN 2 and FC forms require the sum insured to be the current contract value, whereas the form ON requires the sum insured to be the estimated contract price. The requirement in the form UE 2 is for 110% of the estimated contract price and all the other forms, other than the form KT 2, require the sum insured to be the full value of the works, based on the F.I.D.I.C. 1973 wording.

6.5.17 The requirement in connection with the sum insured under the form KT 2 is quoted hereunder:

"Equipment Insurance - the contractor shall insure the equipment for the benefit of both himself and the owner for its full value against..."

The form defines the term "Equipment" as:

"Equipment Includes all units, machineries, materials, building structures, plant and other equipment supplied according to specification of the contract other than the contractor's equipment".

At the same time the form defines the term "Works" as:

"Works - Includes all equipment and works to be done according to provisions of the contract. It may also mean site if indicated by the context".

The requirement under the form KT 2 to insure the equipment for its full value and ignoring other costs and expenditure included in the "works" falls short of the similar requirements under all other forms included in the study.

6.5.18 For the sum insured to be reasonably adequate it should cover the replacement value of the works at time of completion and handing over³⁹. In certain circumstances such as cases of inflation beyond the contractor's estimation, no one of the four alternative requirements in paragraph 6.5.15 may satisfy the need for an adequate cover. The majority of contracts in the Arab Gulf Area are fixed price contracts, the replacement value of which, towards the end of the project, may exceed the price fixed in the contract. It may also be

prudent, in calculating the replacement value at the time of completion, to include an inflation factor during the period of replacement especially in projects which require a long period of replacement.

6.5.19 Two forms of the eleven contain a requirement to insure an amount over and above the contract value to cover additional expenses not catered for in the calculation of the contract value. Those expenses are described in the two forms as "any additional expenses of and incidental to the demolition, removal, restoration or repair of any such loss or damage". The form QR requires for such an amount an addition of 10% of the full value of the works and temporary works executed, whereas the form ON requires for such an amount an addition of 15% to the estimated contract price of the works executed. All other forms do not contain any such requirement. Under these other forms, if the contractor does not take the initiative to insure such additional expenses his loss may not be fully compensated. Additional expenses other than removal of debris may take the form of extra charges for express freight, overtime, night work and/or for architects' fees following loss or damage.

6.5.20 With regard to the insurance of materials the basic rule is that materials included in the contract price need not be specifically mentioned when asking for the insurance cover required for the works if the sum insured is required to be the contract price. In some cases the employer or some other nominated party brings materials to the site for incorporation in the work. It is usually understood and agreed from the time of bidding for

the job that such materials will not be supplied by the contractor, whose responsibility will be to erect or to use such materials in the construction of the works. Therefore, the value of such materials is not included in the contract price. However, once such materials arrive at the site, and unless it is specifically agreed otherwise, it is normally the contractor's responsibility to take care thereof during storage and erection/construction operations. Therefore, the main cover for site operation should include the replacement value of such materials as an additional amount to the sum insured for the works⁴⁰.

6.5.21 With regard to the sum insured for the materials, three forms require the cover for the works to include the materials for incorporation therein at their replacement value. These are the forms BN 2, ON and FC. The rest of the forms require the sum insured on the materials be its full value with no definition of how to calculate such full value.

6.5.22 The form KT 2 describes the subject matter of insurance as "The equipment". The wording of the requirement clause is very ambiguous and needs to be set out more clearly. However, it is not clear whether the definition of the term "equipment" as quoted under paragraph 6.5.17 limits the units, machineries, materials etc. to those items supplied by the contractor under the terms of his contract.

6.5.23 The form UE 2 describes the subject matter of insurance as "all supplies and services under the contract". The sum insured is specifically required to be "110% of the full contract price".

It may be construed that the cover in respect of materials is limited to such materials included in the contract price only. The form can be considered lacking any specific requirement to cover the materials supplied outside the contract.

- 6.5.24 The forms QR and ON require both types of materials to be covered; i.e. the materials brought on to the site by the contractor which are part of the contract price and the materials supplied under separate contracts and not included in the contract price. Whereas the wording specifies the sum insured to be the full value for the first type of materials, it does not specify any method of fixing the sum insured for the second type.
- 6.5.25 In contrast with the foregoing, the remaining five forms contain a specific requirement that the insurance policy for the works should cover also the materials brought on to the site by the contractor, and ignore completely the reference to any materials brought on to the site by the employer or other party where such materials are not included in the contract price.
- 6.5.26 A specific requirement for the insurance of constructional plant on the site appears in nine of the eleven forms. In only three of the nine forms the sum insured is required to be the replacement value. In the remaining six forms the sum insured is required to be the full value. The two forms that do not contain any specific requirement to insure the constructional plant are KT 2 and UE 2.

6.5.27 An important omission in connection with materials and constructional plant insurance requirements is that no form specifically and in clear terms requires the cover to extend to include off site operations such as materials stored outside the site or plant and machinery once they are off the site, in a yard or workshop or during their journey to and from the site. It is, however, to be noted that the aforementioned omission refers to the insurance cover necessary to be valid after the termination of the transport operations and the expiry of its relative cover.

6.5.28 Summing up, a table has been prepared showing how each of the forms under study deals with the subject of works, materials and constructional plant insurance in general and with the various components of the requirement (where applicable) in particular. The exact wording of the alternative requirements for each component under the various forms have been shown in sets under each component, giving at the same time in the table the particular form to which each alternative requirement belongs.

Table 6.2

Comparative analysis of the works, materials and constructional plant insurance requirements under the forms of contract most frequently used in the area

INSURANCE REQUIREMENTS		KUWAIT			UAE		BAHRAIN		SAUDI ARABIA	QATAR	OMAN	F.I.D.I.C. 1977
		MPW	MEW		PWD	WED						
			S&E	CIVIL								
Name of insured	i) Contractor and employer	KT1	KT2	KT3	UE1	UE2	BN1	BN2	SA	QR	ON	FC
	ii) Contractor, employer and the engineer	KT1	KT2	KT3	UE1	UE2	BN1	BN2	SA	QR	ON	FC
Extent of cover	i) Any loss or damage for which the contractor is responsible under the contract				UE1		BN1	BN2	SA	QR	ON	FC
	ii) All loss or damage from whatever cause arising	KT1		KT3		UE2						
	iii) Deterioration, fire, theft and ocean perils or other risks		KT2									
Period of full coverage	i) During the period of construction of the works				UE1		BN1	BN2	SA	QR		FC
	ii) From commencement of the works until 14 days after the date in completion certificate										ON	
	iii) During the whole period of construction & maintenance	KT1	KT2	KT3								
	iv) During construction, erection, commissioning and testing on completion					UE2						
Main-tenance cover	i) Any loss or damage caused by the contractor in complying with his obligation under the contract				UE1		BN1	BN2		QR	ON	FC
	ii) Any loss or damage from a cause occurring prior to the commencement of the period of maintenance				UE1		BN1	BN2		QR	ON	FC
	iii) Any loss or damage from a cause occurring prior to the termination of the period of maintenance								SA			
	iv) During the guarantee period for all acts defaults, negligence and/or omissions whatsoever of the contractor					UE2						

Table 6.2 (continued)

INSURANCE REQUIREMENTS		KUWAIT			UAE		BAHRAIN		SAUDI ARABIA	QATAR	OMAN	F.I.D.I.C. 1977
		MPW	MEW		PWD	MED						
			S&E	CIVIL								
		KT1	KT2	KT3	UE1	UE2	BN1	BN2	SA	QR	ON	FC
Works	i) The works & (temporary works) executed	KT1										
	ii) The equipment	KT1	KT2	KT3	UE1		BN1	BN2	SA	QR	ON	FC
	iii) All supplies and services under the contract					UE2						
Sum insured	i) To the current contract value thereof							BN2				FC
	ii) For its full value	KT1	KT2	KT3	UE1		BN1		SA	QR		
	iii) To 110% of the full contract price					UE2						
	iv) To the estimated contract price										ON	
Additional expenses	i) Plus 10% of FCP to cover additional expenses									QR		
	ii) Plus 15% of FCP to cover additional expenses										ON	
	iii) No requirement to cover additional expenses	KT1	KT2	KT3	UE1	UE2	BN1	BN2	SA			FC
Materials	i) The materials for incorporation in the works		KT2					BN2			ON	FC
	ii) The materials brought on to the site by the contractor	KT1		KT3	UE1		BN1		SA	QR		
	iii) All supplies under the contract					UE2						
	iv) Specific requirement to cover materials supplied outside the contract									QR	ON	
	v) No specific requirement to cover materials supplied outside the contract	KT1	KT2	KT3	UE1	UE2	BN1	BN2	SA			FC
Sum insured	i) For its full value	KT1	KT2	KT3	UE1		BN1		SA	QR		
	ii) At replacement value							BN2			ON	FC
	iii) No specific description of the value of materials					UE2						

Table 6.2 (continued)

INSURANCE REQUIREMENTS		KUWAIT			UAE		BAHRAIN		SAUDI ARABIA	QATAR	OMAN	F.I.D.I.C. 1977
		MPW	MEW		PWD	WED						
			S&E	CIVIL								
Const. plant	i) The constructional plant & other things brought on to the site by the contractor	KT1	KT2	KT3	UE1	UE2	BN1	BN2	SA	QR	ON	FC
	ii) No specific requirement to cover constructional plant	KT1	KT2	KT3	UE1	UE2	BN1	BN2	SA	QR	ON	FC
Sum insured	i) For its full value	KT1		KT3	UE1		BN1		SA	QR		
	ii) At replacement value							BN2			ON	FC

6.6 Liability insurance requirements (other than to workers)

- 6.6.1 All the forms included in the study contain a requirement to insure against liability to third parties. The requirement is divided into eight components dealing with:
- Name of the insured
 - Scope of the cover
 - Some special conditions
 - Extent of the cover
 - Period of the cover
 - The cover required during the maintenance period
 - The limit of indemnity
 - Motor traffic liability
- 6.6.2 Although motor traffic liability is not normally covered under the same general liability cover for the works, yet it is included in this section since it deals with legal liability to third parties. Liability to the workers is, however, not included under this section but is dealt with separately, it being noted that all the forms contain a separate requirement to insure the workers.
- 6.6.3 The liabilities cover during the maintenance period is shown separately because one of the eleven forms contains a specific requirement for such cover, whilst many policies issued in practice do not contain such cover at all.
- 6.6.4 The forms that contain a requirement to insure in the joint names of the contractor and the employer are the forms KT 2, BN 1 and QR. The form UE 2 requires the name of the engineer also to be added as an additional assured. This is of particular importance because in the absence of a specific exclusion the cover includes liability arising out of professional negligence on the part of the

engineer. The form SA requires the cover to be in the joint names of "The employer, the contractor, the sub-contractors and agents".

6.6.5 Due to the requirement shown in paragraph 6.6.4 and to the fact that these five forms do not contain a requirement to indemnify the employer, it may be understood that the cover required is not limited to the contractor's liability only but extends to include that of the sub-contractors, employer and the engineer (as the case may be) arising out of their activities in connection with the works. This understanding is confirmed by the wording of those forms, which requires the insurance policy to cover any damage, loss or injury which may occur to any property or any person by or arising out of the execution of the works, without specifically limiting the cover to "the contractor's liability" for such damage, loss or injury, as is the case in three other forms mentioned hereunder.

6.6.6 The remaining six forms do not contain any specific requirement to insure in the joint names, which may imply that they restrict the cover required to the contractor's liability. In fact, three forms contain such a restriction but with a requirement to indemnify the employer. They are, the forms BN 2, ON and FC. The other three require a cover not specifically restricted to the contractor's liability. These are the forms KT 1, KT 3 and UE 1. One of these latter, UE 1, does not contain any specific requirement to indemnify the employer, whilst the other two, KT 1 and KT 3, contain such a requirement.

6.6.7 Ten out of the eleven forms under study do not specifically require the insurance cover to contain the cross liability clause⁴¹ whether or

not those forms require the insurance to be in the joint names of the employer and the contractor, ignoring that this omission may also affect other additional assureds such as the sub-contractors and render the insurance cover inadequate. The form that contains such a requirement is the form SA.

6.6.8 To summarise, it has been found that:

a. Five forms; KT 2, UE 2, BN 1, SA and QR

- Contain a requirement to insure in the joint names;
- Do not restrict the cover to "contractor's liability";
- Do not contain a specific requirement to indemnify the employer;
- Do not contain a requirement to include the cross liability clause in four of the five forms; KT 2, UE 2, BN 1 and QR.

b. Three forms; BN 2, ON and FC

- Do not contain a requirement to insure in the joint names;
- Restrict the cover to "contractor's liability";
- Contain a requirement to indemnify the employer;
- Do not contain a requirement to include the cross liability clause.

c. Three forms; KT 1, KT 3 and UE 1

- Do not contain a requirement to insure in the joint names;
- Do not restrict the cover to "contractor's liability";
- Do not contain a requirement to indemnify the employer in one of the three forms, UE1;
- Do not contain a requirement to include the cross liability clause.

- 6.6.9 It is, however, worth pointing out that in the cases where the requirement is to insure in the joint names of the contractor and the employer, and the wording does not clearly restrict the cover to the contractor's liability, the cover required by the insurance requirement clauses is wider in scope than the liability of the contractor as per liability clauses in some of these forms, due to the fact that the insurance cover is required to include the employer's liability as well.
- 6.6.10 Form KT 2 requires the insurance cover to be for the liability arising out of "any damage, loss or injury which may occur to any person working at the same site or adjacent to it..." the wording in respect of personal injury cover is so wide that it includes the workers of the employer and of the contractor as well. Two important omissions present themselves in the wording. The first omission is that the cover required is limited to personal injury and does not include property damage arising out of the work. The second omission is that the cover is limited to site operations and does not include liability arising on other premises used wholly or partly for the purpose of the works such as a workshop or a store.
- 6.6.11 All the other forms, with the exception of the form SA, require the cover to be for liability arising out of "damage, loss or injury which may occur to any property (including that of the employer) or any person (including any employee of the employer) by or arising out of the execution of the works (or temporary works) or in the carrying out of the contract." The first omission in the KT 2 form referred to in paragraph 6.6.10 is clearly avoided in all these forms. The

wording may also be construed to mean that the cover required is not limited to the site, thus avoiding also the second omission referred to above. Because of no specific reference to this hidden meaning many contractors and insurers omit to endorse their policies to include off site operations. The wording in respect of personal injury in these forms is so wide that it includes the workers of the employer and the contractor(s) as well.

6.6.12 Form KT 3 however, requires the liability cover to be so wide as not to exclude liability caused by the act or default of the employer. Although the form does not contain a requirement to insure in the joint names, it does not restrict the cover to the contractor's liability. Therefore, in an action taken against the contractor for liability arising out of the works, the contractor in this case may find himself obliged by a court judgment to pay the claim which might not be due to his fault.

6.6.13 The form SA contains a slight omission compared with the aforementioned other forms in that it does not include a specific requirement to insure the liability towards "the employees of the employer" in the same manner as the specific requirement to insure the liability towards the property of the employer.

6.6.14 The form UE 2 is the only form that requires in specific and clear terms that the third party cover "... shall also be valid during the guarantee period for all acts, defaults, negligence and/or omissions whatsoever of the contractor." It may have been noticed that this requirement specifically requires the cover during the maintenance period to be limited to the contrac-

tor's liability unlike the requirement for the cover during the construction period which does not contain such limitation. It is to be noted that this form is the only form that requires in clear terms the liability cover to be in respect of "any damage or injury occurring before all the work has been taken over..". Thus the specific requirement for a cover during the maintenance period as aforesaid is necessary.

6.6.15 All other forms do not specifically require that the liability cover should also be valid during the maintenance period. However, since these other forms require that the third party cover should be in respect of liability due to or arising out of the execution of the works or the carrying out of the contract, it may be implied that the expression "carrying out of the contract" includes all activities during the maintenance period in accordance with the terms of the contract. At this stage, the present wordings of the forms that require insurance to be in the joint names without specifically restricting the cover to the contractor's liability may present a certain ambiguity as to whether the liability cover during the maintenance period is required to be limited to the contractor's acts, defaults etc. or is required to include those of the additional insured as well. During the maintenance period the project is taken into use by the employer, and since most government projects in the area are not insured after completion and handing over, it would be advisable to specify in clear terms the extent and scope of the liability cover during the maintenance period. It may be worth pointing out in this connection that in practice many CAR/EAR policies have been issued with no liability cover whatsoever during the maintenance period.

- 6.6.16 The form KT2 does not specify any limit of liability for the third party insurance cover required thereunder. The forms BN 1, UE 2 and ON specify limits of at least the amount stated in the contract to be for each loss, the number of losses being unlimited. All other forms require the limit to be for at least the amount stated in the tender without specifying that this amount is for each loss or that the number of losses is unlimited. This requirement has led to the fact shown under Table 9.1 of chapter nine that many policies have been issued showing the same limit of indemnity in respect of each loss and in the aggregate.
- 6.6.17 The only form that contains a specific requirement to obtain "third party insurance for all vehicles and machinery used in the execution of the works" is the form SA. The wording does not limit the cover required to vehicles and machinery on site and it may be construed to mean that it includes as well motor traffic liability cover. No other form contains a similar specific requirement, but it may be seen from the wording of the relevant clauses in these other forms that the cover for liability arising out of the execution of the works includes liability caused by the use of constructional plant on the site.
- 6.6.18 Summing up, a table has been prepared showing how each of the forms under study deals with the subject of liability insurance in general and with the various components of the requirement (where applicable) in particular. The exact wording or the alternative requirements for each component under the various forms has been shown in sets under each component, giving in the table at the same time the particular form to which each alternative requirement belongs.

Table 6.3

Comparative analysis of the third party insurance requirements under the forms of contract most frequently used in the area

INSURANCE REQUIREMENTS		KUWAIT			UAE		BAHRAIN		SAUDI ARABIA	QATAR	OMAN	F.I.D.I.C. 1977
		MPW	MEW		PMD	WED						
			S&E	CIVIL								
Name of insured	i) Contractor & employer	KT1	KT2	KT3	UE1	UE2	BN1	BN2	SA	QR	ON	FC
	ii) Contractor, employer & the engineer		KT2			UE2	BN1			QR		
	iii) Contractor, employer, sub-contractors & agents								SA			
	iv) No requirement to insure in the joint names	KT1		KT3	UE1			BN2			ON	FC
Scope of cover	i) Cover in respect of contractor's liability							BN2			ON	FC
	ii) Cover not specifically restricted to contractor's liability	KT1	KT2	KT3	UE1	UE2	BN1		SA	QR		
Special conditions	i) Including indemnity to the employer	KT1		KT3				BN2			ON	FC
	ii) Including cross liability clause								SA			
	iii) No specific requirement for indemnity to the employer or cross liability clause		KT2		UE1	UE2	BN1			QR		
Extent of cover	i) Any loss, damage or injury to any property or person including property and employees of the employer			KT3								
	ii) Same as (i) above but excluding loss due to matters referred to in certain clauses in the contract	KT1			UE1	UE2	BN1	BN2		QR	ON	FC
	iii) Any loss, damage or injury to any property or person including property of the employer								SA			
	iv) Any loss, damage or injury to any person working at the site or adjacent to it		KT2									

Table 6.3 (continued)

INSURANCE REQUIREMENTS		KUWAIT			UAE		BAHRAIN		SAUDI ARABIA	QATAR	OMAN	F.I.D.I.C. 1977
		MPW	MEW		PWD	WED						
			S&E	CIVIL								
Period	i) Arising out of the execution of the works or the carrying out of the contract	KT1	KT2	KT3	UE1	UE2	BN1	BN2	SA	QR	ON	FC
	ii) Before all the works have been taken over due to or arising out of the execution of the work	KT1	KT2	KT3	UE1	UE2	BN1	BN2	SA	QR	ON	FC
Maint. cover	i) Cover specifically required during the guarantee period					UE2						
	ii) No specific requirement for cover during maintenance period	KT1	KT2	KT3	UE1		BN1	BN2	SA	QR	ON	FC
Limit of indemnity	i) For at least the amount stated in the contract	KT1		KT3	UE1			BN2	SA	QR		FC
	ii) For at least the amount stated in the contract per single accident but unlimited in all					UE2	BN1				ON	
	iii) No specific limit is required		KT2									
Motor liability	i) Specific cover for all vehicles and machinery used in the execution of the works								SA			
	ii) No specific cover for vehicles and machinery	KT1	KT2	KT3	UE1	UE2	BN1	BN2		QR	ON	FC

6.7 Workmen's compensation insurance requirements

6.7.1 Insurance of the workers is required by all the forms included in the study. The requirement contained in the relevant clauses links the scope of insurance cover to be obtained with the liabilities shouldered by the contractor(s) under the laws of the country. The labour law in each of the Arab Gulf States provides for certain specified amounts as compensation to the worker who is injured by and during his work. The amount of compensation differs from one state to the other.

6.7.2 Workmen's Compensation insurance policies issued in each state follow a certain pattern which frequently differs from those issued in the other states. For example, due to the fact that medical care is free in Kuwait most policies issued in Kuwait exclude medical expenses, whereas in other states the cover for medical expenses is either given as limited to a certain specified amount or unlimited. Further, many insurance policies limit the geographical scope of the cover to the site only.

6.7.3 The requirement in all the forms in respect of workers is divided into the following components:

- Name of the insured
- Scope of cover
- Extent of cover
- Period of cover
- Sub-contractors' workers

6.7.4 None of the forms included in the study specifically require the cover to be in the joint names. The wordings of the relevant clauses imply that the insurance policy should cover the workers of

the contractor(s) only. Therefore, all other workers of the employer or his agents should be covered separately by the employer or the engineer.

6.7.5 The cover required by the forms KT 2, KT 3 and UE 2 is in respect of damages or compensation payable at law in respect or in consequence of any accident or injury to any workman or other person in the employment of the contractor without specifically excluding an accident or injury resulting from any act or default of the employer, his agents or servants. This wording clearly requires the contractor's insurer to settle first any such liability claim and then endeavour to recover the amount so paid from the employer, if it can be proved to be due to the negligence of the employer or engineer. The other eight forms allow the insurance policy to exclude claims to workmen resulting from any act of default of the employer, his agents or servants.

6.7.6 The form KT 2 requires the cover to be "throughout the entire employment period". The wording of this requirement is loose and to avoid possible misinterpretation regarding injury occurring outside duty and outside the period of the contract it would be better to amend it to conform with the wording of all the other forms which require the cover to be "during the whole time that any person is employed by the contractor(s) on the works". This requirement clearly covers the periods of construction and maintenance and is not limited to the construction/erection site. It may also be construed to mean that the cover is valid only when the worker is on duty in connection with the works. This latter concept coincides with the requirements of the laws in the area⁴².

6.7.7 The requirement dealing with insurance of the workers is the only requirement specifically allowing sub-contractors to issue separate policies covering their own workers. This is apparent in ten of the eleven forms included in the study. In eight out of the said ten forms sub-contractors are allowed to insure the workers separately only if the employer is indemnified under the policy. The two other forms which are the forms KT 2 and SA do not contain the condition of indemnification to the employer. Form UE 2 does not contain any specific reference to sub-contractors' right to insure separately.

6.7.8 It is to be noted that none of the forms under study contain any requirement to indemnify the employer under the workmen's insurance cover, though five forms contain such a requirement under the third party insurance cover. Such a requirement under the workmen's insurance clauses appears in eight forms only when reference is made to the sub-contractors, if they choose to have their own separate covers for their workers. The employer is, however, protected by the relevant liability clauses in the forms under study, but for the insurance requirement clause to be consistent with the liability clause some alterations seem necessary.

6.7.9 Summing up, a table has been prepared showing how each of the forms under study deals with the subject of workmen's compensation insurance in general and with the various components of the requirement (where applicable) in particular. The exact wording of the alternative requirements for each component under the various forms have been shown in sets under each component, giving at the same time in the table the particular form to which each alternative requirement belongs.

Table 6.4

Comparative analysis of the workmen's compensation insurance requirements under the forms of contract most frequently used in the area

INSURANCE REQUIREMENTS		KUWAIT			UAE		BAHRAIN	SAUDI ARABIA	QATAR	OMAN	F.I.D.I.C. 1977	
		MPW	MEW		PMD	WED						
			S&E	CIVIL								
Name of insured	i) No requirement to insure in the joint names	KT1	KT2	KT3	UE1	UE2	BN1	BN2	SA	QR	ON	FC
		KT1	KT2	KT3	UE1	UE2	BN1	BN2	SA	QR	ON	FC
Scope of cover	i) The contractor's employees					UE2						
	ii) The contractor's and sub-contractor's employees	KT1	KT2	KT3	UE1		BN1	BN2	SA	QR	ON	FC
Extent of cover	i) Against workmen's compensation liability		KT2	KT3		UE2						
	ii) For damages or compensation payable at law in respect of any accident or injury unless resulting from any act or default of the employer	KT1			UE1		BN1	BN2	SA	QR	ON	FC
Period	i) During the whole time that any person is employed on the works	KT1		KT3	UE1	UE2	BN1	BN2	SA	QR	ON	FC
	ii) Throughout the entire employment period		KT2									
Sub-contractors	i) Sub-contractors allowed to insure separately only if their cover indemnifies the employer	KT1		KT3	UE1		BN1	BN2		QR	ON	FC
	ii) Sub-contractors allowed to insure separately		KT2						SA			
	iii) No specific requirement for sub-contractors					UE2						

6.8 Summary

- 6.8.1 Two important documents govern the extent of adequacy of the insurance protection for a construction project. The first is the contract conditions, and in particular the insurance requirement clauses therein, and the second is the insurance policy issued in compliance with these clauses. In this chapter the first document is dealt with.
- 6.8.2 In addition to the local standard forms of contract conditions used by government departments that are the major owners of projects in the area, contract conditions most frequently used in the area are international form known as the F.I.D.I.C. conditions 1973 or 1977 edition. By studying carefully the insurance requirement clauses in this form, several important deficiencies are pointed out which have had obvious effect on the scope of cover obtained under policies issued in compliance with these clauses. Some comparisons have also been made, at certain points of the study, with corresponding requirements in a few standard forms showing areas of dissimilarities and the effect thereof. Whilst the preface to the F.I.D.I.C. form states that some clauses therein "must be necessarily varied to take account of the circumstances and locality of the works", alterations effected have not, in general, introduced material improvement to the insurance requirement in the original version.
- 6.8.3 Ten of the contract conditions forms most frequently used in the Arab Gulf Area, as well as the F.I.D.I.C. form (1977 edition) have been analysed and compared and the operating differences between each form and the others recorded. In selecting the forms to be analysed, particular

emphasis has been placed on those adopted by the governmental departments/ministries that own the majority of the construction projects in the area. Other forms in use conform more or less to those analysed. Exceptions are few and not considered of much weight for the purpose of this study.

6.8.4 The insurance requirement clauses in each of the forms investigated have been divided into four main sections as follows:

- The first is the requirement to insure the materials and plant during transportation to the site.
- The second is the requirement to insure the works, materials and constructional plant on the site.
- The third is the requirement to insure liabilities to third parties.
- The fourth is the requirement to insure the workers.

6.8.5 The requirement under each of the main sections has been examined closely and sub-divided into its various components, such as name of the insured, extent of cover, sum insured or limit of liability, period of cover etc. A comparison has been made between the requirements and their components in all the aforementioned forms, showing the characteristics, ambiguities and shortfalls of each and its points of similarity with and difference from the other forms. The need for a properly worded insurance requirement clauses in the contract conditions to replace the present incomplete, ambiguous and confusing sets of clauses has become obvious.

Chapter 6 References

- 1 Ernest Marshall (1st May 1981). Focus on the CAR Contract. The Review, 26.
- 2 Ministry of Electricity and Water. Civil Works Standard Form of Contracts Conditions issued by the Central Tenders Committee.
- 3 E.R. Hardy Ivamy (1977). Casebook on Insurance Law. London: Butterworths, 118-119. See also *Castellian v. Paterson* (1883) where it was said that it was the interest of the insured in the materials for building the house which was covered by the policy, not the materials itself.
- 4 I.N. Duncan Wallace (1974). The International civil engineering contract "A commentary on the F.I.D.I.C. international standard form of civil engineering and building contract". London: Sweet and Maxwell, 59,60.
- 5 ibid., 60.
- 6 What constitutes the Contract Works (14th May 1981). The Post Magazine, 1290-1292.
- 7 Peter Madge (1974). Liability Insurances for Contractors. Journal of the Chartered Ins. Inst., 89.
- 8 Notes on documents for civil engineering contracts, (March 1977). The Hague - Netherlands: Fédération Internationale des Ingénieurs - Conseils, 25.
- 9 ibid., 60.
- 10 Ministry of Electricity and Water, Civil Works standard form of contract conditions, issued by the Central Tenders Committee.
- 11 Ministry of Electricity and Water Supply and Erection standard form of contract conditions, issued by the Central Tenders Committee.
- 12 Notes on document for civil engineering contracts. op. cit., 23.

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- 13 Robert E. Keeton. op. cit., 99 and passim. See also E.R. Hardy Ivamy. General Principles of Insurance law. op. cit., 20 and passim. See also John Birds (1982). Modern Insurance Law. London: Sweet and Maxwell, 37-46.
- 14 E.R. Hardy Ivamy. Casebook on Insurance Law. op. cit., 1.
- 15 Duncan Wallace. op. cit., 53,89,90,91. See also F. Thomas Pool (17th May 1973). Taking possession and the liability to insure. New Law Journal, U.K., 463.
- 16 John Birds. op. cit., 233.
- 17 Earnest Marshall. loc. cit.
- 18 Notes on documents for civil engineering contracts. op. cit., 24. See also Report by Advanced Study Group No. 208A of the Insurance Institute of London 1985 Construction and Erection Insurance, 22,23,24. F.N. Eaglestone (1979). Insurance for the construction Industry. London: George Godwin Ltd., 95. See also The Significance of the Sum Insured in the Insurance of Construction Project Abroad. A paper by K. Conard Member of Board of Management, Munich Reinsurance Co. For under Insurance see also John Birds. op. cit., 240-242.
- 19 Check list of Criteria. The Review 5th Feb. 1982: 16,17,23,24.
- 20 Standard forms used in Kuwait by Ministry of Public Works, Ministry of Electricity and Water and in the UAE by Public Works Dept. and Water and Electricity Dept.
- 21 See clause 41 of F.I.D.I.C. form and Notes on documents for civil engineering contracts. op. cit., 27,28.
- 22 Eaglestone. op. cit., 160,161. See also Report by Advanced Study Group No. 208A. op. cit., 5,28. See also William H. Rodda (1970). Marine Insurance: Ocean and Inland. USA: Prentice Hall Inc., 82 and passim.

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- 23 John Isaacs (1981). Transit and Marine risks - current tenders. A paper presented at a conference on "Insurance for Construction and Engineering Contracts" June 1981 England: Gower.
- 24 Principles and Practice of Insurance, study course 040, The Chartered Insurance Institute. London, 1/2-1/5. See also William D. Winter (1952). Marine Insurance Its Principles and Practice. USA: McGraw-Hill Book Co., 126,134-137.
- 25 Eaglestone. op. cit., 166.
- 26 See paragraphs 5.2./11/12/13 of this chapter.
- 27 Civil Code of 1980 "chapter three".
- 28 e.g. Art. 54 - Law of evidence concerning civil and commercial articles - Kuwait. For "Nonfault Insurance" see Robert E. Keeton. op. cit., 246 and passim. See also No-fault and Political Practicalities. Jeffrey O'Connell (Feb. 1980). The Insurance Law Journal: Chicago, USA: Commerce Clearing House Inc., 82-91. For "Absolute or strict liability" see H.S. Denenberg, R.D. Eilers, J.J. Melone and R.A. Zelten. op. cit., 477.
- 29 Eaglestone. op. cit., 163-165.
- 30 ibid., 150-154.
- 31 ibid., 83-88. For a description of the professional liability cover in general see Peter Madge (1968). Professional Indemnity Insurance. London: Butterworths, 42 and passim.
- 32 Kuwait Civil Code 1980 Arts, 692-697.
- 33 W.A. Dinsdale (1963). Elements of Insurance. London Pitman, 43. See also William D. Winter. op. cit., 160-165.
- 34 Leslie J. Buglass (1983). Marine Insurance and General Average in the United States. USA: Cornell Maritime Press Inc., 23.
- 35 These clauses have subsequently been superseded by: The Institute Cargo Clauses (A).

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- 36 See definitions, section (2) p. 16 of the relevant contract conditions form.
- 37 Robert E. Keeton. loc. cit. See also John Birds. loc. cit. See also William D. Winter. op. cit., 126,134-137.
- 38 The Contractor is normally liable for loss and/or damage to such materials, see supra note 2.
- 39 See supra note 16.
- 40 See supra note 3.
- 41 Report by Advanced Study Group No. 208A. op. cit., 89.
- 42 See paragraph 3.3.43 of chapter three.

7. CONSTRUCTION INSURANCE COVER AND POSSIBLE INADEQUACIES

7.1 Basic insurance cover

- 7.1.1 A simple construction/erection policy insures a contractor against loss and or damage to the work he carries out in accordance with a contract, e.g. construction of a building. The policy may become less simple if it insures more than one party and/or if it covers the liabilities of the insured towards third parties for injury, loss or damage arising out of the work under the contract¹.
- 7.1.2 The construction/erection policy referred to in this study is a single project policy which provides cover in respect of the whole or a part of the project.
- 7.1.3 Construction/erection policies differ in wording from one another². Normally each insurer has his own standard form or forms which may differ either marginally or substantially from one insurer to another or from one form to another. Frequently the same standard policy form issued by the same insurer to various projects may become different from one another due to alterations, extensions, restrictions etc.
- 7.1.4 Being a contract between an insurer and an insured the policy is expected to reflect the intentions of the parties to the contract, but for various reasons this is not always the case. Misunderstandings, confusions, misjudgments etc. frequently occur, especially on the part of the insured who lacks the proper advice at the time the policy terms are negotiated. These problems

are either solved amicably or by reference to courts³, though in the Arab Gulf Area such problems are seldom referred to court.

7.1.5 In the Arab Gulf Area each insurer usually adopts a standard policy form which provides the basic cover⁴. Any alteration to the basic cover is effected through endorsements. In a few cases the insured or his advisors draft the policy wording to reflect their intentions. In such cases the extent of cover requested is influenced largely by the particular project and its contract conditions⁵. It is this vast majority of pre-prepared⁶ construction/erection standard policies which are the subject of this study.

7.1.6 In the Arab Gulf Area a variety of policy wordings are in use. However, the standard policies used by the major insurance companies in the area are very close to each other⁷. Examination of the policy, reproduced in Appendix (K) for ready reference, used by a major insurance company in the area, shows that it consists of two sections: the first deals with the insurance cover for the works, and the second with the insurance cover for the liabilities.

7.1.7 The cover under 'section one' of the policy insures the contract works, and if specifically stated, the construction plant, equipment, machinery and temporary buildings, against all risks of physical loss or damage that do not fall under the exclusions listed thereunder. This section contains also certain provisions in respect of the sum insured and settlement of claims.

7.1.8 The exclusions to 'section one' are:

- The deductibles stated in the schedule to be borne by the insured in any one occurrence.
- Consequential loss of any kind or description whatsoever including penalties, losses due to delay, lack of performance, loss of contract.
- Loss or damage due to faulty design.
- Cost of replacement or rectification of defective material and/or workmanship, but this exclusion is limited to the items immediately affected and is not deemed to exclude loss or damage resulting from an accident due to such defective material and/or workmanship.
- Wear and tear, corrosion, oxidation, deterioration due to lack of use and normal atmospheric conditions.
- Mechanical and/or electrical breakdown or derangement of construction plant, equipment and construction machinery.
- Loss of or damage to vehicles licensed for general road use or waterborne vessels or aircraft.
- Loss of or damage to files, drawings, accounts, bills, currency, stamps, deeds, evidences of debt, notes, securities or cheques.
- Loss discovered only at the time of taking an inventory.

7.1.9 Cover under 'section two' if taken⁸, it indemnifies the insured up to the limit(s) stated in the schedule against all sums which the insured shall become legally liable to pay as damages consequent upon accidental bodily injury to, or illness of, third parties as well as accidental loss or damage to properties belonging to third parties, occurring in direct connection with the performance of the contract insured by the policy

and happening on or in the immediate vicinity of the contract site during the period of insurance.

7.1.10 The exclusions to 'section two' are:

- Expenditure incurred in doing or making good or repairing or replacing any work or property covered or coverable under section 1 of this policy.
- Damage to any property or land or building caused by vibration or by the removal or weakening of support or injury or damage to any person or property occasioned by or resulting from any such damage (unless specifically covered by endorsement).
- Liability consequent upon:
 - Bodily injury to or illness of employees or workmen of the contractor(s) or the principal or any other firm connected with the contract work or members of their families.
- Loss of or damage to property belonging to or held in care, custody or control of the contractor(s), the principals or any other firm connected with the contract work or an employee or workman of one of the aforesaid.
- Any accident caused by vehicles licensed for general road use or by waterborne vessels or aircraft.
- Any agreement by the insured to pay any sum by way of indemnity or otherwise unless such liability would have attached in the absence of such agreement.
- Any loss or damage to underground properties⁹.

7.1.11 In addition to the general conditions, the policy contains the following general exclusions that apply to sections one and two: Loss, damage or liability directly or indirectly caused by or arising out of:

- War, invasion, act of foreign enemy, hostilities (whether war be declared or not), civil war, rebellion, revolution, insurrection, mutiny, riot, strikes, lock-out, civil commotion, military or usurped power, or malicious persons acting on behalf of or in connection with any political organisation, confiscation, commandeering, requisition or destruction of or damage to property by order of the government de jure or de facto or by any public authority¹⁰.
- Nuclear reaction, nuclear radiation or radioactive contamination.
- Wilful act or wilful negligence of the insured.
- Cessation of work whether total or partial.

7.1.12 The schedule of the policy shows the following basic information:

- The title of the contract and the location of the site.
- Name(s) and address(es) of the insured.
- The sum insured on the contract works, permanent and temporary, split between the contract price and value of materials supplied by the principal if any.
- The sum insured for construction plant, equipment and machinery.
- Limit of indemnity in respect of clearance of debris.
- Limit(s) of indemnity in respect of third party liability.
- The deductibles under each of the two sections of the policy.
- The period of insurance split between the period of construction and the period of maintenance.

7.1.13 It is, therefore, implied that if no sum is given in the schedule in respect of materials supplied by the principal, or in respect of construction plant etc., or in respect of clearance of debris or in respect of third party limit of liability, then such items are not covered by the policy unless specifically covered by an endorsement. If the maintenance period is not specifically stated in the schedule it is also implied that there is no cover provided in respect thereof unless specifically covered by an endorsement. Under many other policies used in the area, even if the maintenance period and the limit for third party liability are shown in the schedule, the cover in respect of the third party liability is limited to the construction period only and no liability cover is granted during the maintenance period unless specifically added by an endorsement¹¹.

7.1.14 It is clear that the basic cover on its own which is limited to the construction/erection works is not considered adequate, since it does not automatically provide cover in respect of:

- Materials supplied by the principal (if any);
- Construction plant, equipment and other machinery;
- Clearance of debris;
- Third party liability;
- Maintenance risks;
- Other parties having an insurable interest in addition to the contractor.

7.1.15 Further, the standard policy wording in its wider form, i.e. if it includes the aforementioned supplements to the basic cover, does not provide cover in respect of the following, unless specifically added:

- Full replacement value;
- Consequence of faulty design¹²;
- Inland transit;
- Strikes and riots;
- Extra charges for overtime nightwork, express freight etc.;
- Architects' and professional fees;
- Construction plant and machinery during maintenance¹³;
- Cross liability.

7.2 Possible inadequacies in the construction insurance cover

7.2.1 To be able to evaluate the extent of adequacy of a construction insurance policy, 14 important supplements to the basic cover are to be taken into account¹⁴. The extent of protection under the policy is considered more adequate if it includes in addition to the basic cover the 14 supplements, being the balance of cover, detailed hereunder with examples of actual cases connected therewith:

7.2.2 A. Policy in the joint names

Most contract conditions require the contractor to insure in the joint names of the contractor and the principal¹⁵. It is also a common provision in some contracts that all materials on site for incorporation in the works are the property of the principal irrespective whether they are supplied by the principal, contractor or supplier. In addition, the principal usually pays the contractor sums on account of the final contract value according to an agreed schedule or as the work progresses. Therefore, the principal has a valid insurable interest in the subject matter

covered by the policy. The ultimate financial responsibilities of the contractor could be of such magnitude as to cripple the contractor's financial ability to complete the project, under certain circumstances, thereby indirectly causing a heavy potential loss to the principal. A policy issued in the joint names allow the principal to benefit from any claim payable thereunder especially if the contractor is unable to complete the work by reason of bankruptcy or otherwise at time of settlement of the claim by the insurer.

7.2.3 An illustration to this fact is the actual case of an all risks policy issued in 1979 in the joint names of the principal (a government department in an Arab Gulf State) and the contractor. The project was in respect of installation and testing of a hydrographic monitoring system to determine the extent of pollution of the sea in a certain specified area within the state's territorial waters. The project included the installation of towers in the water with monitoring instruments. Some of these towers were damaged by an unknown vessel. The loss was adjusted for US\$ 87500. By the time the loss adjuster issued his final report the contractor was in liquidation and the claim was actually settled to the principal, who as a coinsured¹⁶ was entitled to receive payment to carry out reconstruction works.

7.2.4 The addition of the principal's name as a coinsured under a policy that includes an adequate liability cover provides him with the necessary protection in case of loss or damage to the contractor's employees or property caused through the negligence of the principal. If the policy

covers the liability of the insured toward third parties, then by having the contractor and the owner as coinsured, both parties' liabilities are covered by the policy. Further, the Kuwait civil code provides that if the owner supplied the material or effected to the contractor a payment on account that includes the value of such material, then the contractor would not be responsible for such material if lost or damaged before scheduled handing over, due to an act of God or sudden accident¹⁷. The interpretation of this article may give rise to questions as to whether or not the contractor has an insurable interest in the materials supplied or paid by the owner. If the policy is issued in the joint names such a problem would not arise, especially in cases of small projects owned by individuals where sometimes no properly written contracts exist between contractors and owners.

7.2.5 B. Constructional plant and machinery during construction

Such equipment is needed in almost every project. Its value ranges widely, and in certain projects where the type of work necessitates heavy usage of machinery, the value may be equal to the value of the project or to a major part thereof. Loss or damage to certain pieces of equipment may cause serious financial loss to the uninsured contractor which, in turn, may affect this ability to complete the project.

7.2.6 In a project to construct water reservoirs in 1979 by an international contractor for a government department, a 50 ton crane toppled over. The steel structure was bent and fell over a tanker truck cabin, causing serious damage to it. The claim submitted by the contractor was for a

total of US\$ 26500. The loss was borne by the contractor because the crane was found not covered by the contractor's all risks policy.

7.2.7 In many other cases where the loss involved many items on the site it was discovered only after the loss that the contractor had not insured all his plant, tools, equipment etc. used on the site. This is the case of an international contractor who was constructing an army camp in 1980. A fire broke out in a site office spreading to cause serious damage to various engineering instruments, equipment, materials etc. The value of items claimed by the contractor as damaged were about \$ 60000, out of which \$ 24000 worth of uninsured items had to be excluded.

7.2.8 Lack of proper planning has been evidenced in a case in 1982 where the contractor insured part of his plant under an annual policy as per a list prepared by him. When constructing a building to be used as a carpet factory, his construction all risks policy did not insure any constructional plant, tools, machinery etc. A fire broke out in the generator set and spread to damage other constructional plant items. The loss adjuster reported that items such as site stores, water tower, batching plant platform, electric saw etc., for which the contractor claimed over \$ 15000, were not insured under either policy, and therefore not recoverable.

7.2.9 C. Construction plant and machinery during maintenance

Usage of plant and machinery during the maintenance period is much less than that during the construction period. However, in many projects the

contractor needs some of his plant and machinery for maintenance work. In practice, insurance of such items during the maintenance period is rarely requested¹⁸ and it seems that in the absence of an annual cover on plant and machinery these pieces of equipment are left uncovered during the maintenance period. In a project to construct a hospital in 1981 the contractor, during the maintenance period, needed a crane on the site to carry out certain maintenance work. The crane was damaged by an accident and the contractor claimed about \$ 20000 as cost of repair. The claim was declined because the policy did not cover constructional plant during the maintenance period. Like almost all other similar policies the cover in respect of plant was left to expire at the end of the construction period.

7.2.10 D. Third party liability

This is an important part of the insurance cover available to contractors. It is in respect of the insured's liability for injury, loss or damage to third parties, arising out of the execution of the project¹⁹. Losses arising from third party claims may easily cripple an uninsured contractor. With the recent world wide trend of increasing awards this cover is now gaining more importance than before. When effecting this cover, it is essential that the limit(s) of indemnity are reasonably adequate²⁰. In many cases the cover under the policy is not limited to the liability of the contractor(s) but covers the legal liability of the 'insured'. This aspect is particularly important if the insured is more than one party, which simply means that not only the contractor's liability is covered but also all other parties comprising the 'insured', such as

the principal, the consultants and the sub-contractors if any or all of them are named as additional insured.

7.2.11 As stated under 7.1.8 above the basic cover under the particular policy in question excludes any loss or damage to underground properties. Because of this exclusion many losses falling under such exclusion have been repudiated by insurers and borne by the contractors. Many other policies issued in the area do not provide any liability cover during the maintenance period whether the loss was due to the works erected before the commencement of the maintenance period or arising out of maintenance works carried out by the contractor in complying with the contract conditions. In a \$ 61000 claim in 1983 against a local contractor for stored furniture damaged by the collapse of a wall of the newly constructed store, the insurer repudiated liability because the loss occurred after the expiry of the construction period with no liability cover during the maintenance period. The contractor had ultimately to shoulder the loss.

7.2.12 E. Cross liability²¹
Normally the insured cannot be considered a third party under the terms of the policy. If, however, the insured comprises more than one party, the liability which may arise in case of injury or damage caused by one of the insured to the other may be covered by the policy if it is suitably worded. E.g. The contractor's liability arising out of causing injury to an employee of the principal on the site is not covered if the policy does not include the extension in respect of the cross liability of the parties insured.

7.2.13 F. Aggregate third party limit of liability exceeding limit per single accident²²

The practice is that in each policy providing liability cover, such cover is limited to a certain sum. The limitation may be expressed as a maximum sum payable during the period of insurance with or without limiting the maximum sum payable for each single accident. It may also be expressed as a maximum sum payable for each single accident leaving the aggregate sum payable during the period of insurance unlimited. In both cases, due care must be taken to determine an adequate limit of liability, whether in respect of each accident or in the aggregate. In practice, many policies provide covers for very low limits of aggregate liability without providing any further cover in case such low limit is consumed in a single accident.

7.2.14 The importance of careful planning of the liability cover as a whole may be evidenced in the case of a policy issued in the names of the principal and the main contractor only, with no mention of the sub-contractors. The policy did not include the cross liability clause. The full contract value, which included sub-contractors' portion of the work was insured, but sub-contractors' legal liability for injury, loss or damage was not insured. In 1979 one of the sub-contractors, while making a hole with a torch on top of the water cooling tower, which was erected by the main contractor and almost complete, caused a fire in the polystyrene filling elements. The fire spread rapidly throughout the erected structure and destroyed it completely. The loss adjuster recommended payment of US\$123215 to the main contractor. The insurer having paid

the claim, obtained a discharge receipt and subrogation rights²³ from the main contractor and claimed his loss from the sub-contractor whose liability for the occurrence was ascertained but not insured under the policy. In an out of court settlement the sub-contractor paid US\$ 96500 to the insurer. Had the policy been properly designed the sub-contractor's liability would have been covered under the same policy with negligible cost. In projects involving numerous sub-contractors, such as the aforementioned project, it is likely that sub-contractors may cause frequent losses to each other. Some of these losses may cause serious damage.

7.2.15 G. Full replacement basis

If the sum insured under the policy is the contract value then the unit rates²⁴ comprising the contract value would be the maximum liability of the insurer under most policy wordings used in the Arab Gulf Area. In times of high inflation, the cover granted under these policies does not provide adequate protection, especially in respect of the longer term contracts²⁵. Taking into consideration that the Arab Gulf Area has witnessed a high rate of inflation during the past decade or so and that most contracts in the area are on a fixed price basis²⁶, it is evident that a cover on full replacement value basis is necessary if adequate cover is sought.

7.2.16 Examples of the application of contract unit rates by loss adjusters against replacement²⁷ or reinstatement cost can be found in many claim files at insurers' offices in the area. In a loss due to heavy rain in 1983 the contractor of a commercial building complex claimed about US\$ 170000. The

loss adjuster stated in his report that the contractor's claim "exceeds the limit of the insurers' liability under the terms of the policy". The loss adjuster continued: "the following adjustment is based upon survey findings, contract unit rates and observations during the process of rectification of the damage incurred by the flood waters". The recommended sum payable was US\$ 127000.

7.2.17 In another case in 1979 the contractor of an effluent utilisation project which involves extensive pipe-laying claimed about US\$ 178000 for damage to the works due to heavy rain. The loss adjuster stated in his covering letter to the insurers "the adjustment is based primarily upon contract unit rates and the site works instructions by the consultants issued to the insured for repairing sections damaged by the heavy rains". The amount of settlement recommended by loss adjuster was about US\$ 64500.

7.2.18 A major part of the balance in the above two examples was due to the difference between actual reinstatement/replacement cost and contract unit rates. It is to be noted, however, that the first contractor prepared his bid in 1980 and the loss occurred in 1983 when market rates had changed without a corresponding change in the sum insured under the policy.

7.2.19 In other cases, change in market rates may not be the main reason behind the difference between replacement cost and contract unit rates. Severe compet

increasing the loss of the contractor for items reinstated at unit rates which were originally under-priced. In a claim for storm damage under a road construction project the loss adjuster stated in his report "under-pricing was one of the main reasons as to why most of the field camps were built cheaply and hence poorly which could not resist the expected storms of the country and always suffered damage". In another case a local contractor engaged in construction of schools claimed about US\$ 44000 cost of replacement of several concrete wall panels and hollow core slabs damaged during erection and transportation to the site. The loss adjuster stated in his report "this project is a loss for the insured because their actual costs are about KD 107 (\$375)/sq.m. of finished building when they are only paid KD 70 (\$ 245)/sq.m.". The loss adjuster therefore, recommended payment of about \$ 28000 leaving the contractor to shoulder the difference.

7.2.20 Because of under-insurance on a site where 1629 houses were under construction in 1981 by an international contractor, replacement of materials damaged by fire cost him the difference between the amount recommended by the loss adjuster of \$ 92920 and the actual cost of replacement of \$ 127234.

7.2.21 The problem is more frequently encountered in claims for loss or damage to constructional plant, equipment or machinery. In almost all such claims the actual cost of replacement is reduced by the proportion that the sum insured for such items bears to their replacement value. On a project site where an international contractor was constructing a military academy in 1981 fire broke

out in the shuttering immediately adjacent to the lift shaft designed to house an elevator. The fire burnt through the plywood formwork spreading to shuttering over a considerable area. The contractor's claim was for about \$ 700000, the major part of which contained formwork and shuttering. It was discovered that the contractor was heavily under-insured for constructional plant and equipment which included such items and the claim was ultimately settled for about \$ 265000.

7.2.22 In the case given under 7.2.7 where a fire broke out in a site office at an army camp construction site, the contractor's claim of about \$ 60000 was first reduced by about \$ 24000 worth of uninsured items and then by another \$ 13000 being depreciation on the replacement value basis. The ultimate amount of the contractor's claim admitted was for about \$ 23000.

7.2.23 H. Maintenance

If the schedule of the policy does not show a maintenance period following the construction period then maintenance risks are not covered by the policy. The standard insurance cover during the maintenance period is available if required which is limited to loss or damage caused by the insured contractor in the course of his operations carried out for the purpose of complying with his obligations under the maintenance clauses. A cover for loss or damage during the maintenance period arising from a cause occurring during the construction period is also available, but is not frequently requested, possibly mainly due to lack of experienced insurance supervisors among the management staff of principals and contractors. In the case described under 7.2.11 the cost of

reconstruction of the collapsed part of the building would have been recoverable under the policy if it had included the extended maintenance cover. Because the policy did not include such cover the loss was shouldered by the contractor.

7.2.24 I. Consequence of faulty design

Most of the standard policy wordings used in the Arab Gulf Area exclude any loss or damage due to faulty design. In some contracts the contractor is not specifically exempted from liability to rectify the loss or damage resulting from an accident due to faulty design²⁸. Even when the contractor under many other contracts is clearly exempted from such liability²⁹ it is still very difficult in many cases to prove faulty design on the part of the engineer, to say nothing of loss of time, expenses and effort put into the discussions and litigation. In most cases this extension does not include the faulty piece or design rectification costs, especially if the contractor is responsible for the design and construction. Insurers normally require increased premiums or increased deductibles or both to grant the required extension.

7.2.25 In a project to construct a road between two towns, storm and flood damages resulted in an embankment wash-out. The loss adjuster stated in the covering letter to the insurer:

"As explained in detail, the major item of the loss is the embankment wash-out at kilometers 71 to 72. A visit to this location will immediately show vividly that the ordinary embankment at this location was not suitable to withstand the erosive action of the flood water flowing in the gorge, on one side of which was built the road. We had a talk with the consultants who were also

aware of the dangers of failures but, due to the limited funds available for this project, they could not incorporate high design standards in this project."

7.2.26 J. Inland Transit³⁰

In the absence of specific insurance cover, loss and/or damage to materials or equipment during transportation to the site is not covered by the standard form of construction/erection all risks policy. Very expensive materials are always in transport to sites of many projects. Whether loss or damage to such materials occurs on the site or during transportation, it will have the same effect on the works and on the capability of the contractor to complete the work. In a few cases the extension to cover the risk of transportation under the construction/erection policy is not limited to land or inland waterways but extends to include ocean or air transport as well, but this is mostly taken care of by a separate insurance cover. In the case described under 7.2.19 above the contractor engaged in construction of schools transported the concrete wall panels and the hollow core slabs from the factory to the sites by special trailers. The damage occurred partly during inland transit and partly on site. The whole loss was admitted in principle because the policy was extended to include inland transit risks.

7.2.27 K. Strikes and/or riots

Most standard policies used in the Arab Gulf Area exclude loss or damage due to these risks, although many contract conditions specifically require that strikes and riots among the contractors' employees must be covered³¹. Lack of proper follow up to make sure that the insurance policy provides for the required cover is a main

reason behind the fact that most policies do not include this cover. Loss or damage to the contract works, materials or construction machinery on the site due to strikes and/or riots among the contractors' labourers may cause serious damage. Fortunately, the Arab Gulf Area has not so far experienced serious labour disturbances that could cause losses large enough to affect the ability of the contractor to complete the work. In a case in 1979 on a huge housing project construction site where an international contractor imported a cheap foreign labour force, negotiations for wage increases failed, causing labour to riot and damage the site offices and few cars. The police immediately intervened and confined the disturbance to a limited area. The loss amounting to about \$ 5500 was paid under the contractors' all risks policy as it included this cover.

7.2.28 L. Clearance of debris³²

In the absence of a specific cover most policies do not include cover in respect of the cost of demolishing and/or removal of parts of the contract works and/or equipment following loss or damage recoverable under the policy. In many projects such costs could be very high following the necessity to use heavy and specialised equipment in order not to cause further damage to other parts of the work, and to be able to do the required demolition and/or removal work properly and efficiently. The removal would include transportation to a suitable dumping place which may be far away from the site. In a project to construct a hospital the contractor incurred about US\$ 100000 to remove debris from the site following a fire in 1981, but since the cover provided for this item was only about \$ 70000, as

stated in the policy schedule, the loss adjuster allowed the maximum limit payable under the policy leaving the contractor to shoulder the balance of about \$ 30000. This case illustrates that cost of debris removal can be expensive and due care must be taken to include in the policy an adequate limit.

7.2.29 The cover may be obtained in a variety of forms such as by adding to the sum insured an amount representing the policy limit in respect of debris removal, or by a clause in the policy to the effect that the sum insured on the contract works includes, sometimes up to a certain percentage of the contract value, an amount for cost of clearance of debris.

7.2.30 M. Extra charges

The loss that the contractor may suffer as a result of total or partial damage to the works is of two kinds. In addition to the direct material damage, the delay in completion of the works as a result of reconstruction or repairs may be more serious than the material damage itself, especially if the contract provides for severe delay penalties. To catch up with the completion and 'handing over' schedules the contractor must do the repair and/or the reconstruction work in the shortest possible time. This cannot be achieved without incurring certain extra charges such as overtime, night work, work on public holidays, express freight and sometimes airfreight etc. These extra charges are not covered under the standard policy wording used in the area. In the case described under 7.2.21 above, the contractor's claim included \$ 3891 in respect of airfreight to bring to the site in the shortest

possible time specialist demolition equipment to enable the contractor to demolish the elevator shaft and proceed with reconstruction to avoid further delays. The loss adjuster did not allow for this expense in full and accepted only an amount corresponding to sea-freight leaving the contractor to bear the major part of this item.

7.2.31 Cover is available with or without airfreight charges and it may be expressed by adding to the sum insured an amount representing the policy limit in respect of extra charges, or by a clause in the policy to the effect that the sum insured on contract works includes (sometimes up to a certain percentage of the contract value) an amount for extra charges.

7.2.32 N. Architects' and professional fees³³

The problems of reconstruction or repair of a loss or damage to the works may necessitate the services of professional people to do or to help in the reconstruction and/or repair. The cover is usually available in the same form as for extra charges but limited to such fees as are authorised by an appropriate professional body. It is also stipulated that such fees do not include the cost of preparing any claim. In a case in 1979 involving construction of a museum building, a main beam and part of the roof deflected considerably due to unauthorised early removal of shuttering. The contractor had to use the services of an outside consultant to advise on remedial work. This additional cost of about \$ 6000 was not paid under the contractors' all risks policy.

- 7.2.33 To ensure that the necessary covers are issued and that they provide a reasonably adequate protection during the whole period of the construction/erection/maintenance operations, a system of checking and follow up must be set up with an insurance expert in charge. Sometimes the required policies are issued but they do not fully insure the risk they are required to cover, or they may contain certain exclusions and/or restrictions that would render the cover unnecessarily limited. Very high deductibles sometimes are included to reduce the amount of premium payable. It takes an expert to draw a line beyond which these shortfalls, exclusions, restrictions, deductibles etc. may jeopardise the interest of principals and/or contractors³⁴.
- 7.2.34 In addition to the above examples, many other cases of inadequate insurance coverage have been located. E.g. on a site where the contractor was constructing roads and sewers a crane owned by a sub-contractor was damaged. It was found that the policy covered the main contractors' plant only and did not cover plant owned or rented by any sub-contractor. Therefore, the loss amounting to about \$ 15000 was not payable under the policy. In another case a 33 KV electric cable drum was damaged in the store away from the site. The policy cover, being limited to the site only, did not admit such loss. In another case, a dumper working at a project to construct a cinema building was damaged outside the site in a collision with another car. The dumper was considered a total loss. The policy cover was limited to the site only and therefore, the loss was not recoverable by the contractor.

7.2.35 Proper follow up will make sure that policies are extended after their expiry to cover works not completed during the original period of insurance. Contractors sometimes do not bother to extend the period of insurance if the remaining work is very small and is expected to be completed in a short time. Unfortunately, accidents occur in these periods also, when the contractor is running the risk himself. In a project to construct a road the contractor did not extend the period of the policy to cover minor works which he estimated would be completed in a short time. Soon after expiry of the policy a pipe burst causing damage to textured tiles for about \$ 3500. The loss was therefore not recoverable. In another case of constructing a highway, part of the road was put into use before the expiry of the policy. Damages to traffic lights were not recoverable because the policy specifically excluded works put into use.

7.2.36 The basic cover, together with the aforementioned supplements, form a reasonably adequate construction/erection insurance cover. It is, however, not to be forgotten that there are various other insurance covers deemed necessary in connection with the construction/erection works to form an overall adequate protection. These other insurance covers include the following:

- Transport insurance in respect of materials and equipment;
- Workmen's Compensation or employers' legal liability in respect of employees and labourers engaged in connection with the construction operations;

- Motor third party liability and own damage insurance cover in respect of vehicles licensed for road use;
- Loss of money insurance, whether during transit to and from the site or within the premises of the contractors; and
- Fidelity guarantee cover for cashiers, accountants, store-keepers etc.

An insurance manager on the staff of the contractor will be able to design the aforementioned insurance covers in such a way as to secure a reasonable protection that meets the needs of the contractor³⁵.

7.3 Summary

7.3.1 In this chapter, the second important document referred to in chapter six, i.e. the construction all risks policy was discussed. A thorough examination of its important sections was carried out identifying the basic cover and 14 different supplements that are needed in most covers and where inadequacies are likely to occur. Detailed examples of actual losses under each of these supplements are given. These were brought out from the records of CAR/EAR settled claims during the period 1981-82 and 83 of a major insurance company operating in the area.

Chapter 7 References

- 1 Report by Advanced Study Group No. 208A. op. cit., 4.
- 2 E.R. Hardy Ivamy (1980). Personal Accident, Life and Other Insurances. London: Butterworths, 179.
- 3 E.R. Hardy Ivamy. General Principles of Insurance Law. op. cit., 257-261.
- 4 For definition and example of basic cover see James L. Athearn. op. cit., 78.
- 5 For standardisation of insurance contracts generally see Robert E. Keeton. Basic Text on Insurance Law 1971. USA: West Publishing Co., 68 and passim.
- 6 Report by Advanced Study Group No. 208A. op. cit., 10.
- 7 Many insurance companies in the Arab Gulf base their standard CAR/EAR policies on a wording issued by the well-known W. German Reinsurer "Munchener Ruck", either by adopting it literally or after effecting certain changes in the wording.
- 8 Many policies are issued providing a cover under section one only, i.e. no cover is provided in respect of third party liability. Please refer to Table 10.1. Many policies providing a third party liability cover restrict protection to construction operations and do not include liability incurred due to maintenance operations. This type of restricted coverage is also given in USA, see R. Riegel, J.S. Miller and C. Arthur Williams, jr. op. cit., 443.
- 9 Some of these exclusions are not found in usual CAR policies issued in the London market and in some CAR policies issued in the Arab Gulf Area.
- 10 Other versions of war etc. exclusion clause are also in use in the Arab Gulf Area.
- 11 See supra note 8 (second part).
- 12 Under the F.I.D.I.C. form, 1977 edition, the contractor is relieved from liability for loss or damage to the works by "a cause solely due to the Engineer's design of the Works" clause 20(2).

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- However, many standard policies issued by U.K. insurers provide a cover in respect of accidental loss and/or damage consequent upon fault in the design but exclude the faulty piece and design rectification costs.
- 13 This is a cover almost always neglected by contractors. Please refer to Table 10.1.
- 14 The 14 supplements chosen are those applicable to almost all CAR policies. Other supplements that are needed for particular projects or in certain circumstances are not accounted for.
- 15 e.g. - F.I.D.I.C. form, March 1977, clause 21.
- I.C.E. form, June 1973 revised Jan. 1979, clause 21.
- Conditions of Contract for Process Plants, the Inst. of Chemical Engineers, clause 32.1.
- General Conditions of Contract for Construction, AIA Document A201, the American Inst. of Architects, clause 11.3.1.
- Lump Sum contract, ed. 5b, 1971, The Royal Australian Inst. of Architects and the Master Builders' Federation of Australia clause 21(a) A.
- 16 For "additional assureds", see Robert E. Keeton. op. cit., 178. See also Irwin M. Taylor (1968). The Law of Insurance. USA: Oceana Publications Inc., 72. In Lombard Australia Ltd. v. N.R.M.A. Insurance Ltd. (1969) 1 Lloyd's Rep. 575, it was held that where a policy covers two insured, who are not joint owners, in respect of their respective interests, the wilful act by one of the insured does not prevent the other insured from bringing an action on the policy.
- 17 Art. 670.
- 18 See Table 10.1.

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- 19 Many contract conditions require this cover in respect of the contractor's liability only, leaving the principal to insure separately his liability.
e.g. F.I.D.I.C. form.
- 20 B.J. Douglas (3rd June 1977). The Review. Insurance and the Contractor, 17.
- 21 Report by Advanced Study Group No. 208A. op. cit., 89.
- 22 Notes on Documents for Civil Engineering Contract.
op. cit., 25.
- 23 Robert E. Keeton. loc. cit. See also John Birds. loc. cit. See also E.R. Hardy Ivamy. General Principles of Insurance Law. op. cit., 496 and passim.
- 24 In a fixed price contract where the total contract value comprises the sum of many items listed in the bill of quantities, the value of each unit thereof is termed the unit rate.
- 25 M.G. Dunn (29th June 1978). EAR and CAR: Market Peculiarities. The Post Magazine and Insurance Monitor, 1673,1674. See also Conrad. loc. cit. See also Builders Risk Insurance, International Risk Management Institute Inc. USA., Construction Risk Management, August 1984, p.vii. A.13.
- 26 For fixed price contracts see P.D.V. Marsh. op. cit., 199 and passim.
- 27 For replacement cost see John Bird. op. cit., 233.
See also Robert I. Mehr and Emerson Cammak. op. cit., 215-216.
- 28 Ministry of Electricity and Water, Kuwait, Civil Works Standard Form, clause 2.19.2.
Ministry of Electricity and Water, Kuwait, Supply and Erection Standard Form, clause 2.63.3.
- 29 e.g. F.I.D.I.C. form March 1977 clause 20(2).
I.C.E. form June 1973 revised January 1979 clause 20(3).

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- For more details of the cover "consequences of faulty design" see David W. Scott, Q.C. Unravelling "the Exception within an Exception" Clause in a Builders' All Risks Policy, USA: Risk Management, May 1981, 22-28.
- 30 For inland transit insurance see Eaglestone. op. cit., 160 and passim. See also Builders risk Insurance, Construction Risk Management. op. cit., p.vii. A.6. See also James L. Athearn. op. cit., 121.
- 31 e.g. F.I.D..I.C. form March 1977, clause 20(2) whereas the I.C.E. form lists "riot" among the excepted risks without mentioning "strike" and without limiting the excepted risk to other than the contractor's employees.
- 32 Report by Advanced Study Group No. 208A. op. cit., 24,25. See also Builders Risk Insurance, Construction Risk Management. op. cit., p.vii. A.1. See also Victor M. Acra (19th May 1978). Clearance of Debris Insurances. The Review, 17-20.
- 33 Report by Advanced Study Group No. 208A. op. cit., 25,26.
- 34 T.J. Deprez (October 1980). Co-ordinating the Cover, a paper presented at a conference on "Insurance and Construction Contracts". London: Company Communications Centre.
- 35 See paragraphs 5.1.8 and 5.1.11 of chapter five.

8. FORMULATION OF AN INDEX TO MEASURE ADEQUACY OF COVER

8.1 Allocation of weights to the basic cover and to the 14 supplements

8.1.1 Through examining carefully the 14 supplements to the basic cover mentioned in chapter seven, it is clear that they do not all have the same importance or carry the same weight. For instance, the provision for a third party liability cover is more important than cover for professional fees, the inclusion under the policy of cover for constructional plant and machinery (if not covered separately) carries more weight than the inclusion of cover in respect of extra charges for night work, overtime etc.

8.1.2 The evaluation of the importance of a component cover depends to a large extent on the effect of such component on the works and on the extent to which the contractor/principal may be affected in case of loss or damage when the particular component cover is not provided for. Assuming that the basic cover provides for a reasonable protection to the works on the site in case of loss or damage, the next most important risk to be covered is the liability to third parties for injury, loss or damage arising out of the works. Although liability claims in the Arab Gulf Area have not reached the limits experienced in USA and Europe yet, the awards are continuously increasing and the matter is attracting greater attention every year. It is therefore essential to add to the basic cover a protection against claims for third party liability. When taking out the third party liability cover, due care must be taken to

ensure that the limit of liability covered by the policy is adequate. This can be achieved, for example, by taking a reasonably adequate limit in respect of any one accident, depending on third party exposure of that particular project, and meanwhile having the aggregate limit either high enough to allow for a few accidents or unlimited.

- 8.1.3 Another important aspect of the liability issue arises when the insured under the policy is more than one party, e.g. the principal and the contractor. The cover in this case should include the cross liability extension to indemnify each insured against liability he may incur to the other. This aspect is also important when more than one contractor is engaged in the construction/erection works on the site, for instance if the main contractor sub-contracts part of the works to one or more other contractors, or if the employer directly engages more than one contractor to do the work.
- 8.1.4 Another important addition to the basic cover is to provide a protection for construction plant, equipment and machinery (if not covered separately) whilst they are used in connection with the project.
- 8.1.5 Other important extensions include insurance cover on full replacement value basis, cover during the maintenance period, cover for loss or damage consequent upon fault in design, strikes and riots, transportation to the site etc.
- 8.1.6 The basic idea in this chapter is to give a weight to each of the 14 supplements listed as the balance of cover, the total weights for the balance of cover being taken as a first step equal

to 100 if they were all satisfied. A schedule listing the supplements to the basic cover with the weight shown next to each item may be used as a tool to measure the adequacy of cover under each policy provided that the basic cover is adequate. When checking a policy, each supplement included under the policy is given its respective weight as per the aforementioned schedule of weights. The total of these weights indicates the degree or the percentage of adequacy of the balance of cover provided by the policy.

8.1.7 It may, however, be preferable to include the basic cover in the schedule of weights, hence the degree of adequacy would then represent the whole of the cover provided under the policy and not only the supplements to the basic cover. Having identified the basic cover under chapter seven, a weight is given thereto and the whole schedule is reconstructed to reflect new individual weights as parts of 100 which includes the weight of the basic cover and the 14 supplements.

8.1.8 It is, however, important to mention that in some cases the weight of a particular cover is greatly affected by the particular project. For example, a project to construct a building on a busy street in the city gives more weight to the third party cover than the weight given to the third party cover in connection with a project away in the desert where third party exposure is much reduced.

8.1.9 Similarly, the supplement "consequences of faulty design" may carry more weight in projects such as constructing a high rise tower or erecting a plant than in a road project. Again, the "inland transit" supplement in a project to erect a plant

and for which a transport policy has been issued covering materials and equipment from warehouse in the country of origin until final warehouse on the site, may carry far less weight than a project to construct houses in the suburb of a city, where cement, steel, timber etc. for the housing project are usually bought locally and transported to the site by the contractor without effecting a separate cover for the transport risk, hence the inland transit cover under the latter project becomes important.

- 8.1.10 A flexible components schedule of the index may, therefore, be suggested where the body that will supervise the works and/or will be responsible for the follow up and checking of insurance policies may decide on the weights of the various covers required to achieve a more adequate protection under the policy. But since an insurance expert is not always employed by the aforementioned supervising bodies¹ a variable flexible schedule is hardly feasible.
- 8.1.11 More than one set schedule may, therefore, be constructed, each applicable to a certain specified type of project. From these schedules, an average index components schedule may be formulated that would be found helpful to the accountant who is not an insurance expert but is required to check a CAR/EAR policy to evaluate whether it provides an adequate cover for the particular project in hand.
- 8.1.12 The above does not, however, rule out the fact that the scope of cover itself, whether under the basic cover or under a supplementary cover, is always required to be carefully checked, as it may

happen that the deductibles are unusually high or that it contains certain exclusions or limitations which render the scope of cover unnecessarily restricted and possibly inadequate. Furthermore, the maintenance cover provided under the printed policy form, if given, provides for a restricted protection which can be expanded by a properly worded endorsement. This index, however, does not intend to differentiate between these two types of maintenance covers, and even if the restricted cover is provided for, the full value of the relative weight is given.

8.1.13 To construct more than one index components schedule, each applicable to a specified type of work, projects have been divided into five main types and a schedule of weights in respect of each as shown in Table 8.1 hereunder has been constructed by the writer in collaboration with an experienced general manager and actuary of a large insurance company (mainly non-life) operating in the Arab Gulf Area since early sixties. The five types of projects are:

- a. roads
- b. drainage, sewers etc.
- c. buildings including housing projects
- d. high rise buildings, towers etc.
- e. erection of plants, factories etc.

Table 8.1

Weights allocated to each component cover for each of the five types of projects

	<u>Roads</u>	<u>Sewers etc.</u>	<u>Buildings</u>	<u>High rise</u>	<u>Plants</u>	<u>Average</u>
Basic cover	45	40	41	34	35	39.0
1. Policy in joint names	3	3	3	3	3	3.0
2. Construction machinery	12	12	10	10	10	10.8
3. Construction machinery during maintenance	1	1	1	2	1	1.2
4. Third party liability	10	13	9	10	12	10.8
5. Cross liability	4	4	5	5	5	4.6
6. Aggregate third party limit exceeds single limit	3	4	3	4	4	3.6
7. Full replacement	5	5	5	5	5	5.0
8. Maintenance	3	3	4	4	4	3.6
9. Consequences of faulty design	4	3	5	6	6	4.8
10. Inland transit	3	4	4	4	2	3.4
11. Strikes and riots	2	1	3	4	4	2.8
12. Clearance of debris	3	5	5	5	5	4.6
13. Extra charges etc.	1	1	1	2	2	1.4
14. Professional fees	1	1	1	2	2	1.4
	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>

- 8.2 Obtaining consensus of the parties concerned to an index
- 8.2.1 To be able to formulate a schedule of weights that would be reasonably acceptable to all parties involved in this issue, the weights of Table 8.1 have been discussed with an important employer², a big contractor³ and a well-known loss adjuster⁴, all operating in the Arab Gulf Area. The aim is to sound their opinion and benefit from their experience which may be reflected in their participation to formulate a practical index. Each of the parties was requested independently to check the aforementioned weights and estimate, according to his own judgment, the respective weights, and prepare his own index components for each type of project separately. The idea was welcomed by all of them as they considered it to be throwing light on a dark area and providing a yardstick for a hitherto unmeasurable issue.
- 8.2.2 It is true that placing a weight for the extent of cover under a CAR policy is not known to have been attempted before, and that the only feasible and practical method to achieve this aim is through a subjective approach, but it is also true that the employer, contractor and loss adjuster, not being insurance experts, their judgment might have been influenced by that of the insurance experts' opinion. However, they all emphasised that the weights they gave expressed their own opinion based on their own experience without bias or prejudice.
- 8.2.3 The result was several sets of weights, each set built up by a different estimator, for each type of project. The data are then grouped in two different ways: the first by each estimator in respect of all projects taken together, and the second by each type of project in respect of all

estimators taken together. The variations in the responses of the estimators in respect of the cover components were significant enough to warrant further approach which concentrate on the means of the sets to reduce the amount of data to a reasonable size.

8.2.4 To appreciate and summarise the variations in responses of the four estimators, the standard deviations as a measure of dispersion have been calculated. The coefficient of variance has also been calculated to find out whether a set of means is relatively more variable than another⁵. As expected, the overall mean under each of the two arrangements is the same. This is more clearly shown in the following two tables.

8.2.5 The two tables overleaf show the following:

1. In respect of sets of weight means prepared by each estimator for the five types of projects taken together (Table 8.2):
 - a. The highest variations between types of projects are among the estimates prepared by the contractor followed very closely those prepared by the employer where the average variance coefficient reached 29% and 28% respectively.
 - b. The lowest variations between types of projects are among the estimates prepared by the loss adjuster before which come those prepared by the insurer where the average variance coefficient reached 16% and 19% respectively.
 - c. Table 8.2 shows that the contractor and the employer are influenced more than the other estimators by the nature and type of project for which the components of the insurance cover have been weighted.

Table 8.2

Analysis of weights given by each estimator in respect of all types of projects taken together

	EMPLOYER			LOSS ADJUSTER			CONTRACTOR			INSURER			ALL ESTIMATORS		
	Mean	St.Dev	VarCo	Mean	St.Dev	VarCo	Mean	St.Dev	VarCo	Mean	St.Dev	VarCo	Mean	St.Dev	VarCo
Basic Cover	35.00	3.16	9%	39.40	5.39	14%	35.00	3.16	9%	39.00	4.05	10%	37.10	0.53	11%
1. Policy in joint names	3.60	1.02	28%	2.40	0.49	20%	3.60	1.02	28%	3.00	0.00	0%	3.15	0.12	4%
2. Construction machinery	10.40	3.07	30%	12.40	2.33	19%	10.40	3.07	30%	10.80	0.98	9%	11.00	0.21	22%
3. Con. mach. during maint.	2.20	1.17	53%	1.50	0.63	42%	2.20	1.17	53%	1.20	0.40	33%	1.78	0.11	5%
4. Third party liability	8.40	2.58	31%	10.00	0.00	0%	7.60	2.42	32%	10.80	1.47	14%	9.20	0.32	3%
5. Cross liability	4.00	0.00	0%	2.00	0.00	0%	4.00	0.00	0%	4.60	0.49	11%	3.65	0.25	7%
6. Aggr. TPL single limit	5.20	0.98	19%	5.00	0.00	0%	5.20	0.98	19%	3.60	0.49	14%	4.75	0.17	4%
7. Full replacement	7.80	1.72	22%	2.00	0.00	0%	6.60	1.50	23%	5.00	0.00	0%	5.35	0.54	10%
8. Maintenance	5.20	0.75	14%	5.00	0.00	0%	5.20	0.75	14%	3.60	0.49	14%	4.75	0.17	4%
9. Conseq. of faulty design	4.00	1.67	42%	5.70	0.75	13%	3.00	1.67	56%	4.80	1.17	24%	4.38	0.25	6%
10. Inland transit	5.80	1.83	32%	3.40	1.36	40%	5.80	1.83	32%	3.40	0.80	24%	4.60	0.30	7%
11. Strikes and riots	1.00	0.00	0%	3.00	0.00	0%	4.00	0.00	0%	2.80	1.17	42%	2.70	0.27	10%
12. Clearance of debris	2.80	1.47	52%	5.40	0.49	9%	2.80	1.47	52%	4.60	0.80	17%	3.90	0.28	7%
13. Extra charges etc.	2.80	0.75	27%	1.60	0.80	50%	2.80	0.75	27%	1.40	0.49	35%	2.15	0.16	8%
14. Professional fees	1.80	1.17	65%	1.20	0.40	33%	1.80	1.17	65%	1.40	0.49	35%	1.55	0.06	4%
Variance Coefficients			28%			16%			29%			19%			5%
Average Stand. Deviation			18%			17%			19%			12%			3%

Table 8.3

Analysis of weights given for each type of projects by all estimators taken together

	ROADS			SEWERS			BUILDINGS			HIGH RISE			PLANTS			ALL TYPES		
	Mean	St.Dev	VarCo	Mean	St.Dev	VarCo	Mean	St.Dev	VarCo	Mean	St.Dev	VarCo	Mean	St.Dev	VarCo	Mean	St.Dev	VarCo
	Basic Cover	37.50	4.33	12%	36.25	2.17	6%	41.75	2.49	6%	35.00	6.56	19%	35.00	0.00	0%	37.10	2.10
1. Policy in joint names	3.50	0.50	14%	4.00	1.00	25%	2.25	0.43	19%	3.25	0.83	26%	2.75	0.43	16%	3.15	0.50	16%
2. Construction machinery	15.00	1.73	12%	11.00	2.12	19%	8.50	1.50	18%	9.50	0.50	5%	11.00	0.71	6%	11.00	0.82	6%
3. Con. mach. during maint.	2.25	0.83	37%	1.25	0.43	35%	0.88	0.22	25%	1.75	0.43	25%	2.75	1.30	47%	1.78	0.44	2
4. Third party liability	7.25	2.77	38%	10.00	1.87	19%	9.50	0.50	5%	10.75	0.83	8%	8.50	2.60	31%	9.20	1.26	14%
5. Cross liability	3.50	0.87	25%	3.50	0.87	25%	3.75	1.09	29%	3.75	1.09	29%	3.75	1.09	29%	3.65	0.98	27%
6. Aggr. TPL single limit	4.00	0.71	18%	5.25	0.83	16%	5.00	1.22	24%	5.25	0.83	16%	4.25	0.43	10%	4.75	0.67	14%
7. Full replacement	4.00	1.22	31%	5.00	1.87	37%	5.50	2.29	42%	6.00	2.74	46%	6.25	3.03	48%	5.35	2.17	41%
8. Maintenance	4.50	0.87	19%	4.00	0.71	18%	4.75	0.43	9%	5.25	0.83	16%	5.25	0.83	16%	4.75	0.67	14%
9. Conseq. of faulty design	4.00	1.87	47%	2.75	1.48	54%	5.38	0.41	8%	5.50	0.50	9%	4.25	1.79	42%	4.38	1.00	23%
10. Inland transit	5.50	2.50	45%	6.25	1.79	29%	3.50	0.87	25%	3.50	0.87	25%	4.25	1.30	31%	4.60	1.20	26%
11. Strikes and riots	2.50	1.12	45%	2.25	1.30	58%	2.75	1.09	40%	3.00	1.22	41%	3.00	1.22	41%	2.70	1.08	40%
12. Clearance of debris	4.00	0.71	18%	5.25	0.43	8%	3.50	1.50	43%	3.00	2.00	67%	3.75	1.79	48%	3.90	1.14	29%
13. Extra charges etc.	1.50	0.50	33%	2.25	0.83	37%	2.00	1.00	50%	2.75	1.30	47%	2.25	0.43	19%	2.15	0.65	30%
14. Professional fees	1.00	0.00	0%	1.00	0.00	0%	1.00	0.00	0%	1.75	0.43	25%	3.00	1.00	33%	1.55	0.26	17%
Variance Coefficients	Average		26%			26%			23%		27%				28%			22%
	Stand. Deviation		14%			16%			15%		16%				15%			10%

2. In respect of sets of weight means prepared for each type of projects by the four estimators taken together (Table 8.3):
 - a. The highest variations between the estimators are among estimates pertaining to erection of plants and high rise constructions where the average variance coefficient reached 28% and 27% respectively.
 - b. Estimates for roads and sewers equally rank thereafter with identical average variance coefficient of 26%.
 - c. The lowest variations between the estimators are among estimates pertaining to construction of buildings where the average variance coefficient reached 23%.

8.2.6 The aforementioned analysis has been taken a step further to find out the relationship in the variations of estimates between any two estimators. The average absolute differences in the weight means and the relevant standard deviations have been calculated as shown hereunder.

8.2.7 The following table shows that the set of estimate means prepared by the employer and contractor are by far nearest to each other followed by the loss adjuster and the insurer, whereas the estimates of the loss adjuster and the contractor are farthest from each other preceded by those of the contractor and the insurer. This is not surprising because normally the loss adjuster has better insurance knowledge and has acquired a wider experience in various types of losses than a contractor or employer. Therefore, it is normal if his methods of evaluating risks associated with an insurance policy are closer to those of the insurer.

Table 8.4

Average absolute differences and the standard deviations of weight means

	AVERAGE ABSOLUTE DIFFERENCE						STANDARD DEVIATION					
	E-L	E-C	E-I	L-C	L-I	C-I	E-L	E-C	E-I	L-C	L-I	C-I
Basic Cover	4.4	0.0	4.0	4.4	6.4	4.0	6.2	0.0	3.5	6.2	4.2	3.5
1. Policy in joint names	1.2	0.0	1.0	1.2	0.6	1.0	0.7	0.0	0.6	0.7	0.5	0.6
2. Construction machinery	2.0	0.0	2.4	2.0	1.6	2.4	1.8	0.0	1.2	1.8	1.5	1.2
3. Con. mach. during maint.	1.1	0.0	1.0	1.1	0.9	1.0	0.5	0.0	1.3	0.5	0.2	1.3
4. Third party liability	2.4	0.8	3.6	2.8	1.2	3.6	1.9	0.4	1.9	1.9	1.2	2.6
5. Cross liability	2.0	0.0	0.6	2.0	2.6	0.6	0.0	0.0	0.5	0.0	0.5	0.5
6. Aggr. TPL single limit	1.0	0.0	1.6	1.0	1.4	1.6	0.0	0.0	1.0	0.0	0.5	1.0
7. Full replacement	5.8	1.2	2.8	4.6	3.0	2.0	1.7	0.4	1.7	1.5	0.0	0.9
8. Maintenance	0.6	0.0	1.6	0.6	1.4	1.6	0.5	0.0	0.5	0.5	0.5	0.5
9. Conseq. of faulty design	2.3	1.0	1.2	2.7	1.3	1.8	1.3	0.0	1.0	2.0	1.1	1.3
10. Inland transit	2.4	0.0	2.4	2.4	1.6	2.4	1.6	0.0	2.1	1.6	1.0	2.1
11. Strikes and riots	2.0	3.0	1.8	1.0	1.0	1.2	0.0	0.0	1.2	0.0	0.6	1.2
12. Clearance of debris	2.6	0.0	2.2	2.6	0.8	2.2	1.4	0.0	1.5	1.4	0.7	1.5
13. Extra charges etc.	1.6	0.0	1.4	1.6	0.6	1.4	0.8	0.0	0.8	0.8	0.5	0.8
14. Professional fees	0.6	0.0	0.4	0.6	0.2	0.4	0.8	0.0	0.8	0.8	0.4	0.8
SUM	32.0	6.0	28.0	30.6	24.6	27.2	19.2	0.8	19.5	19.8	13.4	19.7
RANK	6	1	4	5	2	3	3	1	4	6	2	5

8.2.8 In each of the Tables 8.2 and 8.3, an overall average of the means is calculated which is identical in both tables and is based on the assumptions that each estimator in Table 8.2 and each type of project in Table 8.3 carry equal weight. The aforementioned overall average weights shown separately hereunder can therefore be considered as components of an index applicable to most projects in the area.

Table 8.5

Overall average weights applicable to most projects in the area

	Basic cover	37.10
1.	Policy in joint names	3.15
2.	Construction machinery	11.00
3.	Construction machinery during maintenance	1.78
4.	Third party liability	9.20
5.	Cross liability	3.65
6.	Aggregate third party limit exceeds single limit	4.75
7.	Full replacement	5.35
8.	Maintenance	4.75
9.	Consequences of faulty design	4.38
10.	Inland transit	4.60
11.	Strikes and riots	2.70
12.	Clearance of debris	3.90
13.	Extra charges etc.	2.15
14.	Professional fees	1.55
		<hr/> 100.00

8.2.9 The following two examples show how the aforementioned index can measure the adequacy of cover under a CAR policy. The basic cover under each

policy is assumed identical to that described under chapter seven, and for the purpose of these examples it is considered adequately provided for under each policy. Both policies cover projects of the same type.

8.2.10 Example (1) - Upon examining the policy schedule it has been noticed that the name of the insured is shown as the joint names of the contractor and/or the principal. Besides the contract value, the schedule does not show a sum insured against the items referring to materials supplied by the principal, constructional plant/equipment, debris removal and third party liability. The policy does not contain any statement that it provides a cover for any of these items; therefore it is assumed that they are not covered. The deductibles shown in the schedule are considered reasonable. The period of cover is shown split between the period of construction and the period of maintenance, hence maintenance risks are covered in accordance with the printed policy terms. Attached to the policy there is an endorsement providing cover for goods in transit to the site. No other supplement is added to the policy extending or restricting the cover.

8.2.11 The index parameters may be applied to the insurance cover provided under this policy as hereunder:

<u>Cover Components</u>	<u>Parameters</u>
Basic cover	37.10
Policy in joint names	3.15
Maintenance	4.75
Inland transit	4.60
	<hr/>
Index of adequacy of cover	49.60%

8.2.12 Example (2) - The policy schedule shows the name of the insured as the joint names of the contractor and/or the principal. Under the sum insured section the contract price and an amount for constructional plant/equipment are shown separately. No indication is given that the value of constructional plant/equipment insured represents its new replacement value. No amount is shown against the item of materials supplied by the principal. Debris removal is insured and its respective limit is shown in the schedule. A reasonable limit is shown in respect of each accident under the third party liability section and the total limit of indemnity in respect thereof is expressed as "unlimited". The deductibles shown in the schedule are reasonable and the period of insurance shows clearly the split between the construction period and the maintenance period. Attached to the policy are the following documents:

- a. A list of the construction plant/equipment showing the depreciated values of the items therein.
- b. A cross liability clause
- c. An endorsement extending the maintenance cover beyond that provided by the printed form.
- d. An endorsement providing a cover for loss and/or damage consequent upon faults in the design.
- e. An endorsement providing cover for goods in transit to the site.

8.2.13 The index parameters may be applied to the insurance cover provided by this policy as hereunder:

<u>Cover Components</u>	<u>Parameters</u>
Basic cover	37.1
Policy in the joint names	3.15
Construction machinery	11.00
Third party liability	9.20
Cross liability	3.65
Aggregate third party limit "unlimited"	4.75
Maintenance	4.75
Consequences of faulty design	4.38
Inland transit	4.60
Clearance of debris	3.90
	<hr/>
Index of adequacy of cover	86.48%

8.2.14 Although the policy in the second example does not provide cover on replacement value basis, or for strikes and riots or for extra charges etc. or for professional fees, it is obvious that it provides a more adequate cover than the policy given in the first example. It may be worth pointing out that the maintenance cover provided under both policies was given the same parameter value inspite of the difference in the actual scope of cover given under each. As explained under paragraph 8.1.12, above a parameter value is not given (i.e. taken Nil) only if the relative component cover is not provided for in any form.

8.3 Placing confidence intervals around the sets of weight means and the overall average⁶

8.3.1 It is now important to test the reliability of the weight means pertaining to the cover components comprising the various indices and the overall average. The individual weights are assumed

normally distributed around the real value, i.e. the mean U . Our estimate of the mean being \bar{Y} (the sample mean) and the standard deviation being s , it is known that $\frac{\bar{Y} - U}{s/\sqrt{n}}$ is distributed as t . The value of n being equal to the size of each sample of estimates which in this case equals the number of types of projects, i.e. 5.

8.3.2 Placing a confidence interval of 90% around the real value of the mean U is done as follows:
 $\frac{\bar{Y} - U}{s/\sqrt{n}}$ being distributed as t with sample size n ,

$t(10\%,5)$ is defined as being the value of t such as $\Pr [-t(10\%,5) < t < t(10\%,5)] = 90\%$

By replacing t by $\frac{\bar{Y} - U}{s/\sqrt{n}}$ we get:

$$\Pr [-t(10\%,5) < \frac{\bar{Y} - U}{s/\sqrt{n}} < t(10\%,5)] = 90\%$$

$$\text{or } \Pr [\bar{Y} - t(10\%,5) \frac{s}{\sqrt{n}} < U < \bar{Y} + t(10\%,5) \frac{s}{\sqrt{n}}] = 90\%⁷$$

i.e. we are 90% confident the true value of U lies between $\bar{Y} - t s/\sqrt{n}$ and $\bar{Y} + t s/\sqrt{n}$.

8.3.3 Solving the equation by reference to the values of the mean \bar{Y} and standard deviation s in Table 8.2 in respect of each component cover and each estimator, results in determining the minimum and maximum values of the interval where the true mean lies with a probability of 0.9. The value of $t(10\%,5)$ is determined from the published t tables⁸ giving the significance levels of t distribution, i.e. $t(10\%,5) = 2.132$.

8.3.4 Having determined the values of all symbols in the above equation, the confidence interval limits may be reached as in the following example:

The mean of the weights given by the employer for the basic cover component under Table 8.2 is 35, the relative standard deviation shown in the same table is 3.16. Substituting the symbols in the equation by the aforementioned values as hereunder:

$$\text{Pr} \left[35 - \frac{2.132(3.16)}{(2.24)} < U < 35 + \frac{2.132(3.16)}{(2.24)} \right] = 0.9$$

$$\text{Pr} [32.00 < U < 38.00] = 0.9$$

i.e. in only 10% of the cases where such samples are drawn from the population would the interval so computed not comprise the true mean, or that we are 90% confident that the true value of the mean U lies between 32.0 and 38.0

- 8.3.5 A calculation of 90% confidence interval limits has been carried out in respect of each component cover as estimated by each of the four parties, i.e. employer, contractor, loss adjuster and insurer. This is shown in Table 8.6 overleaf.
- 8.3.6 By referring to the index components under Table 8.5 it is obvious that each of the component weights therein lies within the confidence interval limits shown on the last two columns of Table 8.6 for all types and all estimators. Furthermore, these confidence limits are all within 11% of the overall average of the means computed for the various cover components in Table 8.2 and shown separately in Table 8.5. Hence, the index components are reasonable and reliable and could be considered an acceptable tool to measure adequacy of cover in most ordinary projects which are tendered and insured every day in the Arab Gulf Area.

Table 8.6

Confidence interval limits placed around
the sets of weight means and overall average

	90% CONFIDENCE INTERVAL LIMITS											
	EMPLOYER		LOSS ADJUSTER		CONTRACTOR		INSURER		ALL ESTRS.			
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX		
Basic Cover	32.0	38.0	34.3	44.5	32.0	38.0	35.1	42.9	36.6	37.6		
1. Policy in joint names	2.6	4.6	1.9	2.9	2.6	4.6	3.0	3.0	3.0	3.3		
2. Construction machinery	7.5	13.3	10.2	14.6	7.5	13.3	9.9	11.7	10.8	11.2		
3. Con. Mach. during maint.	1.1	3.3	0.9	2.1	1.1	3.3	0.8	1.6	1.7	1.9		
4. Third party liability	5.9	10.9	10.0	10.0	5.3	9.9	9.4	12.2	8.9	9.5		
5. Cross liability	4.0	4.0	2.0	2.0	4.0	4.0	4.1	5.1	3.4	3.9		
6. Aggr. TPL single limit	4.3	6.1	5.0	5.0	4.3	6.1	3.1	4.1	4.6	4.9		
7. Full replacement	6.2	9.4	2.0	2.0	5.2	8.0	5.0	5.0	4.8	5.9		
8. Maintenance	4.5	5.9	5.0	5.0	4.5	5.9	3.1	4.1	4.6	4.9		
9. Conseq. of faulty design	2.4	5.6	5.0	6.4	1.4	4.6	3.7	5.9	4.1	4.6		
10. Inland transit	4.1	7.5	2.1	4.7	4.1	7.5	2.6	4.2	4.3	4.9		
11. Strikes and riots	1.0	1.0	3.0	3.0	4.0	4.0	1.7	3.9	2.4	3.0		
12. Clearance of debris	1.4	4.2	4.9	5.9	1.4	4.2	3.8	5.4	3.6	4.2		
13. Extra charges etc.	2.1	3.5	0.8	2.4	2.1	3.5	0.9	1.9	2.0	2.3		
14. Professional fees	0.7	2.9	0.8	1.6	0.7	2.9	0.9	1.9	1.5	1.6		

$t(10\%, 5) = 2.132$

8.3.7 It is believed that until the present circumstances, which negatively affect the demand for adequate insurance cover as explained in the previous chapters, have changed, leading to issue of improved policies, the various indices components and the overall average index components detailed above can be a useful tool for persons who are not insurance experts checking CAR/EAR policies, to help them achieve the important aim of making sure that the policy in hand provides a reasonably adequate cover.

8.3.8 It is worth pointing out that decennial liability insurance, referred to in chapters five and six, is not included in the index formulated in this chapter due to the fact that the index is meant to measure adequacy of the customary CAR/EAR cover provided during construction/testing/maintenance operations only.

8.4 Reaction to the use of the index of the officers concerned

8.4.1 In addition to the reliability test, the index was tested to find out the reaction to it, of those who are not insurance experts but in charge of negotiating and checking insurance policies relating to construction projects. Those include financial managers, engineers, commercial directors, general managers of contracting firms, consulting engineers and employers.

8.4.2 A questionnaire (reproduced in appendix "M") was prepared giving details of the index and the manner in which it was constructed, the parties who participated therein and the method of using it. The questionnaire included a request to the

reader to study the index schedule carefully and mark his independent opinion of the level of usefulness of the schedule and its average weights for negotiating and checking a CAR policy. Four levels of usefulness were shown on the questionnaire, one of which was required to be marked:

- a. Helpful for all projects
- b. Helpful for most projects
- c. Helpful for some projects
- d. Of little or no value

The position of the officer giving his opinion, the name of his organization, his signature and the date were also required to be given on the questionnaire.

8.4.3 The questionnaire was given to 30 officers randomly selected representing: contractors (international as well as local firms), employers (including government departments and large oil companies) and consulting engineers. The result of the survey has been as follows:

22 marked level (a) i.e. Helpful for all projects
7 marked level (b) i.e. Helpful for most projects,
1 marked level (c) i.e. Helpful for some projects,
No officer marked level (d) i.e. Of little or no
value

8.4.4 During the meeting with the majority of the officers various questions were asked by them seeking information about the basic cover and its supplements. They considered the index an educational instrument which provided them with new information they were not aware of before. Engineers in particular, thought that the index should be consulted before insuring any project. Out of 15 engineers 14 marked level (a) on the

aforementioned questionnaire, whereas out of 13 financial managers, accountants and the like, 7 marked level (a) and 6 marked level (b). The rest of the officers were a quantity surveyor who marked level (a) and a technical manager who marked level (c). In addition almost all the officers who gave their opinion asked for copies of the schedule for their own use in future.

8.4.5 It may therefore be inferred from the result of this limited but indicative survey that the index is likely to be welcomed for use by contractors, employers and consulting engineers dealing with CAR policies.

8.5 Summary

8.5.1 Formulation of a measure to quantify adequacy of cover under construction all risks policies is attempted in this chapter. This measure may be found helpful to the person who is not an insurance expert but who is required to check CAR/EAR policies to evaluate their adequacy of cover. The method starts by allocating weights to the basic cover and to each of the 14 supplements (component covers) defined under chapter seven. It is obvious that they do not all have the same importance or carry the same weight. The evaluation of the importance of a component cover depends, to a large extent, on the effect of such component on the works and on the insured in case of loss or damage when the particular component cover is not provided for. The total weights for the basic cover and the 14 supplements are taken as 100 if they were all satisfied. A schedule listing the items with the weight next to each one may be used as a tool to measure the adequacy of cover under the particular policy.

8.5.2 It is, however, important to note that the weight of a particular cover is greatly affected by the particular project. Hence, the subject was taken a step further and more than one schedule was constructed, each applicable to a certain specified type of project. From these schedules, average index components were formulated that would be applicable to a major part of the construction market in the area.

8.5.3 To be able to formulate weight schedules that would be reasonably acceptable to all parties involved in this issue, the aforementioned schedules prepared by an insurer were discussed with an important employer, a big contractor and a well-known loss adjuster, all operating in the Arab Gulf Area, to sound their opinion and benefit from their knowledge and experience which may be reflected in their participation in formulating a practical index. Projects have been divided into five types and each party was requested independently to estimate according to his own judgment the respective weights for each type separately. Including the schedules prepared by the insurer, the result was four separate sets of weights for each of the five types of projects. The significance of the variations in the responses of the parties in placing weights for each component cover led to further analysis. The standard deviations, variance coefficients and the average absolute differences relating to these weights have been calculated which helped to summarise their respective variations and understand the relationships between the various mean sets. An average of the four sets of each type is calculated, and on the basis that the five types of projects carry equal weights an overall average is

calculated for the basic cover and for each component cover. The resultant weights can be considered as components of an index applicable to most CAR/EAR policies issued for projects in the area.

8.5.4 To be able to judge the reasonability and reliability of the weight means and the overall average index components, confidence interval limits have been calculated and placed around the sets of weight means and the overall average. It has been found that we are 90% confident that the true value of the mean lies between the computed confidence interval limits. Hence, the overall average index components are reasonable and reliable.

8.5.5 In order to sound the reaction of engineers, accountants and other persons who are supposed to be users of the index, a questionnaire was prepared and was given to a number of them randomly selected, to mark their independent opinion of the level of usefulness of the index and its relative weights. The result shows their positive reaction and indicates that it is likely to be welcomed as a useful practical tool to help in measuring adequacy of cover under CAR policies.

Chapter 8 References

- 1 In practice hardly any supervising bodies in the area employ insurance experts.
- 2 The Ministry of Public Works - Kuwait, Major Projects Department, (head of section following up the receipt and checking CAR policies).
- 3 M.A. Kharafi - A well known contractor, among the biggest in the Middle East. Based in Kuwait with projects in and out of the Arab Gulf Area (chief engineer and technical consultant to the firm).
- 4 V. Barsamian - Civil Engineer, contractor and a well known loss adjuster. Operating in almost all the Arab Gulf States and other countries in the Middle East.
- 5 P.G. Moore (1974). Principles of Statistical Techniques. London: Cambridge University Press, 100-108.
- 6 Edward C. Bryant (1966). Statistical Analysis. New York: McGraw Hill Book Company, 84-87. See also P.G. Moore. op. cit., 193,194.
- 7 Because $\frac{\bar{Y} - U}{s/\sqrt{n}} < t(10\%, 5)$ gives $\bar{Y} - U < t s/\sqrt{n}$
 $U > \bar{Y} - t s/\sqrt{n}$
and $\frac{\bar{Y} - U}{s/\sqrt{n}} > -t$ gives $\bar{Y} - U > -t s/\sqrt{n}$
 $U < \bar{Y} + t s/\sqrt{n}$
- 8 P.G. Moore. ibid., 194.

9. ANALYTIC APPROACH TO CONSTRUCTION
INSURANCE PRACTICES IN THE AREA

9.1 General

- 9.1.1 In order to be able to gauge the extent of adequacy of cover for the vast majority of the construction/erection policies issued in the Arab Gulf Area, it is essential to examine carefully a big slice of the CAR/EAR policies issued in the area. For this purpose a study was conducted, covering all construction/erection all risks policies, totalling 1573 in number, issued during a period of nine years from 1975 to 1983, by one of the major insurance companies in the area that ranks, in total premium income, the third largest among some 250 insurance companies.
- 9.1.2 In late 1973 and 1974, the increase in oil prices generated a huge amount of surplus funds in the Arab Gulf Oil exporting countries. It was not long before a major part of these surplus funds found its way to pay for development projects that the Arab Gulf Area was in need of. Plans were drawn, sometimes hastily, to carry out these projects, and by the mid-seventies the number and size of construction projects had sharply increased creating a greater demand for insurance to cover the various risks connected with the construction activity. Therefore, the study covered the period from 1975, the year that witnessed the beginning of the boom in demand for insurance of construction works, until 1983, showing the most up-to-date situation compared with the early years of the boom and displaying, as well, the trend during the said period.
- 9.1.3 The study is based on the fact that every policy issued provides, inter alia, the basic insurance

cover which is almost the same in all the policies. Each policy is examined carefully and the 14 supplements to the basic cover given in chapter seven are looked for thereunder. By checking the basic cover and recording every addition thereto, a detailed record of the extent of protection provided under each policy is obtained. This plan made it possible to follow up and compare the frequency of each addition and the overall extent of covers as well as the trends during the whole period of 9 years. An overall frequency average for each of the 14 supplements during the whole period of the survey has also been calculated showing which covers are more asked for on the average. Furthermore, an overall percentage appraisal of adequacy of cover was obtained for each of the nine years of study.

9.1.4 Again, the investigation was carried out in greater depth by splitting all the policies into two groups according to the category of the principal. The aforementioned analytic process allowed two stages of comparison to be made, firstly between the two groups, and secondly between each group and the whole. Conclusions were then drawn, based on the results obtained.

9.1.5 Further, all the policies issued for projects owned by a specific sector of the 2nd category of principals who adopt a system of follow up and checking of the policies submitted to them, were separated and analysed in a similar manner, compared with each of the two main groups and with the whole, showing the extent of improvement in the general level of adequacy that arises from such follow up and checking.

- 9.1.6 The index formulated in chapter eight is put into application to measure the extent of adequacy of cover for each of the aforementioned groups.
- 9.1.7 Finally on the policies side, the trend of adequacy of cover during the nine years period was investigated to locate where action is needed in the coming years to improve the situation.
- 9.1.8 To complete the picture the investigation was continued on the claims side. Losses paid under each of the three types of cover provided by the CAR policy, i.e. the works and the materials, the plant and machinery and the third party liability were gauged during the last three years of the investigation period referred to above. The study included a calculation of the frequency and weight of losses actually paid under each type of cover as well as a distribution of these claims according to the nature of the loss. This process which resulted from a study of the losses, within the information available in the claims files, leads to a better appreciation and evaluation of the repercussion of inadequate coverage under CAR/EAR policies on claims made under the policies. This latter aspect is dealt with in more detail in the next chapter.

9.2 The extent of cover under the policies issued during the period 1975-1983

- 9.2.1 As mentioned earlier this analytic approach covered the policies totalling 1573 in number, being all policies issued during a nine year period by a major insurance company in the Arab Gulf Area. Given that rather similar basic insurance cover is provided under each policy, it

is in order to ignore any count of the basic cover noting that its 'value' is 'constant' under each policy. This section therefore, concentrates on the balance of the insurance cover deemed necessary to complete the adequacy of the protection under the policy.

9.2.2 The following table shows the frequency of each of the 14 supplements to the basic policy cover, in each of the nine years. Since the number of projects vary from year to year, a nine year weighted average for each item is also shown in the table, which helps to visualise which items are more required on the average.

9.2.3 The table shows that whereas 95.5% of all policies contain a cover in respect of third party liability, only 18.9% of the policies provide an aggregate limit of liability exceeding the limit for a single accident. Because the policy limits for liability cover per single accident, in most policies investigated, are on the low side, the cover provided thereunder is, therefore, far from being adequate. The table also shows that whilst 47.0% of the policies provide a cover for construction plant and machinery during the construction period, the percentage drops to 0.1% in respect of the same cover during the maintenance period. However, maintenance risks as far as the construction works are concerned are covered in only 49.3% of the policies. It is also worth pointing out that hardly any policies do provide full compensation in the case of loss or damage, to the contract work, recoverable thereunder. This is clear by noticing that only 0.7% of the policies provide a cover on a full replacement value basis. It is also clear by

Table 9.1

Frequency of each of the 14 supplements to the basic cover
- All Policies -

	75	76	77	78	79	80	81	82	83	9 Years weighted average
YEAR 19										
No. of Policies	112	165	185	173	209	170	166	185	208	
1. Policy in joint names	67.9	52.1	58.4	64.2	65.6	74.1	84.9	83.2	72.6	69.3
2. Construction Machinery	49.1	42.4	35.7	42.2	46.9	50.0	65.1	48.1	38.9	47.0
3. Construction Machinery during maintenance	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.1
4. Third party liability	65.2	89.7	98.9	99.4	98.6	99.4	100	97.8	98.1	95.5
5. Cross Liability	30.4	29.1	29.7	36.4	47.4	55.3	62.7	55.7	43.3	43.9
6. Aggregate third party limit exceeds single limit	11.6	13.9	10.8	20.2	13.4	27.1	24.7	24.3	22.1	18.9
7. Full replacement	0.0	0.6	0.0	0.0	0.5	3.5	1.2	0.0	0.5	0.7
8. Maintenance	57.1	45.5	40.0	44.5	50.2	50.0	51.8	58.9	48.1	49.3
9. Consequences of faulty design	2.7	4.2	3.2	7.5	13.9	14.7	9.6	14.6	7.7	9.0
10. Inland transit	0.9	2.4	5.5	10.4	6.2	8.8	10.2	4.1	8.7	7.7
11. Strikes & Riots	6.3	5.5	4.2	8.7	10.0	9.4	8.4	14.1	9.6	8.6
12. Clearance of debris	16.1	22.4	18.4	30.1	60.2	56.5	69.3	65.4	47.6	41.7
13. Extra Charges etc.	0.9	1.8	1.6	6.4	6.7	13.5	10.2	11.4	10.1	7.2
14. Professional fees	0.9	1.2	0.5	2.9	2.9	3.5	4.2	8.1	0.5	2.8

noticing that expenses incurred, following loss or damage in respect of clearance of debris, extra charges or professional fees are covered in only 41.7%, 7.2% and 2.8% of the policies respectively. The frequency also drops to less than 10% for protection in connection with loss or damage consequent upon fault in the design or during inland transit or due to strikes and riots. Finally, the table shows that 69.3% of the policies have been issued in the joint names of the principal and the contractor, but only 43.9% of the policies contain the cover in respect of cross liability between the insured parties.

9.3 Variation of frequency of covers with varying circumstances

9.3.1 To take the investigation to a further stage, the policies have been divided into two main groups according to the category of the principals (owner of the project), being a prime factor in the nature and size of the project and in whether or not a well experienced consultant and contractor are employed.

- The first group of policies cover projects owned by the first category of principals who are individuals and small concerns such as simple partnerships and the like.
- The second group cover projects owned by the second category of principals who are governments, corporations, companies, institutions etc., that do not fall under the first category.

9.3.2 Projects owned by the first category of principals tend to be either small and mainly in respect of private dwellings or small to medium commercial and industrial buildings. This category of principals are usually not aware of the various insurance covers available. They employ individual contractors or small contracting firms, with or without employing a consulting engineer who, if employed, will have a contract usually on a design basis only. In many small projects the owner of the project does not employ a contractor, but hires labourers and one or two supervisors to do and supervise the work and that is about all. It follows that if the insurance cover is not required by an authoritative body as a prerequisite of issue of the building permit, as in Kuwait¹, insurance is not usually taken by this group of principals or their contractors. It is, however, to be noted that until 14.4.85 insurance cover required by Kuwait Municipality as a prerequisite of issue of building permit was in respect of the buildings only and did not include principal's/contractor's liability toward third parties and/or towards their labourers. It still does not include constructional plant, transportation risks, loss of money and all the other insurance covers usually needed in connection with a construction project.

9.3.3 Owners of projects in Kuwait were not required by the law before 14.4.85 to employ contractors. They were also allowed not to employ consulting engineers in the case of building private dwelling houses or other buildings of low value specified by the Municipality. This situation, which clearly allowed owners to build their private dwelling houses by themselves without even

employing technical advisers, was partially amended in Decree No.30 Regulating Building Works which came into effect on 14.4.85, whereby the owner is now required to employ a classified contractor and sign with him a contract as per a specified wording unless the building to be constructed is an annex not exceeding 100m². The owner is, however, still allowed not to employ a consulting engineer in case of buildings of low value. It may be worth pointing out that a building of 100m² may cost in the Kuwaiti market, depending on the type of material used, between US\$ 35,000-75,000 approximately.

- 9.3.4 Projects owned by the second category of principals are mostly medium to big size projects. They comprise construction/erection of commercial and industrial buildings, factories, power stations, refineries, gas liquification, petrochemical and desalination plants, bridges, highways, roads, sewers, cable laying, pipelines, offshore works and a variety of other projects.
- 9.3.5 In contrast with the first category of principals, the second category normally employs well experienced local and international contractors, as well as consulting engineers to carry out the design and supervision on behalf of the principal. In some cases, the design for all or for part of the project is also the responsibility of the contractor, in which case special care is needed to make sure that the insurance policies arranged take care of the additional responsibilities of the contractor. Written contracts of various forms normally exist between this category of principals and their contractors, but the insurance clauses contained in the majority of

these forms² limit the insurance requirement to cover the works, construction plant, third party liability and the workers. The said clauses do not mention the other types of insurance necessary to cover the construction operation adequately.

9.3.6 To be able to examine the variation of frequency of cover under the two aforementioned groups, the following tables are given showing the frequency of each of the 14 supplements to the basic cover under policies of each of the two main groups of policies.

9.3.7 It is evident from the two following tables that policies covering projects owned by the second category of principals provide more adequate cover than those covering projects owned by the first category. This fact is manifested in the nine years frequency average in respect of each of the 14 items comprising the tables. The reasons for this feature may be summarised as follows:

1. Lack of adequate insurance awareness on behalf of principals of the first category and their contractors.
2. The complete absence, in most cases, of anybody among the staff of the principals of the first category to handle insurance matters.
3. Lack of proper written contracts in the majority of cases between principals of the first category and their contractors.
4. It is not always clear, between principals of the first category and their contractors, whose liability it is to effect the necessary insurance covers in connection with their projects.

Table 9.2

Frequency of each of the 14 supplements to the basic cover
- Ist Group -

%

	75 38	76 77	77 97	78 92	79 85	80 64	81 48	82 66	83 87	9 years weighted average
1. Policy in joint names	5.3	7.8	25.8	34.8	32.9	40.6	58.3	56.06	37.9	33.2
2. Construction machinery	5.3	6.5	6.2	8.5	8.8	23.4	45.8	39.4	24.1	19.9
3. Construction machinery during maintenance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4. Third party liability	2.3	80.5	99.0	98.9	98.8	100	100	98.5	100	91.6
5. Cross liability	0.0	3.9	4.1	4.3	7.1	4.7	8.3	9.1	1.1	4.7
6. Aggregate third party limit exceeds single limit	2.6	1.3	0.0	4.3	0.0	1.6	0.0	0.0	2.3	1.4
7. Full replacement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8. Maintenance	2.6	5.2	3.1	12.0	12.9	10.9	10.4	12.5	17.2	12.4
9. Consequences of faulty design	0.0	1.3	0.0	0.0	2.4	0.0	0.0	0.0	0.0	0.5
10. Inland transit	0.0	1.3	0.0	0.0	2.4	0.0	0.0	0.0	0.0	0.5
11. Strikes & riots	0.0	0.0	0.0	0.0	2.4	0.0	0.0	0.0	0.0	0.3
12. Clearance of debris	0.0	3.9	2.1	5.4	16.5	39.1	50.0	50.0	36.8	21.1
13. Extra charges etc.	0.0	0.0	0.0	0.0	2.4	0.0	0.0	0.0	0.0	0.3
14. Professional fees	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2

Table 9.3

Frequency of each of the 14 supplements to the basic cover
- 2nd Group -

%

	75 74	76 88	77 88	78 81	79 124	80 106	81 118	82 119	83 121	9 years weighted average
1. Policy in joint names	100	90.9	94.3	97.5	87.9	94.3	95.8	98.3	97.5	95.0
2. Construction machinery	71.4	73.9	68.2	69.1	66.1	66.0	72.9	52.9	61.2	66.3
3. Construction machinery during maintenance	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.1
4. Third party liability	95.9	97.7	98.9	100	98.4	99.1	100	97.5	96.7	98.3
5. Cross liability	44.9	51.1	58.0	72.8	75.0	85.8	84.7	81.5	73.6	71.7
6. Aggregate third party limit exceeds single limit	16.2	25.0	22.7	38.3	22.6	42.5	34.7	37.8	36.4	31.3
7. Full replacement	0.0	1.1	0.0	0.0	0.8	5.7	1.7	0.0	0.8	1.2
8. Maintenance	85.1	80.7	80.7	81.5	75.8	73.6	68.6	71.4	70.2	75.5
9. Consequences of faulty design	4.1	6.8	6.8	16.0	21.8	23.6	13.6	22.7	13.2	15.1
10. Inland transit	1.4	3.4	10.2	22.2	8.9	14.2	14.4	21.8	14.9	12.8
11. Strikes & riots	8.5	10.2	8.0	8.5	15.3	16.0	11.9	21.8	16.5	14.6
12. Clearance of debris	24.3	38.6	36.4	58.0	56.5	67.0	77.1	73.9	55.4	56.4
13. Extra charges etc.	1.4	3.4	3.4	13.6	9.7	21.7	14.4	17.6	17.4	12.2
14. Professional fees	1.4	1.1	1.1	6.2	4.8	5.7	5.9	12.6	0.8	4.7

5. The aspect of obtaining more restricted insurance covers for the purpose of saving in the overall cost has greater effect on the first category.
6. The absence, in most cases, of advisers or consulting engineers appointed by principals of the first category who might help in improving the extent of adequacy of cover under the policies.

9.3.8 On the other hand, although policies issued for projects owned by principals of the second category provide more adequate cover than those of the first, yet actually the cover provided thereunder is still not fully adequate.

9.4 Degree of adequacy of cover can be improved by a system of follow up and checking of policies

9.4.1 To show the effect of the follow up and checking of insurance policies on the degree of adequacy of cover, all policies issued during the period of nine years for the Major Projects Department at the Ministry of Public Works in Kuwait were analysed separately, and the nine years average frequency of each of the 14 supplements to the basic cover was recorded and compared with that of the other policies relating to the same group of policies, i.e. the second group. It was also compared with the first group and with the whole. The number of policies issued for the M.P.D. was 14.

9.4.2 It is worth pointing out that the Major Projects Department has a section which, in addition to other work, follows up and checks insurance policies submitted by contractors covering

projects supervised by the department. The result of the aforementioned comparison is displayed hereunder.

Table 9.4

Comparison of frequencies of each of the
14 supplements to the basic cover
- 9 years average -
%

	<u>All Policies</u>	<u>1st Group</u>	<u>2nd Group</u>	<u>M.P.D.</u>
1. Policy in joint names	69.3	33.2	95.0	100
2. Construction machinery	47.0	19.9	66.3	100
3. Construction machinery during maintenance	0.1	0.0	0.1	0
4. Third party liability	95.5	91.6	98.3	100
5. Cross liability	43.9	4.7	71.7	100
6. Aggregate third party limit exceeds single limit	18.9	1.4	31.3	100
7. Full replacement	0.7	0.0	1.2	0
8. Maintenance	49.3	12.4	75.5	100
9. Consequences of faulty design	9.0	0.5	15.1	50
10. Inland transit	7.7	0.5	12.8	57.1
11. Strikes and riots	8.6	0.3	14.6	100
12. Clearance of debris	41.7	21.1	56.4	100
13. Extra charges etc.	7.2	0.3	12.2	35.7
14. Professional fees	2.8	0.2	4.7	21.4

9.4.3 The table shows that eight out of the 14 items are included in all the policies pertaining to the Major Projects Department, whereas under the 2nd group of policies not a single item could be traced to be included under all policies. Two items are not yet required by the Major Projects Department and no contractor has taken the initiative to obtain an insurance cover in respect thereof; their frequencies are therefore Nil.

Incidentally, under the 2nd group of policies the frequencies of the same two items are very close to zero.

9.4.4 It is, therefore, obvious that if policies are checked and amendments are followed up by a supervisory body, a material improvement in the adequacy of cover provided thereunder will follow.

9.5 Application of the index

9.5.1 To put the index formulated in chapter eight into practical application, the frequencies of component covers under each of the first and second groups of policies and under the group pertaining to the Major Projects Department have been weighted according to the overall index parameters which, for the purpose of this exercise, are rounded hereunder to the nearest whole number. The total degree of adequacy which is the sum of basic cover and the 14 supplements reveals the adequacy index of the cover under each group. This is shown in Table 9.5 overleaf.

9.5.2 The scope of cover under policies pertaining to the Major Projects Department can be said to be more adequate, 1.28 times the second group of policies, and about 1.75 times the first group.

9.6 Trend of adequacy of cover during the period of study

9.6.1 To be able to examine the results more closely the investigation was further extended to measure the degree of adequacy of cover, as worked out in Table 9.5 for each of the nine years. The results are displayed in Table 9.6 overleaf, from which the trend can easily be seen.

Table 9.5

Real extent of adequacy of cover
- 9 years average parameters -

	<u>Adequacy Index</u>	<u>1st Group</u>	<u>2nd Group</u>	<u>M.P.D.</u>
Basic Cover	37	37	37	37
1. Policy in joint names	3	1.00	2.86	3
2. Construction machinery	11	2.05	7.35	11
3. Construction machinery during maintenance	2	0.00	0.02	0
4. Third party liability	9	7.78	8.84	9
5. Cross liability	4	0.19	2.79	4
6. Aggregate third party limit exceeds single limit	5	0.07	1.53	5
7. Full replacement	5	0.00	0.06	0
8. Maintenance	5	0.48	3.82	5
9. Consequences of faulty design	4	0.02	0.57	2
10. Inland transit	5	0.03	0.64	2.86
11. Strikes and riots	3	0.01	0.39	3
12. Clearance of debris	4	0.91	2.17	4
13. Extra charges etc.	2	0.00	0.23	0.71
14. Professional fees	1	0.00	0.05	0.21
Degree of adequacy of cover	<u>100</u>	<u>49.54</u>	<u>67.99</u>	<u>86.78</u>

Table 9.6

Trend of adequacy of cover

<u>Year</u>	<u>1st Group</u>	<u>2nd Group</u>	<u>All Policies</u>
1975	38.21	64.85	55.99
1976	45.99	66.41	56.87
1977	47.76	66.29	56.63
1978	49.09	70.09	59.66
1979	49.78	68.01	61.85
1980	52.17	71.02	63.80
1981	55.64	70.59	66.26
1982	54.87	69.35	64.13
1983	52.28	67.93	60.80

9.6.2 The table shows that the overall improvement in the degree of adequacy of cover does not seem to be continuous. The first group figures started to deteriorate in 1982 and the deterioration increased in 1983, whilst for the second group, fluctuations up and down are obvious. The table reveals that in 1978 the degree of adequacy of cover for the 2nd group of policies was higher than that in 1983. Close examination reveals that after 1980 the degree of adequacy of the 2nd group deteriorated at a yearly increased rate. This is particularly important due to the fact that the 2nd category of principals usually employ consulting engineers and experienced local and international contractors who are supposed to be more aware of the extent of covers provided under their policies than the 1st category of principals and their contractors. The importance of this finding also emanates from the fact that in addition to the nature of the projects which makes them very important to the economy of the country, their values and the amounts exposed to loss and/or damage, are much higher than the values of projects owned by the 1st category of principals.

9.6.3 During the period of investigation the difference between the minimum and maximum degree of adequacy of cover of the first group policies was 17.43%, whereas for the second group it was 6.17%. Although the improvement in adequacy of cover in the first group policies is about 2.82 times as much as that in the second group, yet the maximum percentage of adequacy of the first group of policies, i.e. 55.64% was only reached in 1981 and of the second group, i.e. 71.02% was reached in 1980. The extent of adequacy for all the policies as shown in the table is a reflection of the

extent of adequacy of the two groups taken together.

9.6.4 To reduce the effect of yearly fluctuations, especially in the 2nd group figures, a moving average of three years' results was calculated and displayed in the following table.

Table 9.7

Trend of adequacy of cover based on moving average

<u>Year</u>	<u>1st Group</u>	<u>2nd Group</u>	<u>All Policies</u>
75-77	43.99	65.85	56.50
76-78	47.62	67.60	57.72
77-79	48.88	68.13	59.38
78-80	50.35	69.71	61.77
79-81	52.53	69.87	63.97
80-82	54.23	70.32	64.73
81-83	54.26	69.29	63.73

9.6.5 Whilst the table smoothes out yearly fluctuations in the degree of adequacy, it emphasises the deterioration in the index in the last three years. This is shown in Figure 9.1 overleaf.

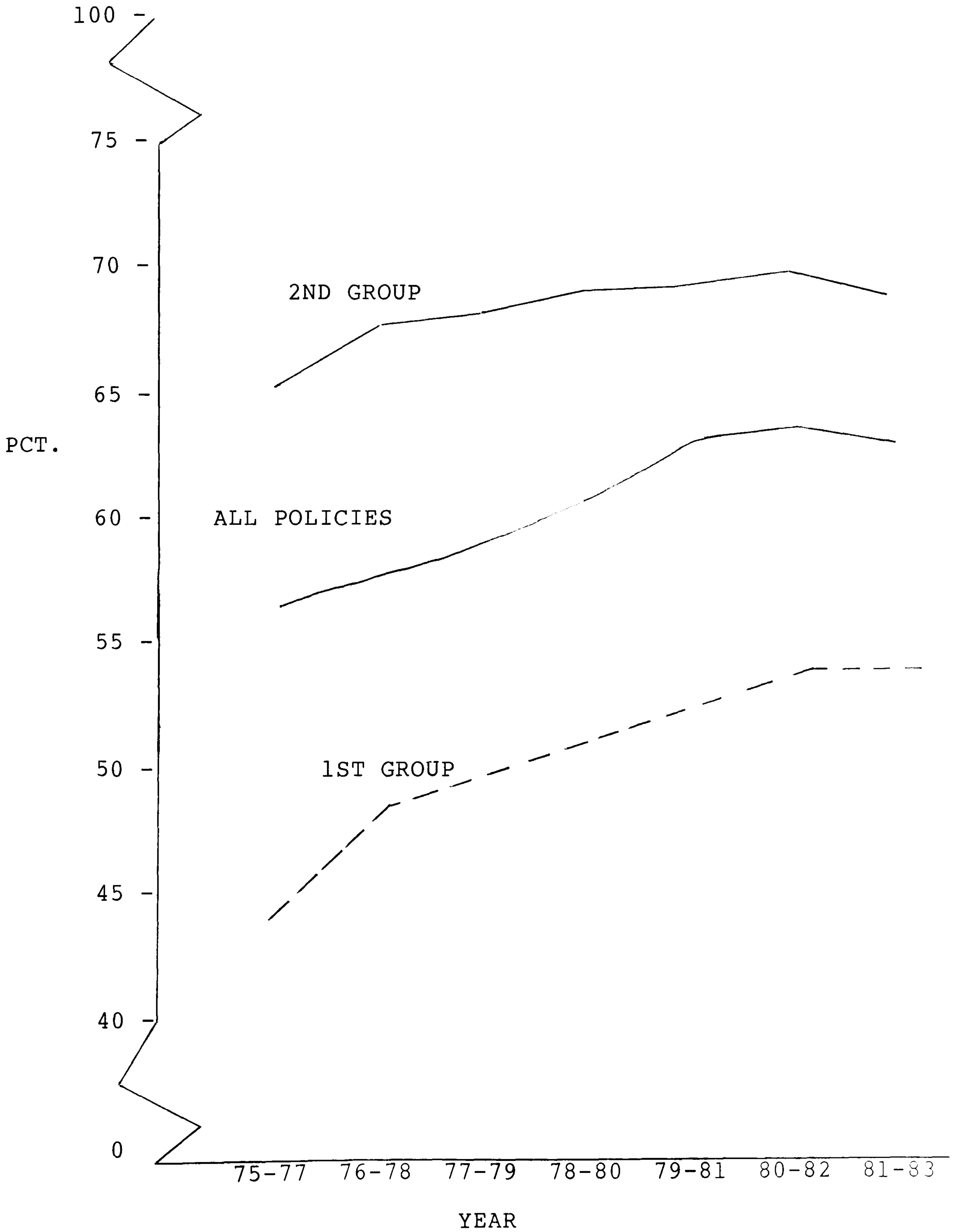
9.6.6 It is evident that action is needed in the market to accelerate improvement in the degree of adequacy of cover. Action is even more necessary for the deteriorating figures of the last two years or three, which, if continued in future years, would pull down the degree of adequacy of cover to very low levels.

9.7 Analysis of the claims paid during 1981-1983

9.7.1 Having examined in depth the CAR/EAR policies issued in the area it was important to complete the picture by examining the claims that occurred. The investigation is, therefore,

Figure 9-1

Trend of adequacy of cover



continued to examine claims paid during the last three years of the study under CAR/EAR policies irrespective of the date of the issue of the policy or the date of the occurrence of the loss. Claims paid during the period of investigation fall in three main groups:

- a. Claims falling under policies issued and handled directly by the insurance company;
- b. Claims falling under policies shared with other local insurers but not directly handled by the insurance company;
- c. Claims falling under policies issued for foreign risks accepted from other insurance companies or brokers.

The study is limited to the claim files under group (a), totalling 453 in number, due to the fact that the information available on these claims is sufficient to provide useful and meaningful results relevant to this study.

9.7.2 It was shown earlier that the CAR/EAR policy normally provides cover for:

- a. The works including the materials for incorporation therein;
- b. The constructional plant, equipment and machinery (including temporary buildings not part of the permanent works unless included under (a));
- c. Third party liability.

It is now essential to find out the contribution of each of these three sections of the cover to the total CAR/EAR claims. Table 9.8 overleaf shows the frequency and weight of losses paid under each of the above covers (sections of the CAR/EAR policy).

- 9.7.3 The sum of the number of claims under the three sections of the cover, i.e. works/materials, plant/machinery and third party exceed the total number of claim files investigated (453) by 31, because in some cases the same file involved claims recoverable under more than one section of the policy. E.g. damage to the works and to constructional plant arising out of the same event.
- 9.7.4 The table shows that although the highest frequency of losses falls under the third party section the whole amount paid as a result thereof represents only 12% of the total amounts paid, whereas the frequency of losses under the works/materials section which is only 27% of the total number of losses accounted for 70% of the total amount of claims paid. The plant and machinery losses accounted for 28% of the total number and 18% of the total amounts paid.
- 9.7.5 The number of losses shown in Table 9.8 includes claims closed without payment of any amount usually either because the amount due fell within the deductible, or the contractor did not pursue the claim due to its negligible value, or the claim is repudiated due to inadequate cover provided under the policy. These claim files total 220 in number and involve 224 claims under the three sections of the cover. If they are excluded Table 9.8 may be reconstructed as in Table 9.9 overleaf.
- 9.7.6 Table 9.9 is not materially different from Table 9.8 other than in the average loss amount paid which is increased after excluding claims settled with no amount.
- 9.7.7 Both tables draw attention to the fact that claims in connection with loss and/or damage to the works/materials are more serious although less in

Table 9.8
Breakdown of number of claims and amounts paid by type of cover under CAR/EAR policies during 1981-1983

<u>Year</u>	<u>WORKS/MATERIALS</u>		<u>PLANT/MACHINERY TEMP. BUILDINGS</u>		<u>THIRD PARTY LIABILITY</u>		<u>TOTAL</u>	
	<u>No.</u>	<u>Amount</u>	<u>No.</u>	<u>Amount</u>	<u>No.</u>	<u>Amount</u>	<u>No.</u>	<u>Amount</u>
1981	36	\$ 767,530	25	\$ 61,953	86	\$ 206,370	147	\$ 1,035,853
1982	52	653,333	49	439,280	78	158,263	179	1,250,876
1983	34	1,456,433	54	222,263	70	133,910	158	1,812,606
<u>Total</u>	<u>122</u>	<u>2,877,296</u>	<u>128</u>	<u>723,496</u>	<u>234</u>	<u>498,543</u>	<u>484</u>	<u>4,099,335</u>
<u>Pct.</u>	25%	70%	27%	18%	48%	12%	100%	100%
<u>Average Loss</u>		\$23777		\$5682		\$2122		\$9105

Breakdown of number of claims and amounts actually paid by type of cover under CAR/EAR policies during 1981-1983 (i.e. excluding claims settled with no amount)

Table 9.9

<u>Year</u>	<u>WORKS/MATERIALS</u>		<u>PLANT/MACHINERY TEMP. BUILDINGS</u>		<u>THIRD PARTY LIABILITY</u>		<u>TOTAL</u>	
	<u>No.</u>	<u>Amount</u>	<u>No.</u>	<u>Amount</u>	<u>No.</u>	<u>Amount</u>	<u>No.</u>	<u>Amount</u>
1981	16	\$ 767,530	13	\$ 61,953	55	\$ 206,370	84	\$ 1,035,853
1982	33	653,333	30	439,280	27	158,263	90	1,250,876
1983	14	1,456,433	34	222,263	38	133,910	86	1,812,606
<u>Total</u>	<u>63</u>	<u>2,877,296</u>	<u>77</u>	<u>723,496</u>	<u>120</u>	<u>498,543</u>	<u>260</u>	<u>4,099,335</u>
<u>Pct.</u>	<u>24%</u>	<u>70%</u>	<u>30%</u>	<u>18%</u>	<u>46%</u>	<u>12%</u>	<u>100%</u>	<u>100%</u>
<u>Average Loss</u>		\$45671		\$9396		\$4225		\$17594

number. It is, therefore, important to pay more attention to the scope of protection provided under the policy in respect of the works/materials whether under the basic cover or under the supplements connected with it. However, under the basic cover increased deductible, for example, applicable to the works/materials section, will have a minimum effect on the total claims amount, whereas the same increased deductible applicable to the third party or plant sections of the cover will have a comparatively greater effect. Restrictions and limitations under the basic cover (and/or its supplements) for the works and materials to be incorporated therein, must be closely monitored by an insurance expert as it is not always possible for the technical or commercial staff of the contractor or the principal to understand properly the wording of the insurance policy and the various endorsements attached to it.

9.7.8 Planning the proper protection and obtaining an adequate cover under the CAR/EAR policy will be assisted by the knowledge of frequency and size of claims actually paid for the various types of losses occurring in a particular market. Having this in mind, the investigation was taken a step forward and further analysis was carried out to show the frequency and size of claims by nature of loss. This is best shown in the following table.

9.7.9 The table points to the high frequency of third party losses appearing under the previous two tables. Damage to existing cables and pipe lines by excavation works for roads, sewers and similar construction projects is the most frequent type of loss but the second least average loss in value. The other salient feature revealed by the table is the relatively high frequency and the highest average value of storm, tempest and flood losses in a desert area. This important aspect is ignored by

Table 9.10

Breakdown of number of occurrences and amounts
actually paid by type of loss during
the period 1981-1983

	No. of claim files investigated	No. of claim files settled with monetary value	Amount settled in US\$	Average claim in US\$
Fire/Explosion	45	30	1,515,110	50,504
Storm/Flood/ Water damage	55	28	1,591,273	56,831
Impact/Collision/ Overturning	106	55	449,993	8,182
Falling/Collapse	18	6	36,593	6,099
Defective Work/Design	8	1	6,000	6,000
Theft	15	5	8,163	1,633
Bodily injury (excluding workers)	5	3	130,000	43,333
Cables and pipe lines	201	105	362,203	3,450
Total	453	233	4,099,335	17,594

most international contractors, especially on their first project in the area. Third party bodily injury claims are few but account for the third highest average loss value, whereas theft losses are the least in average loss value.

9.8 Summary

- 9.8.1 To gauge the extent of adequacy of cover for the vast majority of the construction/erection policies issued in the Arab Gulf Area, a study has been conducted, covering all construction/erection all risks policies, issued during a period of nine years from 1975 to 1983, by one of the major insurance companies in the area.
- 9.8.2 Each policy was examined carefully and the 14 supplements to the basic cover given in chapter seven were looked for thereunder, hence a detailed record of the extent of protection provided under each policy is obtained, allowing to follow up and compare the frequency of each addition and the overall extent of covers, as well as the trend during the whole period of 9 years. An overall frequency average for each of the 14 supplements during the whole period of the survey has also been calculated showing which covers are more requested on the average. Furthermore, an overall percentage appraisal of adequacy of cover was obtained for each of the nine years of study.
- 9.8.3 The policies have been split into two groups according to the category of the principal, which is a prime factor in the nature and size of the project and whether well experienced consultants and contractors are employed. The first category of principals are the individuals and small concerns, and the second category are governments, corporations and the like. The aforementioned analytic process allowed comparisons to be made

between the two groups and between each group and the whole. Conclusions were then drawn, based on the results obtained.

9.8.4 Further, all the policies issued for projects owned by a major authority in Kuwait were separated and analysed in a similar manner, and compared with each of the two main groups and with the whole, showing the extent of improvement in the general level of adequacy that arises from adopting a system of follow up and checking of the policies.

9.8.5 The index formulated in chapter eight is put into application to measure the extent of adequacy of cover for each of the aforementioned groups. The degree of adequacy of cover of the first group policies was 49.53% only and for the second group policies 67.89%, whereas for the Kuwait authority studied where a system of follow up and checking of the policies is adopted, the degree of adequacy was 86.42%.

9.8.6 The trend of adequacy of cover during the nine years period was investigated to establish the action needed in the coming years to improve the situation.

9.8.7 To complete the picture the investigation was extended to the claims side. The study covered 453 CAR/EAR claim files paid during 1981, 1982 and 1983 by the same insurance company referred to earlier. The study included calculation of the frequency and weight of losses actually paid under each of the three types of cover provided by the CAR/EAR policy, i.e. works/materials, constructional plant/machinery and third party liability. It also covered the distribution of these claims according to the nature of the loss.

Chapter 9 References

- 1 "Decree No. 30 Regulating Building Works" issued by Kuwait Municipality effective 14/4/1985.
- 2 Please refer to chapter six for details of the forms most frequently used in the area.

10. REPERCUSSIONS OF THE PROBLEM ON CONTRACTORS,
PRINCIPALS AND INSURERS

10.1 Effect of inadequate insurance covers and lack of
proper advice on insurable losses under CAR
policies

10.1.1 To be able to evaluate the repercussions of the problem on principals and contractors, analysis of the paid claims referred to under section (9.7) was continued in greater depth to find out the effect of inadequate insurance covers and lack of proper advice on losses suffered by construction projects. Unfortunately, the process revealed that an accurate estimate is hardly possible due to many reasons, the most important of which was lack of sufficient information and data necessary for the study to produce exact figures. Another important reason is the confidentiality nature of the information, which rendered the field of investigation limited to the files and procedures of one insurance company where permission was given for investigating the files. The study was therefore limited to the claims recorded in the books of that insurance company.

10.1.2 Losses which are not reported, due, for instance, to inadvertent negligence on the part of a contractor, or due to his belief that they are not covered, are not known, and hence were not included in the study. In few other cases incidents are reported but not recorded by the insurer because it is obvious to contractors and insurers that these losses fall outside the scope of cover. No survey was carried out on such losses.

10.1.3 Each recorded claim carries a number and has a special file that embraces its documents. Documents of the claims investigated were thoroughly studied and two important documents were looked for in each file; the contractor's claim bill and the surveyor's or loss adjuster's report. The first document details the contractor's expenditure or his estimate of repairing or reinstating the damage. The second document details the loss adjuster's estimate of the amount payable according to the terms of the insurance policy. In some cases, each of these two documents shows detailed description and calculation, whereas in many others one or both documents are vague and the calculation is given in general terms. Agreement with the contractor on an amount to settle his claim is usually the main aim of the loss adjuster and the insurer. Verbal discussions are the channel through which such an agreement can be reached in many cases, and in the absence of detailed records of the minutes of these discussions it is sometimes not feasible to deduce the exact areas of agreement or of difference. The result would frequently be a compromise showing a lump sum agreed to be paid in settlement of the contractor's claim. It follows that the exact amount lost by the contractor due to inadequate insurance coverage or lack of proper advice cannot always be segregated from the amount reduced from his claim bill due to his exaggeration in quantities damaged or in repair cost.

10.1.4 In many cases, lengthy discussions between the contractor and the insurer or the loss adjuster take place on interpreting the terms of the insurance policy. This reveals that in many cases the contractor does not study his policy at the time of its issue and is not properly advised by

any insurance consultant or broker of its exact scope of cover.

10.1.5 Turning now to the investigation of the files of the paid claims, the following findings have been ascertained.

- a. In 78 claims the actual losses were reduced to varying degrees because the insurance covers were not on a replacement or reinstatement basis in respect of the works and/or the plant and machinery;
- b. In 21 claims the amounts spent by contractors on clearance of debris following losses covered by the policies were not reimbursed because the insurance covers did not include debris removal expenses;
- c. In 20 claims constructional plant and machinery losses were not recovered wholly or partly because the insurance covers did not include the whole or part of the plant and machinery;
- d. In 18 claims losses to third parties for which the contractors were liable were not recovered due to certain restrictions and limitations in the covers;
- e. In 10 claims amounts spent by contractors on extra charges expediting expenses, overtime etc. follow-

ing losses covered by the policies were not reimbursed because of lack of cover in respect of such expenses;

- f. In 3 claims losses resulting from faults in the design were not recovered because of lack of insurance cover;
- g. In 3 claims amounts paid as professional fees following losses covered by the policy were not reimbursed because of lack of cover under the policies;
- h. In 3 claims losses occurring during the maintenance period from a cause prior to termination of the construction period were not recovered because of lack of suitable cover under the CAR policies;
- i. In 2 claims losses occurring to materials stored outside the site were not recovered because the policies were limited to the construction site;
- j. In one claim damage to construction machinery during the maintenance period was not recovered because the plant/machinery cover expired at the expiry date of the construction period;

k. In 2 claims although the loss occurred before handing over the project, the loss was not recovered because it occurred after the works had been put into use which was in breach with the policy conditions;

l. In 19 claims the amounts spent by contractors on clearance of debris following losses covered by the policy were not claimed from the insurer although the policy provided the relevant cover, due to lack of professional advice at time of preparation of the claim by the contractor;

m. In one claim loss to works was not recovered in full although the policy provided for a cover on replacement value basis. The loss adjuster's fault passed unnoticed by the contractor and the insurer. Had the contractor employed an insurance consultant/manager the loss might have been recovered in full.

10.1.6 As stated earlier, the aforementioned cases are those ascertained from the information available in the files. It is unlikely that they are the only cases where inadequate coverage or lack of proper advice resulted in monetary loss to contractors and principals. Moreover, lack of sufficient information in other files hindered the

exact count of similar or other types of losses where compensations were not paid or not paid in full due to inadequate coverage.

10.1.7 The ascertained cases above constitute a sufficient indication of the existence of a fairly large problem. On their own these cases represent a sizable percentage of the total number of occurrences. The ascertained cases listed in paragraph 10.1.5 above totalling 161 cases (a-k) include 28 claims repudiated in full due to policy restrictions, leaving 133 claims partially paid which represent 51% of the 260 claims paid with monetary value referred to in chapter nine. To find out the ascertained minimum frequency of omission of each of items (a-k) above, they are taken separately as a percentage of the claims actually paid, i.e. excluding the "no claims" but including the 28 claims repudiated in full involving the section(s) of the cover the particular omission involved. This is best shown in the table overleaf.

10.1.8 Whilst no cases affected by the omission of the remaining supplements appeared in this limited investigation, the possibility of encountering problems due to their omission cannot be ruled out, even though some of them by their very nature do not occur frequently. For example, the omission to insure in the joint names followed by bankruptcy of the contractor after a loss is a rare occurrence, but if it happens, the loss to the principal can be very heavy. A case of bankruptcy is shown in one of the files, but fortunately the policy was issued in the joint names. It is to be remembered that more than 30% of the CAR/EAR policies are not issued in the

Table 10.1
Ascertained minimum frequency of omissions of cover
affecting claims paid

	<u>Cover omitted</u>	<u>No. of claims paid excluding no claims</u> ¹	<u>No. of omissions</u> ²	<u>Frequency</u>	<u>Section of the cover involved</u>
a.	Full replacement	140	78	56%	Works & plant/ machinery
b.	Clearance of debris	140	21	15%	Works & plant/ machinery
c.	Plant & Machinery	86	20	23%	Plant/machinery
d.	Third party	133	18	14%	Third party
e.	Extra charges	63	10	16%	Works
f.	Consequences of faulty design	66	3	5%	Works
g.	Professional fees	63	3	5%	Works
h.	Maintenance	66	3	5%	Works
i.	Plant & Machinery during maintenance	77	1	1%	Plant/machinery
j.	Materials stores outside site	63	2	3%	Works
k.	Works put into use before handing over	63	2	3%	Works

joint names. Another example is the omission of the supplement covering strikes and riots. It is true that the Arab Gulf Area had not experienced frequent events involving strikes and riots in the past, but it is also true that with changing circumstances world wide it is prudent to cover this risk in the future.

10.1.9 All such cases emphasise the importance of having an insurance manager or consultant among the staff of the contractor. It is reasonable to assume that the contractor's insurance policy and claims would have been better negotiated under the supervision of an insurance expert.

10.1.10 The repercussion of the problem created by the present situation is not limited to amounts lost by principals and contractors. The delays experienced in settling the claims cannot be ignored. The contractor's main concern after the loss and/or damage is to repair or reinstate it in the least possible time to avoid delays which normally result in penalties. Therefore, the nature of a CAR/EAR claim requires quick settlement, which may not be achieved because of the lengthy discussions that take place before reaching a final settlement. Understandably, the contractor does not easily give up his claim, whether totally or partially, and naturally the insurer does not normally pay the claim or any part thereof if it is not covered by the policy. The situation is aggravated by the fact that interpretation of the scope of cover initially required and that actually given may not coincide, a problem which frequently appears only after the loss occurs.

10.1.11 To calculate the average period taken to settle the claim included in this study, the period between the date each claim was reported to the insurer and the date on which it was finally settled was calculated to the nearest month, and the average calculated for each of the three years of study. Considering however, that a prudent insurer does not normally close a claim file as "no claim" without either obtaining the agreement of the contractor or after the lapse of some time to ascertain that no payment will be forthcoming, it is reasonable to assume that the period between the date a claim is reported and the date on which it is closed as no claim is normally longer than that of paid claims. Therefore, claims closed as "no claim" were excluded in calculating the average delay.

10.1.12 It may also be argued that liability claims normally take more time to be settled than claims concerning losses to the works, materials, plant and machinery. The investigation was, therefore, taken a step further, and all claims involving in all or in part third party losses were excluded leaving claims involving losses to the works, materials, plant and machinery. The latter losses are the type of losses which must be settled in the least possible time because the actual repair or reinstatement has always to be carried out without delay. In such cases, the contractor is in need of immediate reimbursement to secure smooth construction operation. In fact, however, this is not frequently achieved. This is best shown in the following table.

Table 10.2

Average period taken to settle CAR/EAR claims excluding claims settled as "no claim" and excluding third party claims

<u>Year</u>	<u>Average Period</u>
1981	13 months
1982	17 months
1983	20 months

10.1.13 The disturbing phenomenon in the above table is the deteriorating trend in the average delay in settlement. Although a 3 years period may not be sufficient to judge a trend, yet it constitutes an indication of hardening position on the part of contractors and on the part of insurers in negotiating claims. Contractors on one side are resisting more and more reduction in their claim bills, and insurers on the other, particularly because of the deteriorating results, do not wish to pay ex-gratia losses not covered by insurance policies. It may be worthwhile to link the deterioration in the degree of adequacy for cover shown under section six of chapter nine during 1981, 1982 and 1983, with the increasing average of the period taken in settling claims shown above during the same years, at the same time, that about 20% of the claims paid during this period fall under policies issued in the same period. It is, therefore, reasonable to assume that the deterioration in the average delay will be heavier in the year following the years of the study, and that the deteriorating level of adequacy of cover shown in Figure 9.1 of chapter nine was due to the fact that under the pressure of competition among insurers and deteriorating results as shown under Tables 4.7 and 4.8 of chapter four, insurers find themselves offering less coverage to compensate for thin premium rates prevailing in the market.

Many contractors who are usually unaware of the exact cover provided under their policies do not care, whilst others seem to be prepared to carry part of the risk in return for low premium rates that they press to maintain due to severe competition among contractors, which, in turn, forces them to bid as low as possible in order to secure a project.

10.2 Serious problems may arise through inadequacy of the insurance cover asked for and obtained by contractors

10.2.1 Serious problems for contractors and principals may arise out of the uninsured or not adequately insured losses that may result from the cover they ask for mainly by tender. This may involve not only the works and constructional plant on site, but also liability in respect of lives of workers, bodily injury, and property damage to third parties. Such problems suggest that concentrated efforts should be exercised by contractors' associations, chambers of commerce and similar interested organizations, to give proper advice and prepare programs on the importance of asking for adequate insurance cover in respect of construction projects.

10.2.2 A study was conducted on ten projects which suffered seriously through the inadequacy of the CAR cover which the contractor had asked for. The study covered the period from the time each contractor approached insurers for a quotation in respect of the cover he was seeking, until each project was handed over and all claims were finalized. The contractors involved were local, international and joint ventures between local and international contractors.

- 10.2.3 The study showed that the extent of adequacy of the cover requested and obtained by the contractor as compared with the model cover detailed in chapter eight, ranges between 62% and 85% (compared with 100% for the model cover given in Appendix L which includes all index parameters shown under Table 8.5).
- 10.2.4 Amounts claimed for the losses that occurred under the ten cases reached about US\$21,000,000. Independent loss adjusters were used for almost all claims. The total amounts actually settled were about US\$9,000,000, with some US\$12,000,000 not covered under the policies that met the cover asked for by the contractors.
- 10.2.5 The investigation showed that in all these cases with insurance covers issued with the same scope, limits and terms as asked for, contractors suffered heavy financial losses mainly out of one or more of the following risks and/or shortages in the insurance cover which they did not ask to include presumably to cut down expenses and/or due to lack of insurance awareness:
- a. constructional plant, equipment and machinery were not covered in whole or in part during the construction or maintenance period;
 - b. serious limitations (possibly for reducing insurance cost) in respect of the works/plant and/or third party sections;
 - c. cover period ended before handing over the whole project, without asking for extension of cover;
 - d. cover was not subject to full replacement value in respect of the works and constructional plant, equipment, etc.;

- e. no insurance cover was taken for materials supplied outside the contract price, e.g. by the principal;
- f. no cover was requested for consequences of faulty design, debris removal, etc.

10.2.6 It may be worth pointing out that in a small project included in these cases all the losses that occurred were repudiated because of complete lack of insurance coverage of a particular peril, which the contractor did not ask to cover.

10.2.7 The major claims involved physical damage to the works, materials, constructional plant, equipment, and machinery. Such losses need immediate settlement, particularly for a contractor with limited means, because the contractor in his rush to catch up with his work program must carry out immediate repair and/or reinstatement of the loss. Delay in settlement of such claims may put such contractor in financial difficulty. Although it is normal practice for insurers to effect payments on account if the claim is covered by the policy, yet inadequacy of coverage resulted in dispute which delayed any such payment sometimes for a few months. In some of these losses, it took more than three years from the date of occurrence of the loss to the date at which the disputed claim was settled at a compromise. Frequently, claims were entirely rejected.

10.2.8 No available information could be traced to estimate the exact repercussions of the financial loss on the contractors involved in these projects, but it can be reasonably assumed that in some of the cases investigated, losses were too heavy to the contractor and contributed to actual unpleasant

results such as withdrawal of some international contractors from the whole area or voluntary liquidation of some other local and joint venture firms. It may also be inferred that the financial losses suffered under some of the aforementioned cases contributed to the delays encountered in completion of the projects with negative repercussions on the respective principals as well.

10.2.9 If the contractors in these ten projects had employed insurance experts or sought their advice or if the employers had adopted a system of checking the covers by insurance consultants, the position referred to in 10.2.7 would unlikely have been the case. The additional covers would possibly have been bought at a relatively small cost and the contractor/employer would have been more adequately covered.

10.2.10 In contrast with the above cases, another project was studied in which an international contractor employed an insurance adviser who conducted the negotiations with the insurers on behalf of the contractor. Adequacy of cover under the CAR policy asked for approached 100%. Claims presented to the insurer were well documented and settlements were effected promptly after the loss adjusters prepared their final reports.

10.3 Uncertainty about the exact insurance requirements and the lack of proper supervision intensifying competition and resulting in muddling the terms of cover

10.3.1 The enormous increase in the number of contractors seeking new projects in the area resulted in sharp competition that reached, in many cases, uneconomic levels. This situation has forced

contractors to be, more than before, keen to save in every item of expenditure, including insurance cost. Saving in the insurance premiums took two directions:

- (a) Self Insurance
- (b) Pressing for lower insurance rates.

10.3.2 Self insurance has taken the following forms:-

1. Complete self insurance when the contractor estimates that the risk of loss or damage is remote and insurance is not specifically required by the principal or the consultant. This is the case in the majority of small projects³ where no written contract is signed with the contractor, or where a contract exists but it is of such a simple nature that it does not embody any insurance requirement. It is also the case when the owner carries out the construction work by himself assuming thereby the role of a contractor.
2. Partial self insurance when the insurance requirement clauses do not clearly specify the scope of the various types of insurance covers to be obtained by the contractor. In such cases, the contractor shoulders what he or his manager estimates to be a remote risk, either by reducing the scope and extent of insurance covers that he effects or by omitting to effect certain covers altogether. This is exercised in almost all small projects that are insured and in many of the medium and big projects. Partial self insurance is evidenced in first loss policies

or policies that do not cover the full replacement value of the works and of the constructional plant and machinery. These latter policies are the great majority of the policies issued in the area. (Table 9.1). It is also evidenced by the contractor shouldering certain risks, whether or not these risks are actually remote. Examples are limitation of cover during the maintenance period, or omission of cover for transport of materials to the site, cost of removal of debris following loss or damage to the works, strikes and riots, accidental loss or damage consequently upon faults in the design, liability cover during the maintenance period, cross liability cover etc. It is also evidenced in effecting workmen's compensation insurance that does not fully cover the employer's liability under the local law. Many contractors omit to insure the risk of dishonesty of their employees or accidental loss of money in transit, in the offices or on the site. They may also limit the insurance cover for the vehicles to the obligatory liability cover only. In Saudi Arabia, where motor liability insurance is not obligatory, experience shows that some contractors do not effect even the minimum cover required by the law in the other Arab Gulf States.

- 10.3.3 The other direction which saving in the insurance cost has taken, and which contractors usually exploit very efficiently, is their efforts to reduce insurance rates by various methods such as requesting many insurers and brokers to quote for the same risk encouraging them to compete keenly

against each other. In many cases, competition has been so severe that insurers and brokers amend their quotations time after time in their attempts to secure the business. In some cases, reduction in rates is made at the expense of the extent and scope of insurance covers. This is particularly so because not all insurers in the area use the same policy wording. Some insurance policies are more restrictive than others; even policies with wider scope of coverage may be amended to become limited in certain areas without discussing these amendments with the contractor at time of quoting for the risk. Invitations for insurance quotations rarely detail the scope and extent of the insurance cover required. Even if a copy of the insurance requirement clauses of the tender conditions is available to the insurer/broker, these clauses are sometimes so vague and ambiguous that a very limited insurance cover may well be argued to be in conformity therewith. Insurance quotations rarely detail the exact scope of cover quoted for, and the contractor or the principal in many cases does not examine the policy conditions until after the occurrence of the loss.

- 10.3.4 Competition among insurers in insurance of construction projects is a feature of the area⁴ in spite of sharing agreements in some markets⁵. Due to the severe competition and the absence of proper supervision, the market has experienced some muddling in the terms of certain insurance covers. Some policies are endorsed with vague and confusing clauses. Others restrict the cover in important areas. In a few other cases, and at the request of the contractor, very high deductibles appear in the policies rendering the insurance granted thereunder closer to an excess of loss cover⁶.

10.3.5 Lack of proper supervision on the part of principals and consultants in checking the policies submitted under the terms of the contract conditions has encouraged all parties in the insurance market to intensify competition, partly at the expense of the quality of the cover, partly at the expense of the services rendered by the insurer or broker, and partly at the expense of the profitability of insurers, reinsurers and brokers.

10.3.6 The severe competition in the contracting market and the muddling of terms of some insurance covers are likely to be a reason behind some contractors operating in the Arab Gulf Area attempting to gain from their insurance covers by exaggerating their claims thereunder, particularly claims under CAR/EAR policies. The exaggeration referred to has reached, in some cases, such unreasonable levels that it could be considered at times to be verging on fraud⁷. Needless to say, this situation develops an unfavourable atmosphere in which lack of confidence is created between the parties concerned, which may well result in the long run in damage to the relations between the insurance and contracting markets in addition to damage to the relations between insurers and their reinsurers.

10.4 A sizable part of the construction market is lost by insurers and their reinsurers

10.4.1 Experience has, in fact, shown that the great majority of projects owned by the first category of principals in the Arab Gulf Area are not insured. In the absence of a requirement to insure, for instance, through legal provision or by the terms of a mortgage or loan agreement, very

few principals of this category and their contractors would take the initiative to insure their projects. It is evident that insurers are losing the business that would otherwise be insured if all projects are covered by suitable insurance policies. The business lost is not confined to CAR/EAR covers, but includes as well insurance of the workers, transport, third party liability, loss of money, dishonesty of employees etc. It is also not confined to risks totally uninsured, but includes as well that portion of the risk which is self insured, whether intentionally or not, such as the balance of cover under a policy that does not provide an adequate cover. Because no official figures are available to assist in calculating the actual size of the business lost, a very rough estimate is attempted hereunder only to indicate that the construction market insured by CAR/EAR policies does not represent the whole available business, and that a sizable portion is not insured.

10.4.2 In Kuwait, for example, where permission from the Municipality is required prior to commencing the construction of any building, Table 10.3 overleaf shows the number of private construction permits issued by the Municipality of Kuwait and the number of construction/erection all risks policies issued by all insurance companies (national and foreign) operating in Kuwait during the period 1975-1985.

10.4.3 It is to be noted that the number of policies issued included all policies covering many governmental projects such as cable laying, construction of roads and sewers, as well as erection of power stations, desalination plants,

overhead transmission lines etc., for which Municipality private permits are not applicable. It also included policies issued in Kuwait but covering projects outside the State of Kuwait. To be able to estimate the aforementioned cases, the policies issued during a period of 3 years 1981, 1982 and 1983 included in the investigation, referred to in chapter nine, have been examined, and projects insured thereunder falling within the aforementioned categories were counted. The result is displayed in Table 10.4 overleaf.

Table 10.3

Number of private construction permits issued by Kuwait Municipality and number of CAR/EAR policies issued by all the companies in the market

<u>Year</u>	<u>No. of Construction Permits by Type</u>				<u>No. of CAR/EAR Policies</u>
	<u>New</u>	<u>Additional</u>	<u>Rebuilt</u>	<u>Total</u>	
1975	3505	1951	2218	7674	527*
1976	3605	2711	2405	8721	788*
1977	5348	5696	2215	13259	1253*
1978	4074	5483	1778	11335	1097*
1979	2580	5124	2767	10471	1898
1980	1742	4740	3135	9617	1518
1981	1369	6581	3168	11118	1404
1982	1804	12320	3078	17202	1381
1983	1295	5781	2754	9830	1801
1984	1350	5450	2558	9358	1517**
1985	711	3446	2304	6461	1223**

Source: Annual Statistical Abstract, 1985

* Annual Statistical Abstract, 1981

** Annual Statistical Abstract, 1987

Ministry of Planning, Kuwait

Table 10.4

Number and percentage of insured projects for which private building permits were not applicable

<u>Year</u>	<u>Total No. of Projects i.e. Policies</u>	<u>Projects for which building permits were not necessary</u>	
		<u>No.</u>	<u>%</u>
1981	166	41	46.7
1982	185	52	28.1
1983	208	41	19.7
	<u>559</u>	<u>134</u>	<u>24</u>

Therefore, an allowance of 24% was made for all the aforementioned cases. On the other hand, it may be prudent to allow for permits issued but not implemented for which no count is available. The number of unimplemented permits in the opinion of the writer is unlikely to exceed 20-25% of the total number of permits issued. In support of this assumption the procedure required to be followed leading to the issue of the permit is explained hereinafter. "Decree No.30 Regulating Building works" which came into effect on 14/4/85 and the previous decree of 1979, both of which govern the issue of building permits, require the applicant to submit certain documents proving that all necessary preparation work concerning the design and the approval of other governmental departments are obtained. The aforementioned decree requires the following documents to be attached to the application form:

- a. All the facts and documents required by the Municipality, including the architectural, structural and detailed drawings signed by an engineer licensed to do business in Kuwait.

- b. The documents covering ownership of the land.
- c. The approval of the Occupational Health Department and other concerned authorities in respect of buildings constructed in industrial areas or prepared for industrial usage.
- d. The approval of the Fire Brigade Department.
- e. The approval of the Ministry of Electricity and Water in respect of electricity and water services.
- f. The approval of the Ministry of Public Works in respect of the sanitary sewers drawings.
- g. The approval of the Ministry of Communication in respect of the telephone installations drawings.
- h. A written undertaking by the engineering office in respect of the supervision of the licensed construction works.

It is, therefore, evident that the owner who completes the aforementioned lengthy procedures which are time and money consuming, is a serious owner who intends to carry out his project. Hence, it is unlikely that a permit issued at the end of the foregoing exercise will not be implemented without a real unexpected or force majeure reason. Such cases normally constitute a minor percentage. If these unimplemented permits are estimated at 25% of each type of the permits issued, the remaining total number of private permits still exceeds the number of policies by a few times. It is worth pointing out that projects for renovation, refurbishing, interior redesigning and the like are allowed to be carried out without Municipality permits, if the job does not involve structural work or interfere with the basic structure of the building. These projects may sometimes reach hundreds of thousands of dollars each and need to be insured. No allowance for these projects was calculated.

Average contract value insured for each of the
two categories of principals

Table 10.5

Principals of 1st Category				Principals of 2nd Category			
Year	No. of Policies	Total Contracts Value \$	Average Contract Value \$	No. of Policies	Total Contracts Value \$	Average Contract Value \$	
1978, 1979 & 1980	241	127,832,760	530,426	311	4,656,180,300	14,971,640	
% of the whole	43.66%	2.67%		56.34%	97.33%		

- 10.4.4 To be able to estimate the values of contracts that are likely to be uninsured, all policies issued during the three years 1978, 1979 and 1980 included in the study detailed in chapter nine were individually investigated, and the contract values of projects insured thereunder added up and divided by the number of policies to find out the average insured contract value. This process is done after splitting the policies into two groups according to the category of the principal in the same manner as described in chapter nine. This is shown in the previous table (10.5).
- 10.4.5 The table shows that the average value per insured project owned by the first category of principals exceeded US\$ 500,000. If it is assumed that uninsured projects belong to the first category of principals, the very rough estimate of the number of uninsured projects, as deduced from Table 10.3 and paragraph 10.4.3 above, in the light of the average value shown in Table 10.5 clearly indicates that very large amounts are kept at the risk of the owners and/or contractors of these projects and consequently lost by local insurers.
- 10.4.6 It may, however, be argued that normally the smaller projects are the projects that are more likely to be uninsured. To eliminate the effect of big projects on the average value of US\$530,426 shown in Table 10.5, the table is reconstructed showing only those projects pertaining to the first category of principals after taking away all projects where individual contract value exceeded US\$ 1,000,000. The result gives an indication of the average value of projects pertaining to the first category of principals that are more likely to be uninsured. This is shown in Table 10.6 overleaf.

10.4.7 Based on the foregoing an indication of the size of uninsured projects is attempted hereunder. Table 10.7 is constructed after deducting the allowances estimated in paragraph 10.4.3 in respect of number of policies and construction permits. The table also assumes as stated above that all uninsured projects belong to the first category of principals. The average value of US\$ 344,709 is rounded down to US\$ 340,000 and is taken for projects covered by permits that are classified as "new" only. Projects covered by permits classified as "additional" and "rebuilt" are estimated at only 25% of the aforementioned rounded down average. The average value of project insured under CAR/EAR policies in Table 10.7 overleaf is taken as US\$ 340,000.

Table 10.6

Average value of project insured for less than \$ 1,000,000 each, owned by the first category of principals

<u>Year</u>	<u>No. of policies</u>	<u>Total contract values</u> <u>\$</u>	<u>Average contract value</u> <u>\$</u>
1978, 1979 and 1980	221	76,180,667	344,709

10.4.8 It is obvious that without adding to the contract values, the values of constructional plant and equipment on the sites, the aggregate estimated values of projects not insured is so huge that the necessity of action to reduce this exposure to a more reasonable figure imposes itself. This action, if successful, would affect favourably principals and contactors, who would be covered at

Table 10.7
Rough estimate of values of projects not insured under
CAR/EAR policies

Year	Estimated No. of private construction permits of projects by type			Estimated No. of CAR/EAR policies and its percentage of total permits	Estimated aggregate No. and value of private permits of projects exceeding number of projects insured		
	New	Additional & Rebuilt	Total				
1975	2629	3127	5756	401	7	5355	1,023,145
1976	2704	3837	6541	599	9	5942	1,041,845
1977	4011	5933	9944	952	10	8992	1,544,365
1978	3056	5446	8502	834	10	7668	1,218,390
1979	1935	5918	7853	1442	18	6411	670,650
1980	1307	5906	7213	1154	16	6059	554,030
1981	1027	7312	8339	1067	13	7272	607,920
1982	1353	11549	12902	1050	8	11852	1,084,685
1983	971	6401	7372	1369	19	6003	408,765
1984	1013	6006	7019	1153	16	5866	462,910
1985	533	4312	4845	929	19	3916	231,880

No.	Pct.	No.	Value US\$ 000
401	7	5355	1,023,145
599	9	5942	1,041,845
952	10	8992	1,544,365
834	10	7668	1,218,390
1442	18	6411	670,650
1154	16	6059	554,030
1067	13	7272	607,920
1050	8	11852	1,084,685
1369	19	6003	408,765
1153	16	5866	462,910
929	19	3916	231,880

meagre cost in relation to the values they keep at their own risk, and on insurers and reinsurers who would widen their market base and increase their premium income. Such action would, in addition, contribute to the welfare of the economy of the state. The table also clearly indicates the positive effect of the legal requirement to insure these projects, which came into force in 1979.

10.4.9 It is to be noted that the aforementioned figures relate to the Kuwaiti market only. No similar data is available in other Gulf States, but in Saudi Arabia the number of building permits issued during the year, 1978, 1979 and 1980 were 70970, 58597 and 63780 respectively (i.e. many times more than in Kuwait), which clearly indicates that the size of the construction market in Saudi Arabia is much larger than that in Kuwait. Bearing in mind that insurance in Saudi Arabia, unlike Kuwait, is not recognised by the state, and in the absence of any data on the number of insurance policies issued for construction projects, it seems reasonable to assume that the number and values of uninsured projects are much higher than in Kuwait. Considering that Kuwait Municipality is the only one in the whole Arab Gulf Area that requires an insurance policy to be submitted when a construction permit is issued, it is reasonable to assume also that values of uninsured projects in the other Gulf States relatively exceed those in Kuwait by a big difference.

10.4.10 It may be worth emphasising once more that the aforementioned estimates concerning number and values of uninsured projects are by no means exact, but they may be taken as indicative of the present market situation and may be used as the

best available information to draw attention to the size of the potential insurance covers that are now lost by local insurers due to lack of insurance awareness and proper advice, as well as lack of clarity of legal or other requirements to insure, in addition to the insufficient marketing techniques of local insurers. A major portion of this potential market could be gained if a proper plan is drawn up and successfully implemented.

10.5 Summary

10.5.1 Repercussions of the problems, detailed in the previous chapters on contractors, principals and insurers was investigated in this chapter in depth. The investigation on the claims side was continued and a thorough study of the effect of inadequate insurance covers on losses suffered by construction projects was carried out, and the actual findings from the files of the paid claims referred to in chapter nine confirmed the existence of a fairly large problem. More than 50% of the claims paid with a monetary value have been affected to various degrees by inadequate protection under the relevant insurance policies. A calculation of the ascertained minimum frequency of omission of certain aspects of the basic cover and the supplements thereto showed that some omissions are much more frequent than others. This, however, does not mean that all the less frequent omissions are not important because some of them do not occur frequently by their nature, but once they occur the loss could be very heavy. Therefore, it is prudent to insure against the various types of losses, whether these types are of high or low frequency of occurrence. The actual findings also confirmed the importance of

the presence of an insurance manager or consultant among the staff of the contractor at the time of negotiating the terms of the cover and in presenting the claim.

10.5.2 The repercussion of the problem is not limited to amounts actually lost by principals and contractors, but extends to areas affected by the delays experienced in settling the claims due to lengthy discussions to reach a final settlement. It is to be appreciated that contractors are resisting more and more reduction in the claim bills, and at the same time insurers, particularly because of deteriorating results, do not wish to pay ex-gratia losses not covered by insurance policies. CAR/EAR claims for material losses ought to be paid without any delay because normally reconstruction or repair starts immediately after the loss, but the study shows that the average period of delay in settling claims relating to property damage, i.e. excluding all claims with third party element, was 13 months in 1981, 17 months in 1982 and 20 months in 1983. This is also an obvious indication of a yearly increase in the average period of delay resulting from increasingly hardening positions on the sides of contractors and insurers.

10.5.3 To find out whether significant losses may occur due to inadequate insurance cover and to establish what parties are likely to suffer, a few cases were investigated in detail in this chapter. The result confirmed that some contractors have actually suffered significant losses through inadequacy of the CAR cover they had asked for. These losses could have been avoided at a relatively small cost.

10.5.4 Ambiguity and lack of clarity in the insurance requirement clauses in contract conditions and in other regulations resulted in uncertainty about the terms and scope of the insurance cover required. Due to the keenness on the part of contractors to save on the insurance premiums by every possible method, uncertainty about the insurance requirement is frequently used to restrict the scope of cover to save on the insurance cost. Lack of proper supervision and follow up, and lack of a system to check the policies submitted in compliance with the insurance requirements of contracts encouraged the aforementioned actions of contractors and intensified competition resulting in a certain muddling in the terms of many insurance covers, obviously causing immense problems when a loss or damage occurs. Needless to say, this situation develops an unfavourable atmosphere in which lack of confidence is created between the parties concerned which may well result in the long run in damage to the relations between the insurance and contracting markets, in addition to damage to the relations between insurers and their reinsurers.

10.5.5 In the present situation, the great majority of projects owned by individuals and small proprietorships in the area are not insured. It is evident that insurers are losing the business that would otherwise be insured if all projects are covered by suitable insurance policies. The business lost is not confined to CAR/EAR covers but includes as well insurance of the workers, transport, third party liability, loss of money, dishonesty of employees etc. It is also not confined to risks totally uninsured, but includes as well that portion of the risk which is self insured, whether

intentionally or not, such as the balance of cover under a policy that does not provide an adequate cover.

10.5.6 A study is carried out in the chapter, of the Kuwaiti market (which is the only market in the area where the Municipality requires an insurance cover before the issue of a building permit) to attempt a rough estimate of the value of projects not insured in spite of the municipal requirement, during the period 1975-1985. The study showed that the value of uninsured projects in Kuwait reached very high levels, without taking into consideration value of constructional plant on sites. In Saudi Arabia and the remaining Gulf States, where the size of the construction market is many times that in Kuwait and where no municipal requirements to insure exist, it is obvious that the values of uninsured projects are much higher than in Kuwait. The aggregate estimated values of projects not insured is so huge that action to reduce this exposure to a more reasonable figure imposes itself. This action, if successful, would affect favourably principals and contractors, who will be covered at meagre cost in relation to the values they keep at their risk, and insurers and reinsurers who widen their market base, increase their premium income, and balance their exposures. Such action will ultimately contribute to the welfare of the economy of the state.

Chapter 10 References

- 1 Including 28 claims repudiated in full due omission of the relevant cover.
- 2 This column represent the number of claim files under which the loss/damage was not paid in whole or in part due to the omission of the cover shown under the first column.
- 3 Please refer to section 4 of this chapter.
- 4 Please refer to note 19 of chapter four.
- 5 Please refer to paragraph 4.3.12 of chapter 4.
- 6 A deductible of US\$500,000 each occurrence has been seen in some CAR policies covering projects in the area. For "use of deductibles in insurance" see W.H. Rodda. op. cit., 10-11.
- 7 In some cases loss adjusters' reports show clearly that contractors' claims were many times more their actual losses. See Dome Mining Corporation Ltd. v. Drysdale (1931), 41 LI.L. Rep. 109 (dredger insurance) where the assured put forward a claim to a total loss when he had good reason to believe that it was only partial. See also Britton v. Royal Insurance Co. (1866), 4 F. and F.905 (Maidstone Civil Court, Kent Summer Assizes) where in directing the Jury Willes J. said "that is, suppose the insured made a claim for twice the amount insured and lost, thus seeking to put the office off its guard, and in the result to recover more than he is entitled, that will be a wilful fraud, and the consequence is that he could not recover anything". For "fraudulent claims" see John Birds. op. cit., 223-225. See also E.R. Hardy Ivamy, General Principles of Insurance Law. op. cit., 433 and passim.

11. RECOMMENDATIONS AND IMPLEMENTATIONS

11.1 General

11.1.1 In previous chapters it has been shown that action is needed in the Arab Gulf Markets to improve the position of insurance of construction projects. The prospect of material improvement depends to a large extent on the implementation of a variety of recommendations that need to be taken in more than one direction. The recommendations suggested have their roots in the results of the investigations and studies detailed before. These recommendations aim at gradual but persistent improvement rather than radical and rapid change in the present wide spread practices. In presenting any recommendation due care has been taken of the practical issues in its implementation in the prevailing environments and those expected in the near future. In general terms, the course of action recommended are oriented towards the following directions:

1. Initiating more demand for construction insurance covers;
2. Assisting in modernising and up-grading the requirement for construction insurance covers; and
3. Supplementing actions taken in the aforementioned fields to assist in keeping up and maintaining the desired continuous improvement.

11.2 Factors initiating more demand for construction insurance covers

A. LEGAL MEANS

A.1 Direct Insurance Requirement

A.2 Indirect Insurance Requirement

B. ENHANCING INSURANCE AWARENESS

A.1 Direct Insurance Requirement

11.2.1 It has been noted earlier that promoting insurance demand amongst the public in general, and for construction projects in particular, in the Arab Gulf Area, can hardly be sufficiently motivated except through legal issues or through some other requirements, for instance through the terms of mortgage or loan agreements. In Kuwait, the only Gulf State where insurance of buildings under construction is now a legal requirement, it was shown in chapter ten that the number of CAR insurance policies covering such projects has remarkably increased since the legal requirement to insure was introduced in 1979. Although the percentage insured of these projects is still very low, yet it is also true that without the aforementioned legal requirement the percentage insured would have been much lower. A serious follow up of the application of the legal requirement will no doubt greatly improve the percentage insured of these private projects. This means that increase in the demand for construction insurances in the present circumstances can mainly be achieved through legislative requirements in a manner similar, for instance, to the requirements of Kuwait Municipality laid down by "Decree No. 30 Regulating Building Works"¹. It is therefore

1 Please refer to paragraph 5.2.17 of chapter five.

recommended that municipalities or other concerned authorities in the Arab Gulf Area shall adopt a similar requirement. This step, if taken, will ensure that small owners or contractors who are not usually insured at present will have to seek suitable covers for future projects.

11.2.2 Implementation of this recommendation in all the Arab Gulf Countries is not expected to meet with serious objections. In these countries, other than Saudi Arabia, insurance is recognised by the state and insurance companies are licensed to operate under the local laws. The attitude of the government and the public in these states has shown remarkable development towards increased insurance awareness during the past decade or so. This fact is manifested in the recent laws governing insurance activities issued in the area. Insurance statistics, though varying in comprehensiveness, are published yearly in each of the five states, indicating increased interest in insurance by the government departments and the public. The people who have accepted obligatory motor third party insurance and seem to have understood the reason behind it will most likely accept and understand the reason behind a new requirement to insure small projects. The authorities who have proved their sincere eagerness to develop and improve the economic, industrial and social activities are expected to continue their general policy and to agree to introduce such requirement, especially as an example has already been set up in one of these states where the issue developed through practical needs from a simple requirement to insure the works (only) to an advanced requirement to insure the works, the liabilities and the workers. Since insurance companies will benefit

from the recommended new requirements, they should assist by launching a campaign to induce the municipalities or other concerned authorities to introduce it.

A.2 Indirect Insurance Requirement

- 11.2.3 As mentioned earlier, many small projects are executed by the owners themselves who hire labourers to do the job from a to z. The owner in such cases lacks the proper advice that he could have received from an experienced contractor or a consulting engineer on the necessity of insuring the works and the liabilities.
- 11.2.4 If owners who lack experience are required in all cases exceeding certain specified limits to employ classified contractors with whom properly written contracts are always signed, and if consulting engineers are required to be employed to design and supervise these works, insurance of the project in question becomes one of the normal steps in the course of executing the work. Because classified contractors have satisfied the body authorising their classification that they are experienced and reliable in the technical and management aspects, they are expected to have at least the minimum insurance covers before commencing the work on any project. In addition, a properly written contract would no doubt contain an insurance requirement clause. Further, most consulting engineers are aware that insurance of a project secures smooth site operations which may result in easier supervision of the work. Therefore, whenever a reputable consulting engineer and a classified contractor are employed, it is reasonable to assume that a properly written contract will exist and contain an insurance requirement clause.

11.2.5 Implementation of this suggestion can be carried out in stages of which the Kuwaiti market has so far successfully covered certain parts². If classification of contractors is carried out continuously by an official body, and unclassified contractors are not allowed to operate except probably in a very restricted manner, a minimum level of experience and reliability is then secured by owners of small projects. If these owners are not allowed to construct any project exceeding a certain specified limit without employing a licensed consulting engineer and a classified contractor with whom agreements must always be expressed in properly written contracts, then it can reasonably be assumed that initiation of new demand for construction insurance covers will be achieved.

B. ENHANCING INSURANCE AWARENESS

11.2.6 Enhancing insurance awareness among the public is probably one of the most reliable sources of business to insurers in the long run. Increased demand for construction insurance covers due to increased insurance awareness in general cannot be segregated from the increased demand for various other insurance covers due to the same reason. Therefore, increasing insurance awareness will lead to a greater demand for insurance cover in general and construction insurance cover in particular.

11.2.7 The major burden in enhancing insurance awareness falls on insurers, agents, brokers and producers who have a direct vested interest in the results.

2 Please refer to paragraph 9.3.3 of chapter nine

So far those who are involved in insurance business in the area have done little towards this end. For the past twenty or thirty years their attention has been concentrated on insurance of major and medium risks where the big premium is found. Very little time or effort has been directed towards public needs for the various individual small insurance covers. Though considerable efforts have been made to insure major risks, yet the efforts have not been intended to accomplish an initiation of or an increase in the demand for the smaller insurance covers. Major risks have always been required to be insured during construction operations, whereas operational insurance covers are still not taken for most state owned assets. To give the public needs a fair share of the attention insurers, agents, brokers and producers must introduce new elements to their marketing policies and techniques.

- 11.2.8 Proper plans that take into consideration the psychology, beliefs, economic and social customs of the public in this area must be drawn up. Implementation of these plans needs a large number of experienced field and office staff. Training programs form an essential part of these plans so as to ensure continuity and feeding of the market with the required number and calibre of staff. The plans must be flexible to accommodate the rapid changes the area is passing through at present and the changes expected in the near future. It may be argued that this suggestion is expensive to implement. Though this may be true at the initial stage the reward later on is worth the investment.

11.2.9 When the public gets into the habit of buying individual and personal policies such as personal accident, travel, householders or houseowners, life, motor comprehensive etc., insurance of small construction projects becomes only a link in the chain of development towards recognising the importance of insurance and effecting more insurance covers. It is reasonable to assume that owners and contractors of small projects would be more interested in buying insurance than the less wealthy citizens, so as to protect their interests and liabilities. Therefore, the plan to enhance insurance awareness among the public in general is expected to yield a great demand for insurance of construction projects among small investors.

11.2.10 In brief, initiating more demand for construction insurance covers in respect of uninsured projects can only be sufficiently motivated in the present circumstances through:

A. Legal means:

1. Insurance of the project must be required before the issue of the construction permit by municipalities or other authorities concerned.
2. Owners of small projects exceeding a certain specified limit must be required to:
 - i. Employ consulting engineers
 - ii. Employ classified contractors
 - iii. Sign with the contractor properly written contracts.

B. Enhancing insurance awareness among the public including owners of small projects and contractors.

11.3 Factors assisting in modernising and up-grading the requirement for construction insurance covers

11.3.1 It has been shown earlier that at present the main construction insurance covers in the Arab Gulf Area are taken under contractual obligations which are embodied in insurance requirement clauses in the contracts drawn between owners and contractors.

11.3.2 The various investigations carried out and detailed in the previous chapters revealed important facts among which are:

- a. The insurance requirement clauses in the contract conditions most frequently used in the area have not, on their own, led to fully adequate insurance covers.
- b. Ambiguities, shortfalls, impracticalities, etc. in the insurance requirement clauses in these forms, as ascertained from the various analysis carried out in this research, added new dimensions to the problems usually encountered due to lack of insurance awareness and proper advice on insurance matters on the part of contractors and principals.
- c. By application of the index specially formulated in this research to measure adequacy of the cover under CAR/EAR policies it has been ascertained that the vast majority of policies carry a low level of adequacy amounting in the sample investigated to an average of about 49.5% for projects owned by individuals and small proprietorships, and to about 68% of projects owned by governments, companies etc.

- d. The trend of adequacy of cover under CAR/EAR policies investigated showed slight improvement in the early years of the investigation, which covered the period from 1975-1983, but deteriorated in the last three years thereof. If continued in future, the deterioration would pull down the degree of adequacy of cover to very low levels.
- e. The low level of adequacy of cover has been found out to be due to the omission of certain important aspects of the insurance cover. These aspects must be clearly brought up when requesting an insurance policy in respect of a construction project, particularly because insurance consultants/managers are hardly ever employed by contractors and principals in the area.
- f. Inadequate insurance covers have resulted in totally repudiating many claims by insurers. In addition, they have caused more than 50% of the claims paid to be reduced to various levels as ascertained from the actual claim files investigated.
- g. Disputes between insurers and contractors on the scope of insurance covers under CAR/EAR policies, which normally appear after a claim arises, have resulted in an increasingly undue delay in settlement of these claims. The average period taken to settle CAR/EAR claims in respect of damage to the works and/or constructional plant, i.e. excluding third party claims, in the sample investigated increased from 13 months in 1981 to 20 months in 1983.

11.3.3 It is recommended, therefore, to re-word these aforementioned insurance requirement clauses and possibly a few other related clauses, in the contract conditions, so as to require in clear terms adequate insurance covers which can hardly be obtained through the present wordings if strictly followed. Such alteration in the existing wording is of much importance as shown by the experience which has indicated that the initiative of owners and contractors usually falls short of seeking fully adequate insurance cover.

11.3.4 Alteration of the insurance requirement clauses should take into account certain axioms that are essential to form clear requirements covering the various risks that a construction project may be exposed to. These axioms are sometimes so inter-related that they may have to be considered together or consecutively in such a way as to complement each other. When complete, the whole requirement should be easily understood and feasibly applicable by those involved in the insurance exercise for a construction project, although they may not be insurance experts, but technical, commercial, administrative or accounts personnel.

11.3.5 For a proper approach to the drafting of the modified insurance requirement clauses in connection with a construction project it may be advantageous to divide the project into three operational stages corresponding to the type of activities carried out by the contractor.

- The first is the pre-construction stage which commences with the preparation work carried out by the contractor for the purpose of ensuring smooth

operations during the second stage. It includes transportation of materials, plant etc. by sea, air and/or land to the site. This phase may continue during a major part of the second stage operations.

- The second operational stage is the actual construction/erection of the works on the site including testing and commissioning until provisional handing over and the commencement of the maintenance or guarantee period.

- The third stage coincides with the maintenance or the guarantee period during which the contractor's activities are limited to remedial and maintenance operations in accordance with his obligations under the terms of the contract; until the project is finally handed over and the obligations of the contractor are entirely fulfilled.

11.3.6 In view of the fact that the F.I.D.I.C. form is the most popular form in the Arab Gulf Area, in that it is used either literally or with few alterations, in many contract works, it is suggested to re-draft the insurance requirement clauses in the said form. In re-drafting the insurance requirement clauses a few other clauses need to be slightly altered to achieve harmony in the new suggested wording. To this end clauses 20-25 of the F.I.D.I.C. form 1977 edition are suggested to be altered to read as follows:

20(1)* From the commencement of his operation on the site³ until the date stated in the Certificate of Completion for the whole of the Works pursuant to Clause 48 hereof the contractor shall take full responsibility for the care of everything on the site, for which he is liable under the terms of this contract⁴. Provided that if the Engineer shall issue a Certificate of Completion in respect of any part of the Permanent Works the Contractor shall cease to be liable for the care of that part of the Permanent Works from the date stated in the Certificate of Completion in respect of that part and the responsibility for the care of that part shall pass to the Employer. Provided further that the Contractor shall take full responsibility for the care of any outstanding work which he shall have undertaken to finish during the period of Maintenance until such outstanding work is completed. In case any damage, loss or injury shall happen to the Works, or to any part thereof, from any cause whatsoever, save and except risks as defined in sub-clause (2) of this Clause, while the Contractor shall be responsible for the care thereof the Contractor shall, at his own cost, repair and make good the same, so that at completion the Permanent Works shall be in good order and condition and in conformity in every respect with the requirements of the Contract and the Engineer's instructions.

* Clause 20 in the original text remains clause 20 in the new text subject to the recommendations given herein.

3 The underlined phrase is to replace the word "Works" in the original text.

4 The underlined phrase is to replace the word "thereof" in the original text.

In the event of any such damage, loss or injury happening from any of the excepted risks, the Contractor shall, if and to the extent required by the Engineer and subject always to the provisions of Clause 65 hereof, repair and make good the same as aforesaid at the cost of the Employer. The Contractor shall also be liable for any damage to the Works occasioned by him in the course of any operations carried out by him for the purpose of completing any outstanding work or complying with his obligations under Clauses 49 or 50 hereof.

(2) The "excepted risks" are war, hostilities (whether war be declared or not), invasion, act of foreign enemies, rebellion, revolution, insurrection or military or usurped power, civil war, or unless solely restricted to employees of the Contractor or of his sub-contractors and arising from the conduct of the Works, riot, commotion or disorder, or use or occupation by the Employer of any part of the Permanent Works, or a cause solely due to the Engineer's design of the Works, or ionising radiations or contamination by radioactivity from any nuclear fuel or from any nuclear waste from the combustion of nuclear fuel, radioactive toxic explosive, or other hazardous properties of any explosive, nuclear assembly or nuclear component thereof, pressure waves caused by aircraft or other aerial devices travelling at sonic or supersonic speeds, or any such operation of the forces of nature as an experienced contractor could not foresee, or reasonably make provision for or insure against, all of which are herein collectively referred to as "the excepted risks".

21(1)* The Contractor shall, except if and so far as the Contract provides otherwise, indemnify the Employer against all losses and claims in respect of injuries or damage to any person or material or physical damage to any property whatsoever which may arise out of or in consequence of the execution and maintenance of the Works and against all claims, proceedings, damages, costs, charges and expenses whatsoever in respect of or in relation thereto except any compensation or damages for or with respect to:

- (a) The permanent use or occupation of land by the Works or any part thereof.
- (b) The right of the Employer to execute the Works or any part thereof on, over, under, in or through any land.
- (c) Injuries or damage to persons or property which are the unavoidable result of the execution or maintenance of the works in accordance with the Contract.
- (d) Injuries or damage to persons or property in so far as it is not required to be insured in accordance with clause 23 hereunder⁵ resulting from any act or neglect of the Employer, his agents, servants or other contractors, not being employed by the Contractor, or for or in respect of any claims, proceedings, damages, costs, charges and expenses in respect thereof

* Clause 22 in the original text becomes Clause 21 in the new text.

5 The underlined phrase is an addition to the original text.

or in relation thereto or where the injury or damage was contributed to by the Contractor, his servants or agents such part of the compensation as may be just and equitable having regard to the extent of the responsibility of the Employer, his servants or agents or other contractors for the damage or injury.

(2) The Employer shall indemnify the Contractor against all claims, proceedings, damages, costs, charges and expenses in respect of the matters referred to in the proviso to sub-clause (1) of this Clause.

22.* The Employer shall not be liable for or in respect of any damages or compensation payable at law in respect or in consequence of any accident or injury to any workman or other person in the employment of the Contractor or any sub-contractor, save and except an accident or injury resulting from any act or default of the Employer, his agent, or servants and which is not required to be insured in accordance with clause 23 (4) hereunder⁶. The contractor shall indemnify and keep indemnified the Employer against all such damages and compensation, save and except as aforesaid, and against all claims, proceedings, costs, charges and expenses whatsoever in respect thereof or in relation thereto.

* Clause 24(1) in the original text becomes clause 22 in the new text.

6 The underlined phrase is an addition to the original text.

23.* Without limiting his obligations and responsibilities under the contract⁷, the Contractor shall insure in the joint names of the Employer and the Contractor(s) including all sub-contractors as may be applicable and in such a manner that they are covered as hereunder:⁸

(1)** In respect of all goods, materials, plant, machinery etc., needed for the works, during transportation by sea, air or land:

(a) The insurance shall cover the interest from warehouse at the country of origin until it is unloaded and surveyed at the site or other final warehouse at the country of destination. The cover shall not exclude transshipment or temporary storage en route.

(b) The sum insured shall be at least the replacement value of the interest insured including all expenses up to delivery at the site or other final warehouse.

(c) The insurance shall be against all risks as far as customary and practical, including

* Clause 23 in the new text embodies Clauses 21, 23(1),(3) and 24(2) in the original text with some alterations and new additions as underlined.

7 The underlined phrase is an addition to the original text.

8 The underlined phrase is an addition to the original text.

** The whole sub-clause which deals with "transport insurance" is an addition to the original text.

notwithstanding clause 20(2) and 65 hereof,
the risks of war, strikes, riots and civil
commotion as far as possible and practical.
If the war etc. cover shall attract a premium
rate exceeding the normal rate at time of
peace the Employer's approval shall be taken
beforehand.

(2)* In respect of the works, temporary and
permanent, including materials for incorporation
in the works, constructional plant, equipment and
machinery etc.

(2.1) During the construction/erection/testing
operation:

(a) The property insured and the place(s) of
the site(s) including places outside the
main site used solely for the purpose of
the works, shall be clearly described to
include the whole of the works,
construction plant, equipment, machinery
temporary buildings, materials including
materials supplied outside the contract
for incorporation in the works (if any)
and the Employer's existing property on
the site (if any) as long as it is in
the care, custody and control of the
Contractor.

(b) The period of insurance shall start with
the commencement of any operation on the

* The whole sub-clause which deals with "the insurance of the works, materials for incorporation therein, constructional plant, equipment and machinery" replaces clause 21 in the original text.

site and shall attach, in respect of any property insured in accordance with clause 23(1) above, automatically upon the expiry of the transport insurance on such property after arrival on the site(s) or other final warehouse. The insurance shall continue until the completion of the construction/erection/testing and provisional handing over of the permanent works to the Employer.

- (c) The sum insured shall be the reinstatement and/or replacement value of the property insured and shall include an automatic cover in respect of variations to the permanent works for an amount not less than 10% of the sum insured thereon.
- (d) The insurance shall be against all unforeseen loss and/or damage customarily provided for a construction/erection project. It may exclude all or part of the excepted risks, but it shall include inland transit of materials, plant, machinery, etc., to and from the site(s) in so far as they are not required to be insured in accordance with clause 23(1) above. The insurance shall also include indemnity in respect of additional expenses such as debris removal, professional fees and extra charges for overtime, night work, express freight etc., incurred in reinstating or replacing a loss and/or damage covered by the insurance as aforesaid.

(2.2) During the maintenance operation:

- (a) The insurance detailed in sub-clause 2.1 above shall continue in so far as it does not contradict requirements (b) and (c) hereunder.
- (b) The period of insurance shall start with the commencement of the maintenance period until the date of final handing over of the permanent works.
- (c) From commencement of the maintenance period the insurance in respect of the permanent works provisionally handed cover shall be limited to physical loss and/or damage thereto arising from a cause occurring prior to the commencement of the period of maintenance and/or occasioned by the Contractor(s) in the course of any operations carried out by him (them) for the purpose of complying with his (their) obligations under the contract.

(3)* In respect of the liabilities to third parties:

- (a) The place(s) of the site(s) and the nature of the work shall be clearly described;
- (b) The period of insurance shall start with the commencement of any operation on the site(s) until the expiry of the main-

* The whole sub-clause replaces clause 23(1) and (3) in the original text.

tenance period and final handing over of the whole of the permanent works;

- (c) The insurance shall be for at least the amount stated in the contract in respect of each occurrence but unlimited in the aggregate;
- (d) The insurance shall be against the insured's liability for accidental loss, damage or injury which may occur to any property or person other than:
- i. A property covered by the requirement under sub-clause 2.1(a) above or owned by or in the care, custody or control of the insured,
 - ii. A person in the employment of the insured in connection with the works.
- arising out of the execution and maintenance of the works or the carrying out of the contract other than due to other matters referred to in clause (21) hereof.
- (e) The insurance shall include a joint insured cross liability clause.
- (f) All vehicles, machines etc., licensed for road use shall be insured against motor traffic liability in such a manner that the owner of the vehicle and the driver are fully covered for any legal liability in respect of bodily injury or property damage caused to persons or property by the use of the vehicle or machine etc.

(4)* In respect of the workmen employed by the Contractor(s) in connection with the works:

(a) The insurance shall commence with any operation in connection with the works, on or off the site, and shall remain valid until final handing over of the permanent works to the Employer at the end of the maintenance period.

(b) If the Employer is not named as one of the Insured the insurance shall provide the Employer with indemnity and waiver of subrogation rights for any damages or compensation payable at law in respect of the Contractor(s) employees as if the policy had been issued in the joint names of the Contractor(s) and the Employer.

(c) The insurance shall be in respect of any liability for damages or compensation payable at law in respect or in consequence of any accident or injury to any workman or other person in the employment of the Contractor or any sub-contractor.

(5)** In respect of loss of money and dishonesty of the Contractor(s) employees, unless the Contractor(s) carry an annual insurance policy:

* The whole sub-clause replaces clause 24(2) in the original text.

** The whole sub-clause which deals with "insurance of loss of money and dishonesty of employees" is an addition to the original text.

- (a) The insurance shall start with the commencement of any operation in connection with the works until provisional handing over of the permanent works to the Employer;
- (b) The insurance shall be in respect of loss of money in the premises of the contractor or in transit and shall also include (if not insured separately) an insurance in respect of dishonesty of the Contractor's employees such as cashiers, store-keepers, purchase officers etc.;
- (c) The sums insured shall be reasonably adequate in relation to the size of the project and the amounts that would normally be involved.

24.* After completion of the construction in respect of buildings or fixed structures the Contractor shall insure in the joint names of the Employer and the Contractor in such a manner that they are covered as hereunder:

- (a) The insurance shall cover material damage to the building structures and to non-structural works arising out of collapse or threat of collapse of the building structures due to faulty execution (and/or faulty design if the

* The whole sub-clause which deals with "decennial liability insurance" is an addition to the original text.

contractor is responsible for the design).

- (b) The period of insurance shall be ten years from the date the permanent works are completed and provisionally handed over.
- (c) The sum insured shall be the replacement or reinstatement value of the permanent works at time of completion.
- (d) The insurance shall include debris removal costs in respect of the works affected.

25.* The Contractor shall effect the insurances aforementioned in clauses 23 and 24 with an insurer approved by the Employer, which approval shall not be unreasonably withheld, and shall when required, produce to the Engineer or the Engineer's representative such policies of insurance and the receipt(s) for payment of the premium. If the Contractor shall fail to effect and keep in force the insurance referred to in Clauses 23 and 24 hereof, or any other insurance which he may be required to effect under the terms of the Contract, then and in any such case the Employer may effect and keep in force any such insurance and pay such premium or premiums as may be necessary for that purpose and from time to time deduct the amount so paid by the Employer as

* The whole clause replaces the last paragraph of clause 21, clause 23(2), the last part of clause 24(2) and clause 25 in the original text.

aforesaid from any monies due or which may become due to the Contractor, or recover the same as a debt due from the Contractor.

11.4 Factors supplementing the foregoing actions to assist in keeping up and maintaining the continuous improvement aimed at

11.4.1 The recommendations stated before in this chapter in respect of initiating demand for construction insurance covers and in respect of modernising and up-grading the requirements for construction insurance covers have to be supplemented by certain actions to support and maintain the improved situation aimed at. These supplementary actions may be grouped under two main headings:

- a. Actions to be taken by municipalities and other government authorities in support of the issues recommended to initiate demand for construction insurance covers; and
- b. Actions to be taken by owners, contractors and insurers in support of the ways and means assisting in modernising and up-grading the construction insurance covers.

Action to be taken by municipalities and other government authorities

11.4.2 It is recommended to introduce a system to follow up the submission of insurance policies in each case a construction permit is requested. This is an important step to support the issues recommended to initiate demand for construction insurance covers. The number of construction permits issued every year compared with the number of construction all risks policies issued in the

state where a requirement to insure exists, justifies the establishment of the recommended system. Therefore, introduction of the insurance requirement through legal means in any Gulf State as recommended earlier should be accompanied by the aforementioned follow up system to ensure application of the requirement.

- 11.4.3 Implementation of such system would not present difficulties since it would be an application of the rules and regulations issued in this respect. The system can be carried out by the same employees checking the documents submitted under the provisions governing the issue of building permits. Preliminary training and orientation programs for the aforementioned employees responsible for the follow up is recommended. When this system becomes an established procedure as an integral part of the main system of checking the documents submitted for the purpose of issue of a construction permit it may be found necessary to conduct advanced training programs for the employees concerned, whereby they are able to check in more detail the insurance policies submitted to ensure that such policies provide reasonably adequate protection for the projects in question.

Action to be taken by owners, contractors and insurers

- 11.4.4 Owners of projects who fell in to the second category of principals, i.e. governments, companies etc. are recommended to use the services of an insurance expert to follow up the receipt in time and to conduct a thorough check, of the insurance policies submitted by the contractor in compliance with the insurance requirement clauses

in the contract conditions. Many of these owners, especially government departments and the like who are responsible for many projects, can afford to establish an insurance section to look after all insurance matters connected with the projects of their department. It has been shown in the investigations detailed in chapter nine that when such system was implemented in one of the government departments in Kuwait, it remarkably improved the degree of adequacy of cover under CAR policies covering projects supervised by that department, as compared with that of all the policies covering projects owned by the same category of principal taken together. The degree of adequacy of cover increased, due to the introduction of the system from about 68% to about 87%. Other owners of the same category and owners of the first category may probably find it sufficient to employ an insurance expert on a full time or part time basis or use the services of an insurance consultant's or broker's office whenever the need arises.

- 11.4.5 Consulting engineers should use the services of an insurance expert in order to be able to give proper and complete advice to the owner of the project. Since they are normally responsible for the issue of the tender documents and later on for the preparation of the contract conditions which must include insurance requirement clauses the need for an insurance expert is evident to draft these clauses in the most appropriate manner to require in clear terms adequate insurance covers commensurate with the particular project. It may be their duty also to follow up the receipt in time and the checking, of the policies submitted by the contractor under the terms of the contract, in which case the presence of an insurance expert

among the staff of the consulting engineer will no doubt help all parties concerned to achieve the required aim.

11.4.6 Contractors in general are recommended to employ or use the services of an insurance expert. Big and probably medium contractors may be able to afford to have such an expert among their permanent staff, whereas small contractors may find it more practical to make use of such an expert on a part time basis or use the services of an insurance consultant's or broker's office whenever the need arises.

11.4.7 As a practical yardstick to measure adequacy of cover under CAR/EAR policies which was unquantifiable before, it is recommended that the index formulated for this purpose, in chapter eight, is used as a guide by persons responsible for checking construction insurance policies if such persons are not well trained or qualified in insurance matters. Until the time when insurance experts are employed or made use of on a regular basis by municipalities or other government departments, owners of projects, contractors, etc., the use of the aforementioned index seems to be a reasonable and practical tool to help achieving the desired improvement in the level of adequacy of cover. It may be helpful also to refer to a model CAR policy providing a reasonably adequate cover, reproduced in Appendix L, which may be used as a guide for insurance of most ordinary projects. It is worth pointing out that this model policy is not unavailable in the local Gulf insurance market if requested by the contractor or the principal. It is also important to point out that other additions or some deletions

to the said model may be necessary depending on the nature, type and other details of the project, such as whether or not extensions in respect of existing property on the site or materials supplied by the principal or testing covers are required etc.

11.4.8 If an insurance expert exists among the team negotiating insurance matters on behalf of the contractor/owner, the resultant policy/policies can be considered as reflecting the intentions of the parties. Since in the Arab Gulf States most contractors, owners and consulting engineers operate without making use of insurance experts, and since in some of these states international or qualified insurance brokers/consultants are not present, the missing service ought to be rendered by the insurer. In cases where direct contact between the insurer and the insured is established it should be the duty of the insurer to explain to the insured the scope and extent of the cover provided under the policy and what is missing. If the insurer is in possession of all the facts it is recommended that he advises the insured of the suitable covers needed for the particular project.

11.5 Summary

11.5.1 In previous chapters it has been shown that action is needed in the Arab Gulf Markets to improve the position of insurance of construction projects. The recommendations suggested in this chapter have their roots in the results of the investigations and studies detailed before. In presenting any recommendation, due care has been taken of the practical issues in its implementation in the prevailing environments and those expected in the

near future. In general terms, the courses of action recommended are oriented towards the following directions:

1. Initiating more demand for construction insurance covers;
2. Assisting in modernising and up-grading the requirements for construction insurance covers; and
3. Supplementing actions to be taken in the aforementioned fields to assist in keeping up and maintaining the desired continuous improvement.

11.5.2 Initiating more demand for construction insurance covers which is needed in respect of uninsured projects, can only be sufficiently motivated in the present circumstances through:

A. Legal means:

A.1 Insurance of the project must be required before the issue of the construction permit by municipalities or other authorities concerned.

A.2 Owners of small projects exceeding a certain specified limit must be required to:

- i. Employ consulting engineers;
- ii. Employ classified contractors;
- iii. sign with contractors suitable written contracts.

B. Enhancing insurance awareness among the public including owners of small projects and contractors through proper plans to be implemented by insurers, agents, brokers and producers who must also introduce new elements to their marketing policies and techniques.

11.5.3 Modernising and up-grading the requirements for construction insurance covers, which is needed in respect of projects normally required to be insured, may be accomplished by re-wording these requirements and possibly a few other related clauses, in the contract conditions, to require in clear terms adequate insurance covers. In view of the fact that the F.I.D.I.C. form is the most popular form in the Arab Gulf Area a new wording has been drafted and recommended to replace the relevant clauses of the F.I.D.I.C. form 1977 edition. The new wording deals with insurance of the works, materials, constructional plants/machinery, third party liability, workmen's compensation, loss of money, dishonesty of the employees and decennial liability of the contractor for buildings and structures.

11.5.4 The recommendations stated earlier must be supplemented by actions to support and maintain the improved situation aimed at. These supplementary actions maybe grouped as hereunder:

- a. Actions to be taken by municipalities and other government authorities in support of the factors recommended to initiate the demand for construction insurance covers. In this respect it is recommended to introduce a system to follow up the submission of adequate insurance policies in each case that a construction permit is requested.
- b. Actions to be taken by owners, contractors and insurers in support of the factors assisting in modernising and up-grading construction insurance covers. In this direction it is recommended that owners, consultants and contractors should use the services of an insurance expert whenever possible.

c. It is also recommended that persons responsible for checking construction insurance policies who are not well trained or qualified in insurance matters such as accountants, commercial or technical managers, should use the index formulated in chapter eight as a guide to measure adequacy of cover which was unquantifiable before.

11.5.5 Because international or qualified insurance brokers/consultants are not present in all the states of the Arab Gulf, the missing service ought to be rendered by insurers. In cases where direct contact between the insurer and the insured is established it should be the duty of the insurer to explain to the insured the scope and extent of the cover provided under the policy and what is missing. If the insurer is in possession of all the facts it is recommended that he must advise the insured of the suitable covers needed for the particular project.

Chapter 11 References

- 1 Please refer to paragraph 5.2.16 of chapter five.
- 2 Please refer to paragraph 9.3.3 of chapter nine.
- 3 The underlined phrase is to replace the word "Works" in the original text.
- 4 The underlined phrase is to replace the word "thereof" in the original text.
- 5 The underlined phrase is an addition to the original text.
- 6 The underlined phrase is an addition to the original text.
- 7 The underlined phrase is an addition to the original text.
- 8 The underlined phrase is an addition to the original text.

APPENDIX A

"General obligations" clauses in the
F.I.D.I.C. form 1977 edition

GENERAL OBLIGATIONS

Contractor's
General
Respon-
sibilities

8. (1) The Contractor shall, subject to the provisions of the Contract, and with due care and diligence, execute and maintain the Works and provide all labour, including the supervision thereof, materials, Constructional Plant and all other things, whether of a temporary or permanent nature, required in and for such execution and maintenance, so far as the necessity for providing the same is specified in or is reasonably to be inferred from the Contract.

(2) The Contractor shall take full responsibility for the adequacy, stability and safety of all site operations and methods of construction, provided that the Contractor shall not be responsible, except as may be expressly provided in the Contract, for the design or specification of the permanent Works, or for the design or specification of any Temporary Works prepared by the Engineer.

Contract
Agreement

9. The Contractor shall when called upon so to do enter into and execute a Contract Agreement, to be prepared and completed at the cost of the Employer, in the form annexed with such modification as may be necessary.

Performance
Bond

10. If, for the due performance of the Contract, the Tender shall contain an undertaking by the Contractor to obtain, when required, a bond or guarantee of an insurance company or bank, or other approved sureties

APPENDIX A (continued)

to be jointly and severally bound with the Contractor to the Employer, in a sum not exceeding that stated in the Letter of Acceptance for such bond or guarantee, the said insurance company or bank or sureties and the terms of the said bond or guarantee shall be such as shall be approved by the Employer. The obtaining of such bond or guarantee or the provision of such sureties and the cost of the bond or guarantee to be so entered into shall be at the expense in all respects of the Contractor, unless the Contract otherwise provides.

**Inspection
of Site**

11. The employer shall have made available to the Contractor with the Tender documents such data on hydrological and sub-surface conditions as shall have been obtained by or on behalf of the Employer from investigations undertaken relevant to the Works and the Tender shall be deemed to have been based on such data, but the Contractor shall be responsible for his own interpretation thereof.

The Contractor shall also be deemed to have inspected and examined the Site and its surroundings and information available in connection therewith and to have satisfied himself, so far as is practicable, before submitting his Tender, as to the form and nature thereof, including the sub-surface conditions, the hydrological and climatic conditions, the extent and nature of work and materials necessary for the completion of the Works, the means of access to the Site and the accommodation he may require and, in general, shall be deemed to have obtained all necessary information, subject as above mentioned, as to risks, contingencies and all other circumstances which may influence or affect his Tender.

APPENDIX A (continued)

Sufficiency
of Tender

12. The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his Tender for the Works and of the rates and prices stated in the priced Bill of Quantities and the Schedule of Rates and Prices, if any, which Tender rates and prices shall, except insofar as it is otherwise provided in the Contract, cover all his obligations under the Contract and all matters and things necessary for the proper execution and maintenance of the Works. If, however, during the execution of the Works the Contractor shall encounter physical conditions, other than climatic conditions on the Site, or artificial obstructions, which conditions or obstructions could, in his opinion, not have been reasonably foreseen by an experienced contractor, the Contractor shall forthwith give written notice thereof to the Engineer's Representative and if, in the opinion of the Engineer, such conditions or artificial obstructions could not have been reasonably foreseen by an experienced contractor, then the Engineer shall certify and the Employer shall pay the additional cost to which the Contractor shall have been put by reason of such conditions, including the proper and reasonable cost

Adverse
Physical
Conditions and
Artificial
Obstructions

(a) of complying with any instruction which the Engineer may issue to the Contractor in connection therewith, and

(b) of any proper and reasonable measures approved by the Engineer which the Contractor may take in the absence of specific instructions from the Engineer,

APPENDIX A (continued)

as a result of such conditions or obstructions being encountered.

Works to be to
the Satis-
faction of
Engineer

13. Save insofar as it is legally or physically impossible, the Contractor shall execute and maintain the Works in strict accordance with the Contract to the satisfaction of the Engineer and shall comply with and adhere strictly to the Engineer's instructions and directions on any matter whether mentioned in the Contract or not, touching or concerning the Works. The Contractor shall take instructions and directions only from the Engineer or, subject to the limitations referred to in Clause 2 hereof, from the Engineer's Representative.

Programme to
be Furnished

14. (1) Within the time stated in Part II of these Conditions, the Contractor shall, after the acceptance of his Tender, submit to the Engineer for his approval a programme showing the order of procedure in which he proposes to carry out the Works. The Contractor shall whenever required by the Engineer or Engineers' Representative, also provide in writing for his information a general description of the arrangements and methods which the Contractor proposes to adopt for the execution of the Works.

(2) If at any time it should appear to the Engineer that the actual progress of the Works does not conform to the approved programme referred to in sub-clause (1) of this Clause, the Contractor shall produce, at the request of the Engineer, a revised programme showing the modifications to the approved programme necessary to ensure completion of the Works within the time for completion as defined in Clause 43 hereof.

APPENDIX A (continued)

(3) The submission to and approval by the Engineer or Engineer's Representative of such programmes or the furnishing of such particulars shall not relieve the Contractor of any of his duties or responsibilities under the Contract.

**Contractor's
Superintendence**

15. The Contractor shall give or provide all necessary superintendence during the execution of the Works and as long thereafter as the Engineer may consider necessary for the proper fulfilling of the Contractor's obligations under the Contract. The Contractor, or a competent and authorised agent or representative approved of in writing by the Engineer, which approval may at any time be withdrawn, is to be constantly on the Works and shall give his whole time to the superintendence of the same. If such approval shall be withdrawn by the Engineer, the Contractor shall, as soon as is practicable, having regard to the requirement of replacing him as hereinafter mentioned, after receiving written notice of such withdrawal, remove the agent from the Works and shall not thereafter employ him again on the Works in any capacity and shall replace him by another agent approved by the Engineer. Such authorised agent or representative shall receive, on behalf of the Contractor, directions and instructions from the Engineer or, subject to the limitations of Clause 2 hereof, the Engineer's Representative.

**Contractor's
Employees**

16. (1) The Contractor shall provide and employ on the Site in connection with the execution and maintenance of the Works

APPENDIX A (continued)

(a) only such technical assistants as are skilled and experienced in their respective callings and such sub-agents, foremen and leading hands as are competent to give proper supervision to the work they are required to supervise; and

(b) such skilled, semi-skilled and unskilled labour as is necessary for the proper and timely execution and maintenance of the Works.

(2) The Engineer shall be at liberty to object to and require the Contractor to remove forthwith from the Works any person employed by the Contractor in or about the execution or maintenance of the Works who, in the opinion of the Engineer, misconducts himself, or is incompetent or negligent in the proper performance of his duties, or whose employment is otherwise considered by the Engineer to be undesirable and such person shall not be again employed upon the Works without the written permission of the Engineer. Any person so removed from the Works shall be replaced as soon as possible by a competent substitute approved by the Engineer.

Setting-out

17. The Contractor shall be responsible for the true and proper setting-out of the Works in relation to original points, lines and levels of reference given by the Engineer in writing and for the correctness, subject as above mentioned, of the position, levels, dimensions and alignment of all parts of the Works and for the provision of all necessary instruments, appliances and labour in connection there-

APPENDIX A (continued)

with. If, at any time during the progress of the Works, any error shall appear or arise in the position, levels, dimensions or alignment of any part of the Works, the Contractor, on being required so to do by the Engineer or the Engineer's Representative, shall, at his own cost, rectify such error to the satisfaction of the Engineer or the Engineer's Representative, unless such error is based on incorrect data supplied in writing by the Engineer or the Engineer's Representative, in which case the expense of rectifying the same shall be borne by the Employer. The checking of any setting-out or of any line or level by the Engineer or the Engineer's Representative shall not in any way relieve the Contractor of his responsibility for the correctness thereof and the Contractor shall carefully protect and preserve all bench-marks, sight-rails, pegs and other things used in setting-out the Works.

**Boreholes and
Exploratory
Excavation**

18. If, at any time during the execution of the Works, the Engineer shall require the Contractor to make boreholes or to carry out exploratory excavation, such requirement shall be ordered in writing and shall be deemed to be an addition ordered under the provisions of Clause 51 hereof, unless a provisional sum in respect of such anticipated work shall have been included in the Bill of Quantities.

**Watching and
Lighting**

19. The Contractor shall in connection with the Works provide and maintain at his own cost all lights, guards, fencing and watching when and where necessary or required by the Engineer or the Engineer's Representative, or by any duly constituted authority, for the protection of the Works, or for the safety and convenience of the public or others.

APPENDIX A (continued)

Care of Works

20. (1) From the commencement of the Works until the date stated in the Certificate of Completion for the whole of the Works pursuant to Clause 48 hereof the Contractor shall take full responsibility for the care thereof. Provided that if the Engineer shall issue a Certificate of Completion in respect of any part of the Permanent Works the Contractor shall cease to be liable for the care of that part of the permanent Works from the date stated in the Certificate of Completion in respect of that part and the responsibility for the care of that part shall pass to the Employer. Provided further that the Contractor shall take full responsibility for the care of any outstanding work which he shall have undertaken to finish during the Period of Maintenance until such outstanding work is completed. In case any damage, loss or injury shall happen to the Works, or to any part thereof, from any cause whatsoever, save and except the expected risks as defined in sub-clause (2) of this Clause, while the Contractor shall be responsible for the care thereof the Contractor shall, at his own cost, repair and make good the same, so that at completion the Permanent Works shall be in good order and condition and in conformity in every respect with the requirements of the Contract and the Engineer's instructions. In the event of any such damage, loss or injury happening from any of the excepted risks, the Contractor shall, if and to the extent required by the Engineer and subject always to the provisions of Clause 65 hereof, repair and make good the same as aforesaid at the cost of the Employer. The Contractor shall also be liable for any damage to the Works occasioned by him in the course of any operations carried out by him

APPENDIX A (continued)

for the purpose of completing any outstanding work or complying with his obligations under Clauses 49 or 50 hereof.

Excepted Risks

(2) The "excepted risks" are war, hostilities (whether war be declared or not), invasion, act of foreign enemies, rebellion, revolution, insurrection or military or usurped power, civil war, or unless solely restricted to employees of the Contractor or of his sub-contractors and arising from the conduct of the Works, riot, commotion or disorder, or use or occupation by the Employer of any part of the Permanent Works, or a cause solely due to the Engineer's design of the Works, or ionising radiations or contamination by radio-activity from any nuclear fuel or from any nuclear waste from the combustion of nuclear fuel, radio-active toxic explosive, or other hazardous properties of any explosive, nuclear assembly or nuclear component thereof, pressure waves caused by aircraft or other aerial devices travelling at sonic or supersonic speeds, or any such operation of the forces of nature as an experienced contractor could not foresee, or reasonably make provision for or insure against all of which are herein collectively referred to as "the excepted risks".

Insurance of
Works etc.

21. Without limiting his obligations and responsibilities under Clause 20 hereof, the Contractor shall insure in the joint names of the Employer and the Contractor against all loss or damage from whatever cause arising, other than the excepted risks, for which he is responsible under the terms of the Contract and in such manner that the Employer and

APPENDIX A (continued)

Contractor are covered for the period stipulated in Clause 20(1) hereof and are also covered during the Period of Maintenance for loss or damage arising from a cause, occurring prior to the commencement of the Period of Maintenance, and for any loss or damage occasioned by the Contractor in the course of any operations carried out by him for the purpose of complying with his obligations under Clauses 49 and 50 hereof:-

(a) The Works for the time being executed to the estimated current contract value thereof, or such additional sum as may be specified in Part II in the Clause numbered 21, together with the materials for incorporation in the Works at their replacement value.

(b) The Constructional Plant and other things brought on to the Site by the Contractor to the replacement value of such Constructional Plant and other things.

Such insurance shall be effected with an insurer and in terms approved by the Employer, which approval shall not be unreasonably withheld, and the Contractor shall, whenever required, produce to the Engineer or the Engineer's Representative the policy or policies of insurance and the receipts for payment of the current premiums.

Damage to
Persons and
Property

22. (1) The Contractor shall, except if and so far as the Contract provides otherwise, indemnify the Employer against all losses and claims in respect of

APPENDIX A (continued)

injuries or damage to any person or material or physical damage to any property whatsoever which may arise out of or in consequence of the execution and maintenance of the Works and against all claims, proceedings, damages, costs, charges and expenses whatsoever in respect of or in relation thereto except any compensation or damages for or with respect to:-

- (a) The permanent use or occupation of land by the Works or any part thereof.
- (b) The right of the Employer to execute the Works or any part thereof on, over, under, in or through any land.
- (c) Injuries or damage to persons or property which are the unavoidable result of the execution or maintenance of the Works in accordance with the Contract.
- (d) Injuries or damage to persons or property resulting from any act or neglect of the Employer, his agents, servants or other contractors, not being employed by the Contractor, or for or in respect of any claims, proceedings, damages, costs, charges and expenses in respect thereof or in relation thereto or where the injury or damage was contributed to by the Contractor, his servants or agents such part of the compensation as may be just and equitable having regard to the extent of the responsibility of the Employer, his

APPENDIX A (continued)

servants or agents or other contractors for
the damage or injury.

Indemnity
by Employer

(2) The Employer shall indemnify the Contractor against all claims, proceedings, damages, costs, charges and expenses in respect of the matters referred to in the proviso to sub-clause (1) of this Clause.

Third Party
Insurance

23. (1) Before commencing the execution of the Works the Contractor, but without limiting his obligations and responsibilities under Clause 22 hereof, shall insure against his liability for any material or physical damage, loss or injury which may occur to any property, including that of the Employer, or to any person, including any employee of the Employer, by or arising out of the execution of the Works or in the carrying out of the Contract, otherwise than due to the matters referred to in the proviso to Clause 22(1) hereof.

Minimum
Amount of
Third Party
Insurance

(2) Such insurance shall be effected with an insurer and in terms approved by the Employer, which approval shall not be unreasonably withheld, and for at least the amount stated in the Appendix to the Tender. The Contractor shall, whenever required, produce to the Engineer or the Engineer's Representative the policy or policies of insurance and the receipts for payment of the current premiums.

Provision to
Indemnify
Employer

(3) The terms shall include a provision whereby, in the event of any claim in respect of which the Contractor would be entitled to receive indemnity under the policy being brought or made against the

APPENDIX A (continued)

Employer, the insurer will indemnify the Employer against such claims and any costs, charges and expenses in respect thereof.

Accident or
Injury to
Workmen

24. (1) The Employer shall not be liable for or in respect of any damages or compensation payable at law in respect or in consequence of any accident or injury to any workman or other person in the employment of the Contractor or any sub-contractor, save and except an accident or injury resulting from any act or default of the Employer, his agents, or servants. The Contractor shall indemnify and keep indemnified the Employer against all such damages and compensation, save and except as aforesaid, and against all claims, proceedings, costs, charges and expenses whatsoever in respect thereof or in relation thereto.

Insurance
against
Accident, etc.
to Workmen

(2) The Contractor shall insure against such liability with an insurer approved by the Employer, which approval shall not be unreasonably withheld, and shall continue such insurance during the whole of the time that any persons are employed by him on the Works and shall, when required, produce to the Engineer or the Engineer's Representative such policy of insurance and the receipt for payment of the current premium. Provided always that, in respect of any persons employed by any sub-contractor, the Contractor's obligation to insure as aforesaid under this sub-clause shall be satisfied if the sub-contractor shall have insured against the liability in respect of such persons in such manner that the Employer is indemnified under the policy, but the Contractor shall require such sub-contractor to

APPENDIX A (continued)

produce to the Engineer or the Engineer's Representative, when required, such policy of insurance and the receipt for the payment of the current premium.

Remedy on
Contractor's
Failure to
Insure

25. If the Contractor shall fail to effect and keep in force the insurances referred to in Clauses 21, 23 and 24 hereof, or any other insurance which he may be required to effect under the terms of the Contract, then and in any such case the Employer may effect and keep in force any such insurance and pay such premium or premiums as may be necessary for that purpose and from time to time deduct the amount so paid by the Employer as aforesaid from any monies due or which may become due to the Contractor, or recover the same as a debt due from the Contractor.

Giving of
Notices and
Payment of Fees

26. (1) The Contractor shall give all notices and pay all fees required to be given or paid by any National or State Statute, Ordinance, or other Law, or any regulation, or bye-law of any local or other duly constituted authority in relation to the execution of the Works and by the rules and regulations of all public bodies and companies whose property or rights are affected or may be affected in any way by the Works.

Compliance
with Statutes,
Regulations
etc.

(2) The Contractor shall conform in all respects with the provisions of any such Statute, Ordinance or Law as aforesaid and the regulations or bye-laws of any local or other duly constituted authority which may be applicable to the Works and with such rules and regulations of public bodies and companies as aforesaid and shall keep the Employer indemnified against all penalties and liability of every kind for

APPENDIX A (continued)

breach of any such Statute, Ordinance or Law, regulation or bye-law.

(3) The Employer will repay or allow to the Contractor all such sums as the Engineer shall certify to have been properly payable and paid by the Contractor in respect of such fees.

Fossils, etc.

27. All fossils, coins, articles of value or antiquity and structures and other remains or things of geological or archaeological interest discovered on the site of the Works shall as between the Employer and the Contractor be deemed to be the absolute property of the Employer. The Contractor shall take reasonable precautions to prevent his workmen or any other persons from removing or damaging any such article or thing and shall immediately upon discovery thereof and, before removal, acquaint the Engineer's Representative of such discovery and carry out, at the expense of the Employer, the Engineer's Representative's orders as to the disposal of the same.

SPECIAL RISKS

65. Notwithstanding anything in the Contract contained:-

No Liability for
War, etc. Risks

(1) The Contractor shall be under no liability whatsoever whether by way of indemnity or otherwise for or in respect of destruction of or damage to the Works, save to work condemned under the Provisions of Clause 39 hereof prior to the occurrence of any

APPENDIX A (continued)

special risk hereinafter mentioned, or to property whether of the Employer or third parties, or for or in respect of injury or loss of life which is the consequence of any special risk as hereinafter defined. The Employer shall indemnify and save harmless the Contractor against and from the same and against and from all claims, proceedings, damages, costs, charges and expenses whatsoever arising there-out or in connection therewith.

Damage to
Works, etc. by
Special Risks

(2) If the Works or any materials on or near or in transit to the Site, or any other property of the Contractor used or intended to be used for the purposes of the Works, shall sustain destruction or damage by reason of any of the said special risks the Contractor shall be entitled to payment for:-

(a) any permanent work and for any materials so destroyed or damaged,

and so far as may be required by the Engineer, or as may be necessary for the completion of the Works, on the basis of cost plus such profit as the Engineer may certify to be reasonable;

(b) replacing or making good any such destruction or damage to the Works;

(c) replacing or making good such materials or other property of the Contractor used or intended to be used for the purposes of the Works.

APPENDIX A (continued)

Projectile,
Missile, etc.

(3) Destruction, damage, injury or loss of life caused by the explosion or impact whenever and wherever occurring of any mine, bomb, shell, grenade, or other projectile, missile, munition, or explosive of war, shall be deemed to be a consequence of the said special risks.

Increased Costs
arising from
Special Risks

(4) The Employer shall repay to the Contractor any increased cost of or incidental to the execution of the Works, other than such as may be attributable to the cost of reconstructing work condemned under the provisions of Clause 39 hereof, prior to the occurrence of any special risk, which is howsoever attributable to or consequent on or the result of or in any way whatsoever connected with the said special risks, subject however to the provisions in this Clause hereinafter contained in regard to outbreak of war, but the Contractor shall as soon as any such increase of cost shall come to his knowledge forthwith notify the Engineer thereof in writing.

Special Risks

(5) The special risks are war, hostilities (whether war be declared or not), invasion, act of foreign enemies, the nuclear and pressurewaves risk described in Clause 20(2) hereof, or insofar as it relates to the country in which the Works are being or are to be executed or maintained, rebellion, revolution, insurrection, military or usurped power, civil war, or unless solely restricted to the employees of the Contractor or of his Sub-Contractors and arising from the conduct of the Works, riot, commotion or disorder.

APPENDIX A (continued)

Outbreak of
War

(6) If, during the currency of the Contract, there shall be an outbreak of war, whether war is declared or not, in any part of the world which, whether financially or otherwise, materially affects the execution of the Works, the Contractor shall, unless and until the Contract is terminated under the provisions of this Clause, continue to use his best endeavours to complete the execution of the Works. Provided always that the Employer shall be entitled at any time after such outbreak of war to terminate the Contract by giving written notice to the Contractor and, upon such notice being given, this Contract shall, except as to the rights of the parties under this Clause and to the operation of Clause 67 hereof, terminate, but without prejudice to the rights of either party in respect of any antecedent breach thereof.

Removal of
Plant on
Termination

(7) If the Contract shall be terminated under the provisions of the last preceding sub-clause, the Contractor shall, with all reasonable despatch, remove from the Site all Constructional Plant and shall give similar facilities to his Sub-Contractors to do so.

Payment if
Contract
Terminated

(8) If the Contract shall be terminated as aforesaid, the Contractor shall be paid by the Employer, insofar as such amounts or items shall not have already been covered by payments on account made to the Contractor, for all work executed prior to the date of termination at the rates and prices provided in the Contract and in addition:-

APPENDIX A (continued)

- (a) The amounts payable in respect of any preliminary items, so far as the work or service comprised therein has been carried out or performed, and a proper proportion as certified by the Engineer of any such items, the work or service comprised in which has been partially carried out or performed.
- (b) The cost of materials or goods reasonably ordered for the Works which shall have been delivered to the Contractor or of which the Contractor is legally liable to accept delivery, such materials or goods becoming the property of the Employer upon such payments being made by him.
- (c) A sum to be certified by the Engineer, being the amount of any expenditure reasonably incurred by the Contractor in the expectation of completing the whole of the Works insofar as such expenditure shall not have been covered by the payments in this sub-clause before mentioned.
- (d) Any additional sum payable under the provisions of sub-clauses (1), (2) and (4) of this Clause.
- (e) The reasonable cost of removal of Constructional Plant under sub-clause (7) of this Clause and, if required by the Contractor, return thereof to the Contractor's main plant yard in his country of registration or to other destination, at no greater cost.

APPENDIX A (continued)

(f) The reasonable cost of repatriation of all the Contractor's staff and workmen employed on or in connection with the Works at the time of such termination.

Provided always that against any payments due from the Employer under this sub-clause, the Employer shall be entitled to be credited with any outstanding balances due from the Contractor for advances in respect of Constructional Plant and materials and any other sums which at the date of termination were recoverable by the Employer from the Contractor under the terms of the Contract.

APPENDIX B

The form adopted in Kuwait by
the Ministry of Public Works

21. INSURANCE OF WORKS

Before the date specified for commencement of the execution of the Works on the Site and without limiting his obligations and responsibilities under Clause 20 hereof the Contractor shall insure at his expense and in the joint names of the Employer and the Contractor against all loss or damage from whatever cause arising and in such manner that the Employer is covered during the period of construction of the Works and are also covered during the period of Maintenance:

(a) The Works and the Temporary Works to the full value of such works executed from time to time.

(b) The materials, Constructional Plant and other things brought on to the Site by the Contractor to the full value of such materials, Constructional Plant and other things

Such insurances shall be effected with a Kuwaiti Insurance Company and in terms approved by the Employer (which approval shall not be unreasonably withheld) and the Contractor shall produce to the Engineer or the Engineer's Representative the policy or policies of insurance and the receipts for payment of the current premiums.

22. (1) DAMAGE TO PERSONS AND PROPERTY

The Contractor shall (except if and so far as the Contract provides otherwise) indemnify and keep indemnified the Employer against all losses and claims for injuries or damage to any person or any property whatsoever which may

APPENDIX B (continued)

arise out of or in consequence of the construction and maintenance of the Works and against all claims, demands, proceedings, damages, costs, charges and expenses whatsoever in respect of or in relation thereto. The Employer shall have the right to deduct from any amount due to the Contractor the necessary amounts to indemnify against the same without notice or taking any legal procedure and with no right for the Contractor to object in any way against that. Provided always that nothing herein contained shall be deemed to render the Contractor liable for:

- (a) The right of the Employer to construct the Works or any part thereof over or under any land.
- (b) Injuries or damage to persons or property resulting from any act or neglect done or committed by the Employer, his agents, servants or other contractors (not being employed by the Contractor).

(2) INDEMNITY BY EMPLOYER

The Employer will save harmless and indemnify the Contractor from and against all claims, demands, proceedings, damages, costs, charges and expenses in respect of the matters referred to in paragraph (a) and (b) of Clause 22(1).

23. (1) THIRD PARTY INSURANCE

Before commencing the execution of the Works on the Site the Contractor (but without limiting his obligations and responsibilities under Clause 22 hereof) shall insure against any damage, loss or injury which may occur to any property (including that of the Employer) or to any person (including any employee of the Employer) by or arising out of the execution of the Works or Temporary Works or in the carrying out of the Contract otherwise than due to the matters referred to in Clause 22(1)(a) and (b).

APPENDIX B (continued)

(2) MINIMUM AMOUNT OF THIRD PARTY INSURANCE

Such insurance shall be effected with a Kuwaiti Insurance Company and in terms approved by the Employer (which approval shall not be unreasonably withheld) and for at least the amount stated in the Contract and the Contractor shall produce to the Engineer or the Engineer's Representative the policy or policies of insurance and the receipts for payment of the current premiums and all this without any responsibility on the Employer and without limiting the responsibility of the Contractor.

24. (1) ACCIDENT OR INJURY TO WORKMEN

The Employer shall not be liable for or in respect of any damages or compensation payable at law in respect of or in consequence of any accident or injury to any workman or other person in the employment of the Contractor or any Sub-Contractor save and except an accident or injury resulting from any act or default of the Employer, his agents or servants and the Contractor shall indemnify the Employer against all such damages and compensation and against all claims, demands, proceedings, costs, charges and expenses whatsoever in relation thereto.

(2) INSURANCE AGAINST ACCIDENT, ETC. TO WORKMEN

Before commencing the execution of the Works on the Site the Contractor shall insure against such damages and compensations with a Kuwaiti Insurance Company approved by the Employer and shall continue such insurance during the whole of the time that any persons are employed by him on the Works and shall when required produce to the Engineer or the Engineer's Representative such policy of insurance and the receipt for payment of the current premium. Provided always that in respect of any persons employed by any Sub-Contractor the Contractor's obligation to insure as aforesaid under this

APPENDIX B (continued)

sub-clause shall be satisfied if the Sub-Contractor shall have insured against the liability in respect of such persons in such manner that the Employer is indemnified under the policy but the Contractor shall ensure that such Sub-Contractor shall produce to the Engineer or the Engineer's Representative when required such policy of insurance and the receipt for payment of the current premium.

APPENDIX C

The form adopted in Kuwait by the Ministry of Electricity and Water for supply and erection contracts

2.35 INSURANCE

All insurance policies under this Contract shall be issued according to the following:

Preference shall be given to the local National Kuwaiti insurance companies if their rates do not exceed ten percent (10%) above the rates of foreign insurance companies. The Contractor should submit supporting evidence to this.

This insurance cover shall not relieve the Contractor from his responsibility under the Contract, where in all cases the Owner will only hold the Contractor responsible and not the insurance companies.

Insurance companies who underwrite the said insurance policies under the Contract shall be well established and financially capable for the coverage of all risks. With respect to Contracts that exceed one-half million (500,000) Kuwaiti Dinars, an insurance certificate must be submitted certifying that re-insurance has been carried out through a reputable international company. If the Owner should feel that the said insurance company is unable to finance the required risk coverage, then he shall request the Contractor to change the insurance company. If the Contractor does not make the change within a reasonable time, the Owner shall deal with the matter on the Contractor's account and give the insurance to a company he considers reliable.

National Kuwaiti Insurance Companies List:

1. Kuwait Insurance Company, (S.A.K).
2. Al-Ahlia Insurance Company, (S.A.K.).
3. Gulf Insurance Company, (S.A.K.).

APPENDIX C (continued)

- A. Workmen Insurance - The Owner shall not be liable for any damage or compensation with respect to accidents or injury to workmen or other persons employed by the Contractor or his Sub-contractors. The Contractor shall be responsible for all damages, compensations, claims, costs and expenses whatsoever in respect thereof.

The Contractor shall insure his employees against all these liabilities and the insurance shall remain valid throughout the entire employment period. The Contractor shall make available upon the request of the Owner the insurance policy and any receipts of payments of premiums thereto. The same applies to the Sub-contractors.

- B. Equipment Insurance - The Contractor shall insure the equipment for the benefit of both himself and the Owner for its full value against, deterioration, fire, theft, and ocean perils, or other risks from the date of shipping, or the date it becomes the Owner's property (whichever comes first) until the date of final acceptance. The Contractor shall also submit from time to time, or upon the Owner's request, the insurance policy and receipts of payment of premiums thereto.

- C. Third Party Insurance - Upon the execution of the Contract, the Contractor shall insure in the joint names of himself and the Owner, against any damage, loss, or injury which may occur to any person working at the same Site or adjacent to it, as a result of executing the Contract. The Contractor shall make

APPENDIX C (continued)

available upon the Owner's request the insurance policy or policies and premium payment receipts thereto.

APPENDIX D

Free translation from the original in Arabic The form adopted in Kuwait by the Ministry of Electricity and Water for civil contracts

2.19 Care of Works

2.19.1 From the commencement to the completion of the Works the Contractor shall take full responsibility for the care thereof and all Temporary Works and in case any damage, loss or injury shall happen to the Works or to any part thereof or to any Temporary Works from any cause whatsoever (save and except the excepted risks) shall at his own cost repair and make good the same so that at completion the Works shall be in good order and condition and in conformity in every respect with the requirements of the Contract and the Engineer's instructions. In the event of any such damage, loss or injury happening from any of the excepted risks, the Contractor shall, if and to the extent required by the Engineer, repair and make good the same as aforesaid at the cost of the Employer. The Contractor shall also be liable for any damage to the Works occasioned by him in the course of any operations carried out by him for the purpose of complying with his obligations.

2.19.2 Excepted Risks

The "excepted risks" are war hostilities (whether war be declared or not), invasion, act of foreign enemies, rebellion, revolution, insurrection or military or usurped power, civil war or (otherwise than among the Contractor's own employees) riot, commotion or disorder, or use or occupation by the Employer of any portion of the Works in respect of which a Certificate of Completion has been issued all of which are herein collectively referred to as "the excepted risks".

APPENDIX D (continued)

2.19.3 Protection of materials and plant etc.

The Contractor shall make good any loss occasioned by theft, fire, damage or weather factors etc. of any materials which are the property of or provided by the Employer together with all materials plant etc. of sub-contractors or other parties engaged upon the Works. The Contractor shall allow for any extra temporary fencing and watching that he may deem necessary for this purpose in addition to that required for compliance with these Clauses.

2.20 Insurance of the Works

Before the date fixed for the actual commencement of the works on the site and without limiting his obligations and responsibilities under these clauses, the Contractor shall insure on his account and for the benefit of the Employer and the Contractor with a Kuwaiti Insurance Co. against all loss or damage arising out of any cause during the whole period of construction of the Works and during the maintenance period.

The insurance shall be as follows:

- a. The Works and the Temporary Works to the full value of such Works executed from time to time;
- b. The materials, constructional plant and other things brought on to the site by the Contractor to the full value of such materials, constructional plant and other things.

2.21.1 Such insurances shall be effected with an insurer and in terms approved by the Employer (which approval shall not be unreasonably withheld) and the Contractor shall produce

APPENDIX D (continued)

to the Engineer or the Engineer's Representative the policy or policies of insurance and the receipts for payment of the current premiums.

2.21.2 Damage to Persons and Property

The Contractor shall (except if and so far as the contract provides otherwise) indemnify and keep indemnified the Employer against all losses and claims for injuries or damage to any person or any property whatsoever which may arise out of or in consequence of the construction and maintenance of the Works and against all claims, demands, proceedings, damages, costs, charges and expenses whatsoever in respect of or in relation thereto. The Employer may deduct from any monies due to the Contractor all amounts to compensate any such loss without the need to give any notice or take any legal action and the Contractor shall have no right whatsoever to object to any such deduction. Provided always that nothing herein contained shall be deemed to render the Contractor liable for or in respect of or to indemnify the Employer against any compensation or damages for or with respect to:

- a. The right of the Employer to construct the Works or any part thereof, on, over, under, in or through any land.
- b. Injuries or damage to persons or property resulting from any act or neglect done or committed of the Employer, his agents, servants, or other contractors (not being employed by the Contractor) or for or in respect of any claims, demands, proceedings, damages, costs, charges and expenses in respect thereof or in relation thereto.

APPENDIX D (continued)

2.22 Third Party Insurance

2.22.1 Before commencing the execution of the Works the Contractor (but without limiting his obligations and responsibilities) shall insure against any damage, loss or injury which may occur to any property (including that of the Employer) or to any person (including any employee of the Employer by or arising out of the execution of the Works or Temporary Works or in carrying out of the Contract.

2.22.2 Minimum Amount of Third Party Insurance

Such insurance shall be effected with an insurer and in terms approved by the Employer (which approval shall not be unreasonably withheld) and for at least the amount stated in Contract and the Contractor shall produce to the Engineer or the Engineer's Representative the policy or policies of insurance and the receipts for payment of the current premiums. The insurance co. shall be a Kuwaiti co. without any liability on the Employer and without limiting the Contractor's obligations and responsibilities.

2.23 Accident or Injury to Workmen

2.23.1 The Employer shall not be liable for or in respect of any damages or compensation payable at Law in respect or in consequence of any accident or injury to any workmen or other person in the employment of the Contractor or any sub-contractor save and except an accident or injury resulting from any act or default of the Employer, his agents or servants and the Contractor shall indemnify and keep indemnified the Employer against all such damages and compensation and against all claims, demands, proceedings, costs, charges, and expenses whatsoever in respect thereof or in relation thereto.

APPENDIX D (continued)

2.23.2 Insurance Against Accident etc. to Workmen

The Contractor shall insure against such liability with an insurer approved by the Employer and shall continue such insurance during the whole of the time that any persons are employed by him on the works, and shall when required produce to the Engineer or the Engineer's Representative such policy of insurance and the receipt for payment of the current premium. Provided always that in respect of any persons employed by any sub-contractor the Contractor's obligation to insure as aforesaid under this sub-clause shall be satisfied if the sub-contractor shall have insured against the liability in respect of such persons in such manner that the Employer is indemnified under the policy but the Contractor shall require such sub-contractor to produce to the Engineer or the Engineer's Representative when required such policy of insurance and the receipt of payment of the current premium. The insurance co. shall be a Kuwaiti co.

2.24 Remedies on Contractor's Failure to Insure

If the Contractor shall fail to effect and keep in force the insurances referred to in the proceeding clauses hereof or any other insurance which he may be required to effect under the terms of the Contract then, and in any such case the Employer may effect and keep in force any such insurance and pay such premium or premiums as may be necessary for that purpose and from time to time deduct the amount so paid by the Employer as aforesaid from any monies due or which may become due to the Contractor or recover the same as a debt due from the Contractor. Nothing in this Clause contained shall impose any liability upon the Employer either to effect or keep in force any insurances on behalf of the Contractor.

APPENDIX E

The form adopted in the U.A.E. by the
Public Works Department

Insurance of
Works. etc.

20. Without limiting his obligations and responsibilities under Clause 19 hereof the Contractor shall insure in the joint names of the Employer and the Contractor against all loss or damage from whatever cause arising (other than the excepted risks) for which he is responsible under the terms of the Contract and in such manner that the Employer and the Contractor are covered during the period of construction of the Works and are also covered during the Period of Maintenance for loss or damage arising from a cause occurring prior to the commencement of the Period of Maintenance and for any loss or damage occasioned by the Contractor in the course of any operations carried out by him for the purpose of complying with his obligations under Clause 47 hereof:-

(a) The Works and the Temporary Works to the full value of such Works executed from time to time.

(b) The materials, Constructional Plans and other things brought on to the Site by the Contractor to the full value of such materials, Constructional Plant and other things.

Such insurances shall be effected with an insurer in Abu Dhabi and in terms approved by the Employer (which approval shall not be unreasonably withheld) and the Contractor shall whenever required produce to the Engineer or the Engineer's Representative

APPENDIX E (continued)

the policy or policies of insurance and the receipts for payment of the current premiums. Provided always that without limiting his obligations and responsibilities as aforesaid nothing in this clause contained shall render the Contractor liable to insure against the necessity for the repair or reconstruction of any work constructed with materials or workmanship not in accordance with the requirements of the Contract.

Damage to
Persons and
Property

21. (1) The Contractor shall take every precaution not to cause damage or injury to any adjoining or other properties or any persons, animals or things. He shall (except if and so far as the Specification provides otherwise) indemnify and keep indemnified the Employer against all losses and claims for injuries or damage to any person or any property whatsoever (other than surface or other damage to land, being or crops being on the Site suffered by tenants or occupiers) which may arise out of or in consequence of the construction and maintenance of the Works and against all claims, demands, proceedings, damages, costs, charges and expenses whatsoever in respect of or in relation thereto. Provided always that nothing herein contained shall be deemed to render the Contractor liable for or in respect of or to indemnify the Employer against any compensation or damages for or with respect to:

- (a) The permanent use or occupation of land by the Works or any part thereof or (save as hereinafter provided) surface or other damage as aforesaid.

APPENDIX E (continued)

- (b) The right of the Employer to construct the Works or any part thereof on, over, under or in or through any land.
- (c) Interference whether temporary or permanent with any right of light, air way or water or easement or quasi-easement which is the unavoidable result of the construction of the Works in accordance with the Contract.
- (d) Injuries or damage to persons or property resulting from any act or neglect done or committed during the currency of the contract of the Employer, his agents, servants or other contractors (not being employed by the Contractor) or for or in respect of any claims, demands, proceedings, damages, costs, charges and expenses in respect thereof or in relation thereto.

Provided further that for the purposes of the clause the expression "the Site" shall be deemed to be limited to the area defined in the Specification or show on the drawings in which land and crops will be disturbed or damaged as an inevitable consequence of the carrying out of the Works.

**Indemnity
by Employer**

(2) The Employer will save harmless and indemnify the Contractor from and against all claims, demands, proceedings, damages, costs, charges and expenses in respect of the matters referred to in the provision to sub-clause (1) of this clause.

APPENDIX E (continued)

**Third Party
Insurance**

22. (1) Before commencing the execution of the Works the Contractor (but without limiting his obligations and responsibilities under Clause 21 hereof) shall insure against any damage, loss or injury which may occur to any property (including that of the Employer) or to any person (including any employee of the Employer) by or arising out of the execution of the Works or Temporary Works or in the carrying out of the Contract otherwise than due to the matters referred to in the provision to Clause 21(1) hereof.

**Minimum Amount
of Third Party
Insurance**

(2) Such insurance shall be effected with an insurer in Abu Dhabi and in terms approved by the Employer (which approval shall not be unreasonably withheld) and for at least the amount stated in the Appendix to these Conditions and the Contractor shall whenever required produced to the Engineer or the Engineer's Representative the policy or policies of insurance and the receipts for payment of the current premiums.

**Accident or
Injury to
Workmen**

23. (1) The Employer shall not be liable for or in respect of any damages or compensation payable at law in respect or in consequence of any accident or injury to any workman or other person in the employment of the Contractor or any sub-contractor save and except an accident or injury resulting from any act or default of the Employer, his agents or servants and the Contractor shall indemnify and keep indemnified the Employer against all such damages and compensation (save and except as aforesaid) and against all claims, demands, proceedings, costs, charges and expenses whatsoever in respect thereof or in relation thereto.

APPENDIX E (continued)

Insurance
against
Accidents,
etc. to
Workmen

(2) The Contractor shall insure against such liability with an insurer in Abu Dhabi approved by the Employer (which approval shall not be unreasonably withheld) and shall continue such insurance during the whole of the time that any persons are employed by him on the Works and shall when required produce to the Engineer or the Engineer's Representative such policy of insurance and the receipt for payment of the current premium. Provided always that in respect of any persons employed by any sub-contractor shall have insured against the liability in respect of such persons in such manner that the Employer is indemnified under the policy but the Contractor shall require such sub-contractor to produce to the Engineer or the Engineer's Representative when required such policy of insurance and the receipt for payment of the current premium.

Remedy on
Contractor's
Failure to
Insure

24. If the Contractor shall fail to effect and keep in force the insurances referred to in Clause 20, 22 and 23 hereof or any other insurances which may be required to effect under the terms of the Contract then and in any such cases the Employer may effect and keep in force any such insurance and pay such premium as may be necessary for that purpose and from time to time deduct the amount so paid by the Employer as aforesaid from any monies due or which become due to the Contractor or recover the same as a debt due from the Contractor.

APPENDIX F

The form adopted in the U.A.E. by the
Water and Electricity Department

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4.10.3

Insurances

General

The Contractor shall comprehensively insure all equipment and material, supplied by him and shall effect and maintain the following insurances with:

a) The National Insurance Company

Omeir Building	:	Sheikh Khalifa Street
P.O. Box 839	:	Abu Dhabi
Telephone	:	43171-43173
Cable Address	:	ADINSURE
Telex No.	:	AH 340 ADINSURE

or

b) The Al-Ain Ahlia Insurance Company

Sheikh Tahnoon Bldg.	:	New Market Street
PO. Box 3077	:	Abu Dhabi
Telephone	:	2351-2353
Cable Address	:	AHLIN
Telex No.	:	2532 AHLIN

The Contractor shall furnish the insurance policies or adequate certificates of coverage prior to the first shipment and the beginning of the erection, respec-

APPENDIX F (continued)

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tively, to the Owner in two copies and shall whenever required, produce to the Owner further copies as well as the receipts for payment of the current premiums. Additional insurances, if required by the Owner, will be paid for at actuals.

The insurance policies shall be subject to the Owner's/Engineer's approval.

4.10.3.1

Transport - All Risks Insurance

The insurance shall cover all equipment and material during transportation from places of manufacture up to the relevant places of destination for the installation as well as intermediate storage against all risks, according to Institute Cargo Clauses (All Risks) including theft, pilferage, loss and/or damage caused by sea-, fresh- and rainwater, condensation, hooks, mud, oil and/or other cargo, fire; including ordinary breakage; including bending, denting and twisting; including rust and/or oxidation howsoever caused. The coverage shall be made for 110% of the C&F part of the Contract Price of the equipment and material to be supplied.

The insurance shall cover all risks from ex-factory to job-sites till the beginning of erection, including storage period(s).

APPENDIX F (continued)

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4.10.3.2

Erection - All Risks Insurance

The insurance shall cover all supplies and services under the Contract to 110% of the full Contract Price during the various periods of construction, erection, commissioning and testing on completion.

This insurance coverage shall also be valid during the Guarantee Period for all acts, defaults, negligence and/or omissions whatsoever of the Contractor.

The coverage of this insurance shall be against all risks. The insurance shall be established in the joint names of the Owner, the Contractor and the Engineer, and shall be payable in free convertible currency. The insurance coverage between the transport and the erection all risks insurance shall be without any interruption. All monies received under any such insurance shall be applied in or towards the replacement and repair of the work destroyed or damaged.

4.10.3.3

Third Party, Public Liability and Property Damage Insurance

The Contractor shall, in the joint names of the Contractor, the Owner and the Engineer, insure against a damage or injury occurring before all Work has been taken over, to any person or to any property (other than property forming part of the Work) due to or arising out of the execution of the Work. Such insurance shall not be unreasonably withheld) and for

APPENDIX F (continued)

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at least the amount of Dirhams four millions (4,000,000) per single accident for an unlimited number of accidents.

This insurance coverage shall also be valid during the Guarantee Period for all acts, defaults, negligence and/or omissions whatsoever of the Contractor.

The Owner shall have the right at any time to require insurance coverage limits greater than those specified above. In such event, additional premiums payable solely as the result of such increase in insurance shall be added to the Contract Price.

4.10.3.4

Workmen's Compensation Insurance

The Contractor shall insure against workmen's compensation liability and shall continue such insurance during the whole of the time that any persons are employed by him on the Work.

4.10.3.5

Remedy on Contractor's Failure to Insure

If the Contractor fails to effect and keep in force the insurance required hereof or any other insurance which may be required to effect under the terms of the Contract, then and in such case the Owner may effect and keep in force any insurance and pay such premium or premiums as may be necessary for that purpose and from time to time deduct the amount so paid by the Owner as aforesaid from any monies due or which may become due to the Contractor or recover the same as a debt due from the Contractor.

APPENDIX G

The form adopted in Bahrain based on the F.I.D.I.C. 1973 edition

10. Watching and Lighting

The Contractor shall in connection with the Works provide and maintain at his own cost all lights, guards, fencing, and watching when and where necessary or required by the Engineer or Engineer's Representative or by any duly constituted authority for the protection of the Works or for the safety and convenience of the public or others. This work shall be done on the Contractor's expense.

11. Care of Works

a) Contractor's Responsibility

From the commencement to the completion of the Works the Contractor shall take full responsibility for the care thereof and all Temporary Works and in case any damage, loss or injury shall happen to the Works or to any part thereof or to any Temporary Works from any cause whatsoever (save and except the excepted risks as defined in sub-clause (b) of this clause) shall at his own cost repair and make good the same so that at completion the Works shall be in good order and condition and in conformity in every respect with the requirements of the Contract and the Engineer's instructions. In the event of any such damage, loss or injury happening from any of the excepted risks, the Contractor shall if and to the extent required by the Engineer and subject always to the provisions of Clause 22 hereof repair and make good the same as aforesaid at the cost of the Employer. The Contractor shall also be liable for any damage to the Works occasioned by him in the course of any operations

APPENDIX G (continued)

carried out by him for the purpose of complying with his obligations under Clause 10(1) hereof.

b) Excepted Risks

The "excepted risks" are war hostilities (whether war be declared or not), invasion, act of foreign enemies, rebellion, revolution, insurrection or military or usurped power, civil war or (otherwise than among the Contractor's own employees) riot, commotion or disorder or use or occupation by the Employer of any portion of the Works in respect of which a Certificate of Completion has been issued or a cause solely due to the Engineer's design of the Works or any such operation of the forces of nature as reasonable foresight and ability on the part of the Contractor could not foresee or reasonably provide against all of which are herein collectively referred to as "the excepted risks".

12. Insurance of Works, etc.

Without limiting his obligations and responsibilities under Clause 6(11) hereof the Contractor shall insure in the joint names of the Employer and the Contractor against all loss or damage from whatever cause arising (other than the excepted risks) for which he is responsible under the terms of the Contract and in such manner that the Employer and Contractor are covered during the period of construction of the Works, and are also covered during the Period of Maintenance for loss or damage arising from a cause occurring prior to the commencement of the Period of Maintenance, and for any loss or damage occasioned by the Contractor in the course of any operations carried out by him for the purpose of complying with his obligations under this Contract:

APPENDIX G (continued)

- a) The works and the Temporary Works to the full value of such Works executed from time to time.
- b) The materials, Constructional plant and other things brought on to the Site by the Contractor to the full value of such materials, Constructional Plant and other things.

Such insurances shall be effected with an insurer and in terms approved by the Employer (which approval shall not be unreasonably withheld) and the Contractor shall whenever required produce to the Engineer or the Engineer's Representative the policy or policies of insurance and the receipts for payment of the current premiums. Provided always that without limiting his obligations and responsibilities as aforesaid nothing in this clause contained shall render the Contractor liable to insure against the necessity for the repair or reconstruction of any work constructed with materials or workmanship not in accordance with the requirements of the Contract.

13. Damage to Persons and Property

- a) The Contractor shall (except if and so far as the Specification provides otherwise) indemnify and keep indemnified the Employer against all losses and claims for injuries or damage to any person or any property whatsoever (other than surface or other damage to land, being or crops being on the Site suffered by tenants or occupiers) which may arise out of or in consequence of the construction and maintenance of the Works and against all claims, demands, proceedings, damages, costs, charges and expenses whatsoever in respect of or in relation thereto. Provided always that nothing

APPENDIX G (continued)

herein contained shall be deemed to render the Contractor liable for or in respect of or to indemnify the Employer against any compensation or damages for or with respect to:

- i) The permanent use or occupation of land by the Works or any part thereof or (save as hereinafter provided) surface or other damage as aforesaid.
- ii) The right of the Employer to construct the Works or any part thereof, on, over, under, in or through any land.
- iii) Interference, whether temporary or permanent, with any right of light, air, way or water or other easement or quasi-easement which is the unavoidable result of the construction of the works in accordance with the Contract.
- iv) Injuries or damage to persons or property resulting from any act or neglect done or committed during the currency of the Contract, of the Employer, his agents, servants, or other contractors (not being employed by the Contractor) or for or in respect of any claims, demands, proceedings, damages, costs, charges and expenses in respect thereof or in relation thereto.

Provided further that for the purposes of this clause the expression "the Site" shall be deemed to be limited to the area defined in the Specification or shown on the drawings in which land and crops will be disturbed or damaged as an inevitable consequence of the carrying out of the Works.

APPENDIX G (continued)

b) Indemnity by Employer

The Employer will save harmless and indemnify the Contractor from and against all claims, demands, proceedings, damages, costs, charges and expenses in respect of the matters referred to in the provision to Clause 6(13)a hereof.

14. Third Party Insurance

a) Obligations and Responsibilities

Before commencing the execution of the Works the Contractor - (but without limiting his obligations and responsibilities under Clause 6(13) hereof) shall insure against any damage, loss or injury which may occur to any property (including that of the Employer) or to any person (including any employees of the Employer) by or arising out of the execution of the Works or Temporary Works or in carrying out of the Contract, otherwise than due to the matters referred to in the provision to Clause 6(13)(a) hereof. The third party insurance should be in the joint names of the Employer and the Contractor.

b) Minimum Amount of Third Party Insurance

Such insurance shall be effected with an insurer and in terms approved by the Employer (which approval shall not be unreasonably withheld) and for at least BD 100,000 for any claim, with the number of claims unlimited and the Contractor shall whenever required produce to the Engineer or the Engineer's Representative the policy or policies of insurance and the receipts for payment of the current premiums. The Contractor shall maintain such insurance in force until the date on which the Maintenance Certificate is issued.

APPENDIX G (continued)

15. Accident or Injury to Workmen

a) Indemnity to Employer

The Employer shall not be liable for or in respect of any damages or compensation payable at Law in respect or in consequence of any accident or injury to any workmen or other person in the employment of the Contractor or any sub-contractor save and except an accident or injury resulting from any act or default of the Employer, his agents or servants and the Contractor shall indemnify and keep indemnified the Employer against all such damages and compensation (save and except as aforesaid) and against all claims, demands, proceedings, costs, charges and expenses whatsoever in respect thereof or in relation thereto.

b) Insurance Against Accident etc. to Workmen

The Contractor shall insure against such liability with an insurer approved by the Employer (which approval shall not be unreasonably withheld) and shall continue such insurance during the whole of the time that any persons are employed by him on the Works, and shall when required produce to the Engineer or the Engineer's Representative such policy of insurance and the receipt for payment of the current premium. Provided always that in respect of any persons employed by any sub-contractor the Contractor's obligation to insure as aforesaid under this sub-clause shall be satisfied if the sub-contractor shall have insured against the liability in respect of such persons in such manner that the Employer is indemnified under the policy but the Contractor shall require such sub-contractor to produce to the Engineer or the Engineer's Representative when required such policy of insurance and the receipt for payment of the current premium.

APPENDIX G (continued)

16. Remedies on Contractor's Failure to Insure

The Contractor shall hand over the Employer copies of all insurance policies and receipts for payments of current premiums without prejudicing the rights of the Engineer or the Engineer's Representative to inspect the originals.

If the Contractor shall fail to effect and kept in force the insurances referred to in the preceding clauses hereof or any other insurance which he may be required to effect under the terms of the Contract then, and in any such case the Employer may effect and keep in force any such insurance and pay such premium or premiums as may be necessary for that purpose and from time to time deduct the amount so paid by the Employer as aforesaid from any monies due or which may become due to the Contractor or recover the same as a debt due from the Contractor. Nothing in this Clause contained shall impose any liability upon the Employer either to effect or keep in force any insurances on behalf of the Contractor.

APPENDIX H

The form adopted in Saudi Arabia

ARTICLE 21 - Care of Works

From the commencement to the completion of the Works the Contractor shall take full responsibility for the care thereof and of all Temporary Works and in case any damage, loss or injury shall happen to the Works or to any part thereof or to any Temporary Works from any cause whatsoever (save and except the excepted risks as defined in Article 22 - "Excepted Risks") shall at his own cost repair and make good the same so that at completion the Works shall be in good order and condition, and in conformity in every respect with the requirements of the Contract and the Engineer's instructions. In the event of any such damage, loss or injury happening from any of the excepted risks the Contractor shall, if and to the extent required by the Engineer and subject always to the provisions of Article 78 hereof, repair and make good the same as aforesaid at the cost of the Employer. The Contractor shall also be liable for any damage to the Works occasioned by him in the course of any operations carried out by him for the purpose of complying with his obligations under Article 62 hereof.

ARTICLE 22 - Excepted Risks

The "excepted risks" are war, hostilities (whether war be declared or not), invasion, act of foreign enemies, rebellion, revolution, insurrection of military or usurped power, civil war or (otherwise than among the Contractor's own employees) riot, commotion or disorder or use or occupation by the Employer of any portion of the Works in respect of which a Certificate of Completion has been issued or a cause solely due to incorrect design by the

APPENDIX H (continued)

Engineer or any unusual operation of the forces of the nature which no other competent Contractor could expect.

ARTICLE 23 - Insurance of Works etc.

Without limiting his obligations and responsibilities under Article 21 hereof the Contractor shall insure in the joint names of the Employer and the Contractor against all loss or damage from whatever cause arising (other than the excepted risks) for which he is responsible under the terms of the Contract and in such manner that the Employer and Contractor are covered during the period of construction of the Works and are also covered during the Period of Maintenance for loss or damage arising from a cause occurring prior to the termination of the Period of Maintenance.

The insurance shall be as follows:

- a) The Works and the Temporary Works to the full value of such Works executed from time to time.
- b) The materials, Constructional Plant and other things brought on to the Site by the Contractor to the full value of such materials, Constructional Plant and other things.

Such insurances shall be effected with an insurer and in terms approved by the Employer and the Contractor shall whenever required produce to the Engineer or the Engineer's Representative the policy or policies of insurance and the receipts for payment of the current premiums. Provided always that without limiting his obligations and responsibilities as aforesaid nothing in

APPENDIX H (continued)

this Article contained shall render the Contractor liable to insure against the necessity for the repair of reconstruction of any Work constructed with material or workmanship not in accordance with the requirements of the Contract.

ARTICLE 24 - Damage to Persons and Property

Indemnify Employer

The Contractor shall (except if and so far as the Specifications provide otherwise) indemnify and keep indemnified the Employer against all losses or claims for injuries or damage to any person or any property whatsoever (other than surface or other damage to land, being or crops being on the Site suffered by tenants or occupiers) which may arise out of or in consequence of the construction and maintenance of the Works and against all claims, demands, proceedings, damages, costs, charges and expenses whatsoever in respect of in relation thereto. Provided always that nothing herein contained shall be deemed to render the Contractor liable for or in respect of or to indemnify the Employer against any compensation or damages for or with respect to:

- a) The permanent use or occupation of land by the Permanent Works or any part thereof as aforesaid.
- b) The right of the Employer to construct the Works or any part thereof on, over, under, in or through any land.
- c) Interference, whether temporary or permanent, with any right of light, air, way or water or passage or other easement or quasi-easement which is the unavoidable

APPENDIX H (continued)

result of the construction of the Works in accordance with the Contract.

- d) Injuries or damage to persons or property resulting from any act or neglect done or committed during the currency of the Contract of the Employer, his agents, servants or other contractors (not being employed by the Contractor) or for or in respect of any claims, demands, proceedings, damages, costs, charges and expenses in respect thereof or in relation thereto.

Provided further that for the purposes of this Article the expression "the Site" shall be deemed to be limited to the area defined in the Specifications or shown on the Drawings in which land and crop will be distributed or damaged as an inevitable consequence of the carrying out of the Works.

24.2 Indemnity by Employer

The Employer will save harmless and indemnify the Contractor from and against all claims, demands, proceeding, damages, costs, charges and expenses in respect of the matters referred to in Article 24.1, provided that the Contractor has paid them in accordance with the Employer's written approval and has submitted proof of payment.

ARTICLE 25 - Third Party Insurance

25.1 Property and Persons

The Contractor (without limiting his obligations and responsibilities under Article 24 hereto) shall insure against any damage, loss or injury which may occur to properties or any person by or arising out of the

APPENDIX H (continued)

execution of the Works or Temporary Works or in the carrying out of the Contract (otherwise than due to matters referred to in paragraphs a, b, c, and d of Article 24.1 hereto), whether the properties belong to the Employer or to any other person.

25.2 Minimum Amount of Third Party Insurance

The insurance shall be effected with an insurer and under conditions approved by the Employer and for the amount stated in the Tender at least. The Contractor shall, whenever required, produce for the Engineer or the Engineer's Representative the insurance policy or policies with receipts for payment of the current premiums.

25.3 Vehicles and Machinery

The Contractor shall provide third party insurance for all vehicles and machinery used in the execution of the Works. The Contractor shall require his and his sub-contractor's employees to insure the vehicles they own or use for third party protection insurance.

25.4 General

Insurance provided for in Article 25, 26 and 27 of these Conditions shall provide maximum insurance protection against the claims specified. The minimum of insurance referred to in Article 25.1 is specified in Article 88 hereto.

The policies effected under this clause shall be in the joint names of the Employer, the Contractor and his sub-contractors and agents and shall contain a cross-liability clause.

APPENDIX H (continued)

ARTICLE 26 - Accidents and Injury to Workmen

The Employer shall not be liable for or in respect of any damages or compensation payable at Law in respect or in consequence of any accident or injury or any workman or other person in the employment of the Contractor or any sub-contractor save and except an accident or injury resulting from any act or default of the Employer, his agents or servants and the Contractor shall indemnify and keep indemnified the Employer against all such damages and compensation (save and except as aforesaid) and against all claims, demands, proceedings, costs, charges and expenses whatsoever in respect thereof or in relation thereto.

ARTICLE 27 - Insurance Against Accidents, etc. to Workmen

The Contractor shall insure against such liability in Article 26 with an insurer approved by the Employer (which approval shall not be unreasonably withheld) and shall continue such insurance during the whole of the time that any persons are employed by him on the Works and shall when required produce to the Engineer or the Engineer's Representative such policy of insurance and the receipt for payment of the current premium. Provided always that in respect of any persons employed by any sub-contractor the Contractor's obligation to insure as aforesaid under this sub-clause shall be satisfied if the sub-contractor shall have insured against the liability in respect of such persons policy but the Contractor shall require such sub-contractor to produce to the Engineer or the Engineer's Representative when required such policy or insurance and the receipt for payment of the current premium.

APPENDIX H (continued)

ARTICLE 28 - Remedy on Contractor's Failure to Insure

Should the Contractor fail to effect and keep in force or maintain the insurances referred to in Articles 23, 25 and 27 hereto or any other insurance which may be required to effect under the terms of the Contract, then and in any case the Employer may effect and keep in force any such insurance and pay such premium or premiums as may be necessary for the purpose and from time to time deduct the amount so paid by the Employer as aforesaid from any monies due or which may become due to the Contractor, or may recover the same as a debt due from the Contractor.

ARTICLE 29 - Giving of Notices and Payment of Fees

The Contractor shall give all notices and pay all fees required to be given or paid by any National or State Statute, Ordinance or other Law or any Regulation or By-Law of any local or other duly constituted authority in relation to the execution of the Works or of any Temporary Works and by the rules and regulations of all public bodies and companies whose property or rights are effected or may be affected in any way by the Works or any Temporary Works.

APPENDIX I

The form adopted in Qatar

Excepted
Risks

(2) The "excepted risks" are war, hostilities (whether war be declared or not), invasion, act of foreign enemies, rebellion, revolution, insurrection or military or usurped power, civil war or (otherwise than among the Contractor's own employees) riot, commotion or disorder or use or occupation by the Government of any portion of the Works in respect of which a Certificate of Completion has been issued or a cause solely due to the Engineer's design of the Works (all of which are herein collectively referred to as "the excepted risks").

Insurance
of Works,
etc.

21. Without limiting his obligation and responsibilities under Clause 20 hereof the Contractor shall insure in the joint names of the Government and the Contractor against all loss or damage from whatever cause arising (other than the excepted risks) for which he is responsible under the terms of the Contract and in such manner that the Government and Contractor are covered during the period of construction of the Works and are also covered during the Period of Maintenance for loss or damage arising from a cause occurring prior to the commencement of the Period of Maintenance and for any loss or damage occasioned by the Contractor in the course of any operations carried out by him for the purpose of complying with his obligations under Clause 49 hereof.

(a) The Works and the Temporary Works to the full value of such Works executed from time to

APPENDIX I (continued)

time plus 10% to cover any additional expense of and incidental to the demolition, removal, restoration or repair of any such loss or damage.

- (b) The materials, Constructional Plant and other things brought on to the Site by the Contractor to the full value of such materials, Constructional Plant and other things.
- (c) All plant, equipment and materials of any kind being provided under separate contract or by any nominated Sub-Contractors for incorporation in the Works from the time such plant, equipment and materials are taken over by the Contractor at the port workshop or place of manufacturing as the case may be until delivery to Site and thereafter in accordance with sub-paragraphs (a) and (b) above.

Such insurances shall be effected with an insurer and in terms approved by the Government (which approval shall not be unreasonably withheld) and the Contractor shall whenever required produce to the Engineer or the Engineer's Representative the policy or policies of insurance and the receipts for payment of the current premiums. Provided always that without limiting his obligations and responsibilities as aforesaid nothing in this clause contained shall render the Contractor liable to insure against the necessity for the repair or reconstruction of any work constructed with materials or workmanship not in accordance with the requirements of the Contract.

APPENDIX I (continued)

Damage to
Persons and
Property

22. (1) The Contractor shall (except if and so far as the Specification provides otherwise) indemnify and keep indemnified the Government against all losses and claims for injuries or damage to any person or any property whatsoever (other than surface or other damage to land, being or crops being on the Site suffered by tenants or occupiers) which may arise out of or in consequence of the construction and maintenance of the Works and against all claims, demands, proceedings, damages, costs, charges and expenses whatsoever in respect of or in relation thereto. Provided always that nothing herein contained shall be deemed to render the Contractor liable for or in respect of or to indemnify the Government against any compensation or damages for or with respect to:

- (a) The permanent use or occupation of land by the works or any part thereof or (save as hereinafter provided) surface or other damage as aforesaid.
- (b) The right of the Government to construct the Works or any part thereof on over under in or through any land.
- (c) Interference whether temporary or permanent with any right of light, air way or water or other easement or quasi-easement which is the unavoidable result of the construction of the Works in accordance with the Contract.

APPENDIX I (continued)

- (d) Injuries or damage to persons or property resulting from any act or neglect done or committed during the currency of the Contract of the Government, Government Agents, servants or other contractors (not being employed by the Contractor) or for or in respect of any claims, demands, proceedings, damages, costs, charges and expenses in respect thereof or in relation thereto.

Provided further that for the purposes of this clause the expression "the Site" shall be deemed to be limited to the area defined in the Specification or shown on the Drawings in which land and crops will be disturbed or damaged as an inevitable consequence of the carrying out of the Works.

(2) The Government will save harmless and indemnify the Contractor from and against all claims, demands, proceedings, damages, costs, charges and expenses in respect of the matters referred to in the proviso to sub-clause (1) of this clause.

**Third Party
Insurance**

23. (1) Before commencing the execution of the Works the Contractor (but without limiting his obligations and responsibilities under Clause 22 hereof) shall in the joint names of the Government and the Contractor insure against any damage loss or injury which may occur to any property (including that of the Government) or to any person (including any employee of the Government) by or arising out of the execution of the Works or

APPENDIX I (continued)

Temporary Works or in the carrying out of the Contract otherwise than due to the matters referred to in the proviso to Clause 22(1) hereof.

Minimum
Amount of
Third Party
Insurance

(2) Such Insurance shall be effected with an insurer and in terms approved by the Government (which approval shall not be unreasonably withheld) and for at least the amount stated in the Tender and the Contractor shall whenever required produce to the Engineer or the Engineer's Representative the policy or policies of insurance and the receipts for payment of the current premiums.

Accident or
Injury to
Workmen

24. (1) The Government shall not be liable for or in respect or in consequence of any accident or injury to any workman or other person in the employment of the Contractor or any sub-contractor save and except an accident or injury resulting from any act or default of the Government, Government agents or servants and the Contractor shall indemnify and keep indemnified the Government against all such damages and compensation (save and except as aforesaid) and against all claims, demands, proceedings, costs, charges and expenses whatsoever in respect thereof or in relation thereto.

Insurance
against
Accident etc.
to Workmen

(2) The Contractor shall insure against such liability with an insurer approved by the Government (which approval shall not be unreasonably withheld) and shall continue such insurance during the whole of the time that any persons are employed by him on the Works and shall when required produce to the Engineer or the Engineer's Representative such

APPENDIX I (continued)

policy of insurance and the receipt for payment of the current premium. Provided always that in respect of any persons employed by any sub-contractor the Contractor's obligation to insure as aforesaid under this sub-clause shall be satisfied if the sub-contractor shall have insured against the liability in respect of such persons in such manner that the Government is indemnified under the policy but the Contractor shall require such sub-contractor to produce to the Engineer or the Engineer's Representative when required such policy of insurance and the receipt for payment of the current premium.

APPENDIX J

The form adopted in Oman

Excepted Risks

(3) The "excepted risks" are war, hostilities (whether war be declared or not), invasion, act of foreign enemies, rebellion, revolution, insurrection or military or usurped power, civil war, or unless solely restricted to employees of the Contractor or of his sub-contractors and arising from the conduct of the Works, riot, commotion or disorder, or use or occupation by the Employer of any part of the Permanent Works, or ionising radiations or contamination by radio-activity from any nuclear fuel or from any nuclear waste from the combustion of nuclear fuel, radio-active toxic explosive, or other hazardous properties of any explosive, nuclear assembly or nuclear component thereof, pressure waves caused by aircraft or other aerial devices travelling at sonic or supersonic speeds, or any such operation of the forces of nature as an experienced contractor could not foresee, or reasonably make provision for or insure against all of which are herein collectively referred to as "the excepted risks".

**Reinstatement
Compensation
Damage to
Persons or
Property**

(4) Unless stated otherwise, the Contractor shall reinstate all properties whether public or private which are damaged in consequence of the execution, completion and maintenance of the Works to a specified condition at least equal to that obtaining before his first entry on them.

If in the opinion of the Engineer the Contractor shall have failed to take reasonable and prompt action to discharge his obligations in the

APPENDIX J (continued)

matter of reinstatement the Engineer will inform the Contractor in writing of his opinion, in which circumstances the Employer reserves the right to employ others to do the necessary work of reinstatement and to deduct the costs thereof from any money due or which shall become due from the Employer to the Contractor.

The Contractor shall refer to the Employer without delay all claims which may be considered to fall within the provisions of Clause 22.

Insurance of
Works, etc.

21. Without limiting his obligations and responsibilities under Clause 20 hereof, the Contractor shall insure in the joint names of the Employer and the Contractor against all loss or damage from whatever cause arising, other than the excepted risks, for which he is responsible under the terms of the Contract and in such manner that the Employer and Contractor are covered for the period stipulated in Clause 20(1) hereof and are also covered during the Period of Maintenance for loss or damage arising from a cause, occurring prior to the commencement of the Period of Maintenance, and for any loss or damage occasioned by the Contractor in the course of any operations carried out by him for the purpose of complying with his obligation under Clause 49 and 50 hereof:

(a) The Works for the time being executed to the estimated Contract Price thereof, plus a further 15% to cover any additional expense of a nature incidental to the demolition, removal, restoration or repair of any such

APPENDIX J (continued)

loss or damage, together with the materials for incorporation in the Works at their replacement value.

- (b) The Constructional Plant and other things brought onto the Site by the Contractor to the replacement value of such Constructional Plant and other things.
- (c) The Equipment, materials and other things being provided under separate contract or by nominated Sub-Contractors to the replacement value for incorporation in the Works from the time such equipment, materials and other things are taken over by the Contractor at the port, workshop or place of manufacture as the case may be.

Such insurance shall be effected prior to commencement of the Works with an insurer registered in the Sultanate of Oman and in terms to be approved by the Employer which approval shall not be unreasonably withheld, such terms shall exclude the exercise by the insurer of any right of indemnity against their or either of their servants, agents or employees, and the Contractor shall, whenever required, produce to the Engineer or the Engineer's Representative the policy or policies of insurance and the receipts for payment of the current premiums.

Damage to
Persons and
Property

22. (1) The Contractor shall, except if and so far as the Contract provides otherwise, indemnify and keep indemnified the Employer and his servants

APPENDIX J (continued)

agents or employees against all losses and claims in respect of injuries or damage to any persons or material or physical damage to any property whatsoever which may arise out of or in consequence of the execution, completion and maintenance of the Works and against all claims, proceedings, damages, costs, charges and expenses whatsoever in respect of or in relation thereto except any compensation or damages for or with respect to:

- (a) The permanent use or occupation of land by the Works or any part thereof.
- (b) The right of the Employer to execute the Works or any part thereof on, over, under, in or through any land.
- (c) Injuries or damage to persons or property which are the unavoidable result of the execution, completion or maintenance of the Works in accordance with the Contract.
- (d) Injuries or damage to persons or property resulting from any act or neglect of the Employer, his agents, servants or other contractors, not being employed by the Contractor, or for or in respect of any claims, proceedings, damages, costs, charges and expenses in respect thereof or in relation thereto or where the injury or damage was contributed to by the Contractor, his servants or agents such part of the compensation as may be just and equitable having regard to the extent of the respons-

APPENDIX J (continued)

ibility of the Employer, his servants or agents or other Contractor for the damage or injury.

Indemnity by
Employer

(2) The Employer shall indemnify the Contractor against all claims, proceedings, damages, costs, charges and expenses in respect of the matters referred to in proviso to sub-clause (1) of this Clause.

Members of
Employer's
Staff etc.
not
Personally
liable

(3) Neither any member of the Employer's staff nor the Engineer nor of his staff nor the Engineer's Representative shall be in any way personally liable to the Contractor for their acts or obligations under Contract or answerable for any default or omission on the part of the Employer in the observance or performance of any of the acts or things which are contained in the Contract.

Third party
Insurance

23. (1) Before commencing the execution of the Works the Contractor without limiting his obligations and responsibilities under Clause 22(1) shall insure against his liability for any material or physical damage or injury which may occur to any property, including that of the Employer or to any person, including any employee of the Employer, by or out of the execution of the Works or in the carrying out of the Contract otherwise than due to the matters referred to in the proviso to Clause 22(1) hereof.

Minimum Amount
of Third Party
Insurance

(2) Such insurance shall be effected with an insurer registered in the Sultanate of Oman and in terms approved by the Employer, which approval

APPENDIX J (continued)

shall not be unreasonably withheld, and for at least the amount stated in the Appendix to the Tender, per single accident with an unlimited number of accidents. The terms shall exclude the exercise by the insurer of any right of indemnity against their or either of their servants, agents or employees. The Contractor shall prior to the commencement of Works, produce to the Engineer or the Engineer's Representative the policy or policies of insurance and the receipts for payment of current and subsequent premiums within 7 days of payment.

Provision to
Indemnify
Employer

(3) The terms shall include a provision whereby, in the event of any claims in respect of which the Contractor would be entitled to receive indemnity under the policy being brought or made against the Employer, the Contractor will indemnify the Employer against such claims and any costs, charges and expenses in respect thereof.

If the Employer pays any monies in respect of any such claims or demands as aforesaid the amount so paid and the costs incurred to the Employer shall be charged to and paid by the Contractor provided that the Employer shall, if circumstances permit, give to the Contractor reasonable opportunity of examining such claim or demand before payment. In the event of the Contractor disputing the payment, payments made in accordance with a legal obligation or after approval by the Contractor, then the Contractor shall have the right to refer the matter in accordance with the provisions of Clause 67 hereof.

APPENDIX J (continued)

Accident or
Injury to
Workmen

24. (1) The Employer shall not be liable for or in respect of any damages or compensation payable at law in respect or in consequence of any accident or injury to any workman or other person in the employment of the Contractor or any sub-Contractor, save and except an accident or injury resulting from any act of default of the Employer, his agents or servants. The Contractor shall indemnify and keep indemnified the Employer against all such damages and compensation, save and except as aforesaid and against all claims, proceedings, costs, charges and expenses whatsoever in respect thereof or in relation thereto.

Insurance
against
Accident,
etc. to
Workmen

(2) The Contractor shall insure against such liability with an insurer registered in the Sultanate of Oman and approved by the Employer, which approval shall not be unreasonably withheld, and shall continue such insurance during the whole of the time that any persons are employed by him on the Works and shall, when required, produce to the Engineer or the Engineer's Representative such policy of insurance and the receipt for payment of the current premium. Provided always that, in respect of any persons employed by any sub-contractor, the Contractor's obligation to insure as aforesaid under this sub-clause shall be satisfied if the sub-contractor shall have insured against the liability in respect of such persons in such manner that the Employer is indemnified under the policy, but the Contractor shall require such sub-contractor to produce to the Engineer or the Engineer's Representative, prior to commencement of Works, such policy of insurance and the receipt for

APPENDIX J (continued)

the payment of the current and subsequent premiums within 7 days of payment.

Notification
by Contractor

25. (1) (a) The Contractor shall notify the insurers of any of the insurances referred to in Clauses 21, 23 and 24 hereof of any matter or event which by the terms of such insurances are required to be so notified and the Contractor shall indemnify and keep indemnified the Employer against all losses, claims, demands, proceedings, costs, charges and expenses whatsoever arising out of or resulting from any default by the Contractor in compliance with the requirements of this Clause whether as a result of the avoidance of such insurance or otherwise.

(b) The Contractor shall keep the Employer informed of all matters regarding claims submitted by him to the insurers wherein any advantage from insurance policies is claimed.

Remedy on
Contractor's
Failure to
Insure

(2) If the Contractor shall fail to effect and keep in force the insurances referred to in Clauses 21, 23 and 24 hereof, or any other insurance which he may be required to effect under terms of the Contract, then and in any such case the Employer may effect and keep in force any such insurance and pay such premium or premiums as may be necessary for that purpose and from time to time

APPENDIX J (continued)

deduct the amount so paid by the Employer as aforesaid from any monies due or which may become due to the Contractor, or recover the same as a debt due from the Contractor.

**Compliance
with Laws
Rules and
Regulations**

26. The Contractor shall conform in all respects with the Laws of the Sultanate of Oman and give all notices and pay all fees required therewith in relation to the execution of the Works and by the Rules and Regulations of all public bodies and companies whose property or rights are affected or may be affected in any way by the Works and shall keep the Employer indemnified against all penalties and liability of every kind for breach of any such Law, rules, or regulations.

APPENDIX K

Contractors All Risks Policy used
by a major insurance co. in the
Arab Gulf Area

Policy No:

CONTRACTORS' ALL RISKS POLICY

Whereas the Insured named in the Schedule hereto has made to _____ (hereinafter called "the Company") a written proposal by completing a Questionnaire which together with any other statements made in writing by the Insured for the purpose of this Policy is deemed to be incorporated herein.

Now this Policy of Insurance witnesseth that in consideration of the Insured having paid to the Company the premium mentioned in the Schedule and subject to the exclusions, provisions and conditions contained herein or endorsed hereon the Company will indemnify the Insured in the manner and to the extent hereinafter provided.

GENERAL EXCLUSIONS

The Company will not indemnify the Insured in respect of loss, damage or liability directly or indirectly caused by or arising out of:

- (a) War, invasion, act of foreign enemy, hostilities (whether war be declared or not), civil war, rebellion, revolution, insurrection, mutiny, riot, strike, lock-out, civil commotion, military or usurped power, or malicious persons acting on behalf of or in connection with any political organisation, confiscation, commandeering, requisition or destruction of or damage to property by order of the government de jure or de facto or by any public authority;

APPENDIX K (continued)

- (b) nuclear reaction, nuclear radiation or radioactive contamination;
- (c) wilful act or wilful negligence of the Insured;
- (d) cessation of work whether total or partial.

In any action, suit or other proceeding where the Company alleges that by reason of the provisions of Exclusion (a) above any loss, destruction, damage or liability is not covered by this insurance the burden of proving that such loss, destruction, damage or liability is covered shall be upon the Insured.

PERIOD OF COVER

(a) Construction Period

The liability of the Company shall commence, either with the date specified in the Schedule, or the unloading of the property specified in the Schedule at the Contract Site whichever shall be later and shall expire on the date specified in the Schedule. The Company's liability expires also for parts of the insured contract works taken over or put into service by the Principal prior to the expiry date specified in the Policy whichever shall be earlier.

(b) Maintenance Period

If a maintenance period is specified in the Schedule, the liability of the Company during this period shall be limited to any loss or damage caused by the insured Contractor(s) in the course of the operations carried out for the purpose of complying with the obligations under the Maintenance Clause of the Contract.

APPENDIX K (continued)

SECTION I
PROPERTY INSURED
(Material Damage)

The Company hereby agrees with the Insured that if at any time during the period of insurance stated in the Schedule, or during any further period of extension thereof, the property or any part thereof described in the Schedule shall suffer any unforeseen loss or damage from any cause, other than those specifically excluded, in a manner necessitating repair or replacement, the Company will pay or make good all such loss or damage up to an amount not exceeding in respect of each of the items specified in the Schedule the sum set opposite thereto and not exceeding in all the total sum expressed in the said Schedule as insured hereby.

The Company will also reimburse the Insured for the cost of clearance of debris following upon any event giving rise to a claim under this Policy but not exceeding in all the sum set opposite thereto in the Schedule

EXCLUSIONS TO SECTION I

The Company shall not, however, be liable for:

- (a) the deductions stated in the Schedule to be borne by the Insured in any one occurrence;
- (b) consequential loss of any kind or description whatsoever including penalties, losses due to delay, lack of performance, loss of contract;
- (c) loss or damage due to faulty design;

APPENDIX K (continued)

- (d) cost of replacement or rectification of defective material and/or workmanship, but this exclusion shall be limited to the items immediately affected and shall not be deemed to exclude loss or damage resulting from an accident due to such defective material and/or workmanship;
- (e) wear and tear, corrosion, oxidation, deterioration due to lack of use and normal atmospheric conditions;
- (f) mechanical and/or electrical breakdown or derangement of construction plant, equipment and construction machinery;
- (g) loss of or damage to vehicles licensed for general road use or waterborne vessels or aircraft;
- (h) loss of or damage to files, drawings, accounts, bills, currency, stamps, deeds, evidences of debt, notes, securities or cheques;
- (i) loss discovered only at the time of taking any inventory.

PROVISIONS APPLYING TO SECTION I

Memo 1. Sum Insured: It is a requirement of this insurance that the amounts of insurance stated in the Schedule shall not be less than:

for item 1: the full value of the contract works at the completion of the construction, inclusive of materials, wages, freight, customs duties, dues and materials or items supplied by the Principal;

for item 2: the replacement value of construction plant, equipment and construction machinery.

APPENDIX K (continued)

The Insured undertakes to notify the Company of any facts affecting a material increase or decrease of the sums insured provided always that such increase or decrease shall take effect only after the same has been recorded on the Policy by the Company before the occurrence of any claim hereunder.

If, in the event of loss or damage it is found that the sum insured is less than the amount required to be insured then the amount recoverable by the Insured under this Policy shall be reduced in such proportion as the sum uninsured bears to the amount required to be insured.

Memo 2. Basis of Loss Settlement: In the event of any loss or damage the basis of any settlement under this Policy shall be:

- (a) In the case of any damage which can be repaired - the cost of repairs necessary to restore the property to its condition immediately before the occurrence of the damage less salvage; or
- (b) In the case of a total loss - the actual value of the property immediately before the occurrence of the loss less salvage provided always that the provisions and conditions have been complied with.

The Company will make payments only after being satisfied by production of the necessary bills and documents that the repairs have been effected or replacement has taken place, as the case may be.

All damage which can be repaired shall be repaired but if the cost of repairing any damage equals or exceeds the value of the property immediately before the occurrence of the damage the settlement shall be made on the basis provided for in (b) above.

APPENDIX K (continued)

The cost of any provisional repairs will be borne by the Company if such repairs constitute part of the final repairs and do not increase the total repair expenses.

The cost of any alterations, additions and/or improvements shall not be recoverable under this Policy.

Memo 3. Extension of Cover: Extra charges for overtime, nightwork, work on public holidays, express freight, etc. are covered by this Insurance only if previously and specially agreed upon.

SECTION II

THIRD PARTY LIABILITY

The Company will indemnify the Insured against all sums which the Insured shall become legally liable to pay as damages consequent upon:

- (a) accidental bodily injury or illness (whether fatal or not) to third parties
- (b) accidental loss or damage to property belonging to third parties

occurring in direct connection with the performance of the contract insured by this Policy and happening on or in the immediate vicinity of the Contract Site during the Period of Insurance.

In respect of a claim for compensation to which the indemnity provided herein applies, the Company will in addition indemnify the Insured against:

- (a) all costs and expenses of litigation recovered by any claimant from the Insured, and

APPENDIX K (continued)

- (b) all costs and expenses incurred with the written consent of the Company.

The Liability of the Company under this section shall not exceed the limits of indemnity stated in the Schedule (Section II).

EXCLUSIONS TO SECTION II

The Company will not indemnify the Insured in respect of:

1. expenditure incurred in doing or redoing or making good or repairing or replacing any work or property covered or coverable under Section I of this Policy;
2. damage to any property or land or building caused by vibration or by the removal or weakening of support or injury or damage to any person or property occasioned by or resulting from any such damage (unless especially agreed upon by Endorsement);
3. Liability consequent upon:
 - (a) bodily injury to or illness of employees or workmen of the Contractor(s) or the Principal or any other firm connected with the contract work or members of their families;
 - (b) loss of or damage to property belonging to or held in care, custody or control of the Contractor(s), the Principal or any other firm connected with the contract work or an employee or workman of one of the aforesaid;
 - (c) any accident caused by vehicles licensed for general road use or by waterborne vessels or aircrafts;

APPENDIX K (continued)

- (d) any agreement by the Insured to pay any sum by way of indemnity or otherwise unless such liability would have attached in the absence of such agreement;
- (e) any loss of or damage to Underground properties.

SPECIAL CONDITIONS APPLYING TO SECTION II

1. No admission, offer, promise, payment or indemnity shall be made or given by or on behalf of the Insured without the written consent of the Company who shall be entitled, if it so desire to take over and conduct in the name of the Insured defence or settlement of any claim or to prosecute for its own benefit in the name of the Insured any claim for indemnity or damages or otherwise and shall have full discretion in the conduct of any proceedings or in the settlement of any claim and the Insured shall give all such information and assistance as the Company may require.
2. The Company may so far as any accident is concerned pay to the Insured the limit of indemnity for any one accident (but deducting therefrom in such case any sum or sums already paid as compensation in respect thereof or any lesser sum for which the claim or claims arising from such accident can be settled and the Company shall thereafter be under no further liability in respect of such accident under this section.

GENERAL CONDITIONS

1. The due observance and fulfilment of the Terms of this Policy in so far as they relate to anything to be done or complied with by the Insured shall be a condition precedent to any Liability of the Company to make any payment under this Policy.

APPENDIX K (continued)

2. The Schedule and the Section(s) shall be deemed to be incorporated in and form part of this Policy and the expression "this Policy" wherever used in this contract shall be read as including the Schedule and Section(s). Any word or expression to which a specific meaning has been attached in any part of this Policy or of the Schedule or of the Section(s) shall bear such meaning wherever it may appear.
3. The Insured shall take all reasonable precautions to prevent loss, damage or liability and to comply with sound engineering practice, statutory requirements and manufacturer's recommendations and maintain in efficient condition all contract works, construction plant, equipment and construction machinery insured by this Policy.
4. The Insured shall immediately notify the Company in writing of any material change in the risk insured hereunder; the scope of cover and/or the premium shall, if necessary be adjusted accordingly.
5. Representatives of the company shall at any reasonable time have access to the site or premises and to all pertinent data, documents, drawings etc. and shall have the right to inspect any property insured.
6. In the event occurrence which might give rise to a claim under this Policy, the Insured shall:
 - (a) immediately notify the Company by telephone or telegram as well as in writing;
 - (b) take all steps within his power to minimise the extent of the loss or damage;

APPENDIX K (continued)

- (c) preserve the damaged parts and make them available for inspection by a representative or surveyor of the Company;
- (d) furnish all such information and documentary evidence as the Company may require;
- (e) inform the police authorities in case of loss or damage due to theft or burglary.

The Company shall not in any case be liable for loss, damage or liability of which no notice have been received by the Company within 14 days of its occurrence.

Upon notification being given to the Company under this condition, the Insured may carry out the repairs or replacement of any minor damage; in all other cases a representative of the Company shall have the opportunity of inspecting the loss or damage before any repairs or alterations are effected. Nothing herein shall prevent the Insured from taking such steps as are absolutely necessary for the security and continuation of the contract work. If a representative of the Company does not carry out the inspection within a period of time which could be considered as adequate under the circumstances the Insured is entitled to proceed with the repairs or replacement.

7. The Insured shall at the expense of the Company do and concur in doing and permit to be done all such acts and things as may be necessary or required by the Company in the interest of any rights or remedies, or of obtaining relief or indemnity from parties (other than those insured under this Policy) to which the Company shall be or would become entitled or subrogated upon their paying for or making good any loss or damage under this Policy whether such acts and things shall be or become necessary or required before or after Insured's indemnification by the Company.

APPENDIX K (continued)

8. All differences arising out of this Policy shall be referred to the decision of an Arbitrator to be appointed in writing by the parties in difference or if they cannot agree upon a single Arbitrator to the decision of two Arbitrators, one to be appointed in writing by each of the parties, within one calendar month after having been required in writing so to do by either of the parties, or, in case the Arbitrators do not agree, of an Umpire to be appointed in writing by the Arbitrators before entering upon the reference. The Umpire shall sit with the Arbitrators and preside at their meetings. The Arbitrators and the Umpire shall be qualified Engineers. The making of an award shall be a condition precedent to any right of action against the Company.

9. If a claim is in any respect fraudulent, or if any false declaration is made or used in support thereof, or if any fraudulent means or devices are used by the Insured or anyone acting on his behalf to obtain any benefit under this Policy or if a claim is made and rejected and no action or suit is commenced within three months after such rejection or in case of arbitration taking place as provided herein, within three months after the Arbitrators or Umpire have made their award, all benefit under the Policy shall be forfeited.

10. If at the time any claim arises under the Policy there be any other insurance covering the same loss, damage or liability the Company shall not be liable to pay or contribute more than their rateable proportion of any claim for such loss or damage.

APPENDIX K (continued)
SCHEDULE

Policy No. Issued at	
Title of Contract	
Name(s) and address(es) of Insured	
(a) Principal	
(b) Contractor(s)	
Location of Contract Site	
Description of the Insured Items	
Section 1. Property Insured	Sum Insured
1. Contract Works (Permanent and Temporary Works, including all Materials to be incorporated therein)	
(a) Contract Price	1. (a)
(b) Materials or Items supplied by the Principal	(b)
2. Construction Plant, Equipment & Machinery according to attached list	2.
	Total
Limit of indemnity under this Policy in respect of Clearance of Debris	
Section II. Third Party Liability	
1. Limit of indemnity in respect of any one accident or series of accidents arising out of one event	1.
2. Total limit of indemnity under this Policy	2.
Deductibles: Amounts to be borne by the Insured in respect of each and every occurrence for loss of or damage to contract works (Schedule Section 1 item 1) arising out of:	
(a) earthquake, storm, hurricane, cyclone, flood, inundation, subsidence, landslide, collapse	the first
(b) any other cause	the first
Amount to be borne by the Insured in respect of each and every occurrence for loss of or damage to construction plant and machinery (Schedule Section 1 Item 2) arising out of:	
(a) earthquake, storm, hurricane, cyclone, flood, inundation, subsidence, landslide, collapse	the first
(b) any other cause	the first
Amount to be borne by the Insured in respect of each and every occurrence under (Schedule Section II Item 1)	the first
Period of Insurance (Subject to the Provisions concerning the Period of Cover)	
(a) Construction Period	From:
(b) Maintenance Period	To:
Premium (Subject to adjustment in accordance with the Provisions and Conditions of the Policy)	

In Witness whereof the Undersigned being duly authorised by the Company and on behalf of the Company has/have hereunto set his/their hand(s)

..... day of 19.....

APPENDIX L

Model Contractors All Risks Policy
providing adequate coverage

Policy No:.....

CONTRACTORS' ALL RISKS POLICY

Whereas the Insured named in the Schedule hereto has made to
_____ (hereinafter called "the
Company") a written proposal by completing a Questionnaire which
together with any other statements made in writing by the insured for
the purpose of this Policy is deemed to be incorporated herein.

Now this Policy of Insurance witnesseth that in consideration of
the Insured having paid to the Company the premium mentioned in the
Schedule and subject to the exclusions, provisions and conditions
contained herein or endorsed hereon the Company will indemnify the
Insured in the manner and to the extent hereinafter provided.

GENERAL EXCLUSIONS

The Company will not indemnify the Insured in respect of loss, damage
or liability directly or indirectly caused by or arising out of:

- (a) War, invasion, act of foreign enemy, hostilities (whether war be
declared or not), civil war, rebellion, revolution, insurrec-
tion, mutiny, riot, strike, lock-out, civil commotion, military
or usurped power, or malicious persons acting on behalf of or in
connection with any political organisation,
confiscation, commandeering, requisition or destruction of or
damage to property by order of the government de jure or de
facto or by any public authority;
- (b) Nuclear reaction, nuclear radiation or radioactive contamination;

APPENDIX L (continued)

- (c) wilful act or wilful negligence of the Insured;
- (d) cessation of work whether total or partial.

In any action, suit or other proceeding where the Company alleges that by reason of the provisions of Exclusion (a) above any loss, destruction, damage or liability is not covered by this insurance the burden of proving that such loss, destruction, damage or liability is covered shall be upon the Insured.

PERIOD OF COVER

(a) Construction Period

The liability of the Company shall commence, either with the date specified in the Schedule, or the unloading of the property specified in the Schedule at the Contract Site whichever shall be later and shall expire on the date specified in the Schedule. The Company's liability expires also for parts of the insured contract works taken over or put into service by the Principal prior to the expiry date specified in the Policy whichever shall be earlier.

(b) Maintenance Period

If a maintenance period is specified in the Schedule, the liability of the Company during this period shall be limited to any loss or damage caused by the Insured Contractor(s) in the course of the operations carried out for the purpose of complying with the obligations under the Maintenance Clause of the Contract.

APPENDIX L (continued)

SECTION I

PROPERTY INSURED

(Material Damage)

The Company hereby agrees with the Insured that if at any time during the period of insurance stated in the Schedule, or during any further period of extension thereof, the property or any part thereof described in the Schedule shall suffer any unforeseen loss or damage from any cause other than those specifically excluded, in a manner necessitating repair or replacement the Company will pay or make good all such loss or damage up to an amount not exceeding in respect of each of the items specified in the Schedule the sum set opposite thereto and not exceeding in all the total sum expressed in the said Schedule as insured hereby.

The Company will also reimburse the Insured for the cost of clearance of debris following upon any event giving rise to a claim under this Policy but not exceeding in all the sum set opposite thereto in the Schedule.

EXCLUSIONS TO SECTION I

The Company shall not however, be liable for:

- (a) the deductibles stated in the Schedule to be borne by the Insured in any one occurrence;
- (b) consequential loss of any kind or description whatsoever including penalties, losses due to delay, lack of performance, loss of contract;
- (c) loss or damage due to faulty design;

APPENDIX L (continued)

- (d) cost of replacement or rectification of defective material and/or workmanship, but this exclusion shall be limited to the items immediately affected and shall not be deemed to exclude loss or damage resulting from an accident due to such defective material and/or workmanship;
- (e) wear and tear, corrosion, oxidation, deterioration due to lack of use and normal atmospheric conditions;
- (f) mechanical and/or electrical breakdown or derangement of construction plant, equipment and construction machinery;
- (g) loss of or damage to vehicles licensed for general road use or waterborne vessels or aircraft;
- (h) loss of or damage to files, drawings, accounts, bills, currency, stamps, deeds, evidence of debt, notes, securities or cheques;
- (i) loss discovered only at the time of taking an inventory.

PROVISIONS APPLYING TO SECTION I

Memo 1. Sum Insured: It is a requirement of the insurance that the amounts of insurance stated in the Schedule shall not be less than:

for item 1: the full value of the contract works at the completion of the construction, inclusive of materials, wages, freight, customs duties, dues and materials or items supplied by the Principal;

for item 2: the replacement value of construction plant, equipment and construction machinery.

APPENDIX L (continued)

The Insured undertakes to notify the Company of any facts affecting a material increase or decrease of the sums insured provided always that such increase or decrease shall take effect only after the same has been recorded on the Policy by the Company before the occurrence of any claim hereunder.

If, in the event of loss or damage it is found that the sum insured is less than the amount required to be insured then the amount recoverable by the Insured under this Policy shall be reduced in such proportion as the sum insured bears to the amount required to be insured.

Memo 2. Basis of Loss Settlement: In the event of any loss or damage the basis of any settlement under this Policy shall be:

- (a) In the case of any damage which can be repaired - the cost of repairs necessary to restore the property to its condition immediately before the occurrence of the damage less salvage; or
- (b) in the case of a total loss - the actual value of the property immediately before the occurrence of the loss less salvage, provided always that the provisions and conditions have been complied with.

The Company will make payments only after being satisfied by production of the necessary bills and documents that the repairs have been effected or replacement has taken place, as the case may be.

All damage which can be repaired shall be repaired but if the cost of repairing any damage equals or exceeds the value of the property immediately before the occurrence of the damage the settlement shall be made on the basis provided for in (b) above.

APPENDIX L (continued)

The cost of any provisional repairs will be borne by the Company if such repairs constitute part of the final repairs and do not increase the total repair expenses.

The cost of any alterations, additions and/or improvements shall not be recoverable under this Policy.

Memo 3. Extension of Cover: Extra charges for overtime, nightwork, work on public holidays, express freight, etc. are covered by this Insurance only if previously and specially agreed upon.

SECTION II
THIRD PARTY LIABILITY

The Company will indemnify the Insured against all sums which the Insured shall become legally liable to pay as damages consequent upon:

- (a) accidental bodily injury or illness (whether fatal or not) to third parties
- (b) accidental loss or damage to property belonging to third parties

occurring in direct connection with the performance of the contract insured by this Policy and happening on or in the immediate vicinity of the Contract Site during the Period of Insurance.

In respect of a claim for compensation to which the indemnity provided herein applies the Company will in addition indemnify the Insured against:

- (a) all costs and expenses of litigation recovered by any claimant from the Insured; and
- (b) all costs and expenses incurred with the written consent of the Company.

APPENDIX L (continued)

The Liability of the Company under this section shall not exceed the limits of indemnity stated in the Schedule (Section II).

EXCLUSIONS TO SECTION II

The Company will not indemnify the Insured in respect of:

1. expenditure incurred in doing or redoing or making good or repairing or replacing any work or property covered or coverable under Section I of this Policy;
2. damage to any property or land or building caused by vibration or by the removal or weakening of support or injury or damage to any person or property occasioned by or resulting from any such damage (unless especially agreed upon by Endorsement);
3. Liability consequent upon:
 - (a) bodily injury to or illness of employees or workmen of the Contractor(s) or the Principal or any other firm connected with the contract work or members of their families;
 - (b) loss of or damage to property belonging to or held in care, custody or control of the Contractor(s), the Principal or any other firm connected with the contract work or an employee or workman of one of the aforesaid;
 - (c) any accident caused by vehicles licensed for general road use or by waterborne vessels or aircraft;
 - (d) any agreement by the insured to pay any sum by way of indemnity or otherwise unless such liability would have attached in the absence of such agreement;

APPENDIX L (continued)

- (e) any loss of or damage to Underground properties.

SPECIAL CONDITIONS APPLYING TO SECTION II

1. No admission, offer, promise, payment or indemnity shall be made or given by or on behalf of the Insured without the written consent of the Company who shall be entitled, if it so desire to take over and conduct in the name of the Insured defence or settlement of any claim or to prosecute for its own benefit in the name of the Insured any claim for indemnity or damages or otherwise and shall have full discretion in the conduct of any proceedings or in the settlement of any claim and the Insured shall give all such information and assistance as the Company may require.
2. The Company may so far as any accident is concerned pay to the Insured the limit of indemnity for any one accident (but deducting therefrom in such case any sum or sums already paid as compensation in respect thereof of any lesser sum for which the claim or claims arising from such accident can be settled and the Company shall thereafter be under no further liability in respect of such accident under this section.

GENERAL CONDITIONS

1. The due observance and fulfilment of the Terms of this Policy in so far as they relate to anything to be done or complied with by the Insured shall be a condition precedent to any Liability of the Company to make any payment under this Policy.

APPENDIX L (continued)

2. The Schedule and the Section(s) shall be deemed to be incorporated in and form part of this Policy and the expression "this Policy" wherever used in the contract shall be read as including the Schedule and Section(s). Any word or expression to which a specific meaning has been attached in any part of this Policy or of the Schedule or of the Section(s) shall bear such meaning wherever it may appear.
3. The Insured shall take all reasonable precautions to prevent loss, damage or liability and to comply with sound engineering practice, statutory requirements and manufacturer's recommendations and maintain in efficient condition all contract works, construction plant, equipment and construction machinery insured by this Policy.
4. The Insured shall immediately notify the Company in writing of any material change in the risk insured hereunder; the scope of cover and/or the premium shall, if necessary be adjusted accordingly.
5. Representatives of the company shall at any reasonable time have access to the site or premises and to all pertinent data, documents, drawings etc. and shall have the right to inspect any property insured.
6. In the event occurrence which might give rise to a claim under this Policy, the Insured shall:
 - (a) immediately notify the Company by telephone or telegram as well as in writing;
 - (b) take all steps within his power to minimise the extent of the loss or damage;

APPENDIX L (continued)

- (c) preserve the damaged parts and make them available for inspection by a representative or surveyor of the Company;
- (d) furnish all such information and documentary evidence as the Company may require;
- (e) inform the police authorities in case of loss or damage due to theft or burglary.

The Company shall not in any case be liable for loss, damage or liability of which no notice has been received by the Company within 14 days of its occurrence.

Upon notification being given to the Company under this condition, the Insured may carry out the repairs or replacement of any minor damage, in all other cases a representative of the Company shall have the opportunity of inspecting the loss or damage before any repairs or alterations are effected. Nothing herein shall prevent the Insured from taking such steps as are absolutely necessary for the security and continuation of the contract work. If a representative of the Company does not carry out the inspection within a period of time which could be considered as adequate under the circumstances the Insured is entitled to proceed with the repairs or replacement.

7. The Insured shall at the expense of the Company do and concur in doing and permit to be done all such acts and things as may be necessary or required by the Company in the interest of any rights or remedies, or of obtaining relief or indemnity from parties (other than those insured under this Policy) to which the Company shall be or would become entitled or subrogated upon their paying for or making good any loss or damage under this Policy whether such acts and things shall be or become necessary

APPENDIX L (continued)

or required before or after Insured's indemnification by the Company.

8. All differences arising out of this Policy shall be referred to the decision of an Arbitrator to be appointed in writing by the parties in difference or if they cannot agree upon a single Arbitrator to the decision of two Arbitrators, one to be appointed in writing by each of the parties, within one calendar month after having been required in writing so to do by either of the parties, or, in case the Arbitrators do not agree, of an Umpire to be appointed in writing by the Arbitrators before entering upon the reference. The Umpire shall sit with the Arbitrators and preside at their meetings. The Arbitrators and the Umpire shall be qualified Engineers. The making of an award shall be a condition precedent to any right of action against the Company.
9. If a claim is in any respect fraudulent or if any false declaration is made or used in support thereof, or if any fraudulent means or devices are used by the Insured or anyone acting on his behalf to obtain any benefit under this Policy or if a claim is made and rejected and no action or suit is commenced within three months after such rejection or in case of arbitration taking place as provided herein, within three months after the Arbitrator or Arbitrators Umpire have made their award, all benefit under this Policy shall be forfeited.
10. If at the time any claim arises under the Policy there be any other insurance covering the same loss, damage or liability the Company shall not be liable to pay or contribute more than their rateable proportion of any claim for such loss or damage.

Policy No. Issued at	
Title of Contract: Construction of 250 limited income houses as per Contract No.	
Name(s) and address(es) of Insured	
(a) Principal: Ministry of Public Works (b) Contractor(s): ABC Contracting Co. Ltd. and/or sub-contractors	
Location of Contract Site: (Exact address and location)	
Description of the Insured Items	
Section 1. Property Insured	Sum Insured
1. Contract Works (Permanent and Temporary Works, including all Materials to be incorporated therein) (a) Contract Price (b) Materials or Items supplied by the Principal	1. (a) US\$ 35,000,000 (b) -
2. Construction Plant, Equipment & Machinery according to attached list: (New replacement value)	2. US\$ 2,500,000
	Total US\$ 37,500,000
Limit of indemnity under this Policy in respect of Clearance of Debris	US\$ 500,000
Section II. Third Party Liability	
1. Limit of indemnity in respect of any one accident or series of accidents arising out of one event	1. US\$ 1,000,000
2. Total limit of indemnity under this Policy	2. UNLIMITED
Deductibles: Amounts to be borne by the Insured in respect of each and every occurrence for loss of or damage to contract works (Schedule Section 1 item 1) arising out of: (a) earthquake, storm, hurricane, cyclone, flood, inundation, subsidence, landslide, callapse (b) any other cause Amount to be borne by the Insured in respect of each and every occurrence for loss of or damage to construction plant and machinery (Schedule Section 1 Item 2) arising out of: (a) earthquake, storm, hurricane, cyclone, flood, inundation, subsidence, landslide, callapse (b) any other cause Amount to be borne by the Insured in respect of each and every occurrence under (Schedule Section II Item 1)	the first US\$ 5000 the first US\$ 2000 the first US\$ 2500 the first US\$ 1000 the first
Period of Insurance (Subject to the Provisions concerning the Period of Cover) (a) Construction Period: 24 months From: 1.1.1987 To: 31.12.1988 (b) Maintenance Period : 12 months thereafter	
Premium US\$ (Subject to adjustment in accordance with the Provisions and Conditions of the Policy)	

In Witness whereof the Undersigned being duly authorised by the Company and on behalf of the Company has/have hereunto set his/their hand(s)

..... day of 19.....

APPENDIX L (continued)

Cover for Full Replacement and/or
Reinstatement

In the event of the property insured under section I of this policy is lost or damaged by a peril insured against, the amount payable in respect of such loss or damage shall be on the full repair, replacement or reinstatement basis.

APPENDIX L (continued)

Cover for Maintenance Risks

This policy is extended for the maintenance period specified in the Schedule to cover loss or damage to the contract works arising from a cause occurring prior to the commencement of the Period of Maintenance and/or occasioned by the insured contractor(s) in the course of the operation carried out for the purpose of complying with the obligations under the maintenance provisions of the Contract.

APPENDIX L (continued)

Special Conditions Concerning Underground
Cables, Pipes and Other Facilities

Notwithstanding exclusion (e) of the list of exclusions to section II hereof this policy will indemnify the Insured in respect of loss of or damage to existing underground cables and/or pipes or other underground facilities if, prior to the commencement of works, the Insured has inquired with the relevant authorities about the exact position of such cables, pipes or other underground facilities and takes all necessary steps to avoid damage to same.

The indemnity shall in any case be restricted to the repair costs of such cables, pipes or other underground facilities, any consequential damage being excluded from the cover.

APPENDIX L (continued)

Cover for Cross Liability

The Third Party Liability cover under section II of the policy shall apply to the insured parties named in the Schedule as if a separate policy had been issued to each party, provided that the insurers shall not indemnify the insured under this endorsement in respect of liability for:-

1. Loss of or damage to items insured or insurable under section I of the policy, even if not recoverable due to an excess of any limit.
2. Fatal or non-fatal injury or illness of employees or workmen who are or could have been insured under workmen's compensation and/or employers' liability insurance except for such fatal or non-fatal injury or illness caused to the employees of the Principal for which the Contractor shall be legally liable.

The Insurer's liability in respect of the insured parties shall not however exceed in the aggregate for anyone accident or series of accidents arising out of one event the limit of indemnity stated in the Schedule.

APPENDIX L (continued)

Automatic Increase Cover in Respect
of Permanent Contract Works

The sum insured in respect of the permanent contract works shown under section I in the Schedule of this policy is subject to an automatic increase up to 10% thereof.

Premium adjustment will be carried out upon completion of the Works and declaration of the final values.

APPENDIX L (continued)

Cover for Consequences of Faulty Design

It is hereby understood and agreed that exclusion (c) of the list of exclusions to section I of this policy is amended to read as follows:

Loss or damage due to faulty design but this exclusion shall be limited to the items immediately affected and shall not be deemed to exclude other loss or damage resulting from an accident due to such fault.

Design or specification costs are excluded.

APPENDIX L (continued)

Cover for Inland Transit Risks

This policy is extended to cover inland transit risks within The State of provided that such transit is not a continuation of a marine voyage nor is it covered by any other policy. However, if the marine cover terminates at the port of then this policy is extended to include the said goods whilst in transport from that port to the Insured's warehouse on site provided that the goods are surveyed by the company's surveyor prior to commencement of the voyage from the port to the Insured's warehouse on site.

This extension also does not include goods bought locally on the seller's responsibility until the goods are safely unloaded on the site.

APPENDIX L (continued)

Cover for Loss or Damage Due to Strike,
Riot and Civil Commotion (SRCC)

This Policy is extended to cover riot, strike and civil commotion damage which for the purpose of this endorsement shall mean (subject always to the Special Conditions hereinafter contained).

Loss of or damage to the property insured directly caused by:-

1. The act of any person taking part together with others in any disturbances of the public peace (whether in connection with a strike or lock-out) not being an occurrence mentioned in Condition 2 of the Special Conditions hereof.
2. The action of any lawfully constituted authority in suppression or attempting to suppress any such disturbance or in minimising the consequences of any such disturbances.
3. The wilful act of any striker or locked-out worker done in furtherance of a strike or in resistance to a lock-out.
4. The action of any lawfully constituted authority in preventing or attempting to prevent any such act or in minimising the consequences of any such act.

Provided that it is hereby further expressly agreed and declared that:-

APPENDIX L (continued)

1. All the terms, exclusions, provisions and conditions of the Policy shall apply in all respects to the insurance granted by this extension save in so far as the same are expressly varied by the following Special Conditions and any reference to loss or damage in the wording of the policy shall be deemed to include the perils hereby insured against.

2. The following Special Conditions shall apply only to the insurance granted by this extension and the wording of the policy shall apply in all respects to the insurance granted by the policy as if this endorsement had not been made thereon.

SPECIAL CONDITIONS

1. This insurance does not cover:-
 - a) Loss or damage resulting from total or partial cessation of work or the retarding or interruption or cessation of any process or operation;

 - b) Loss or damage occasioned by permanent or temporary dispossession resulting from confiscation, commandeering or requisition by any lawfully constituted authority;

 - c) Loss or damage occasioned by permanent or temporary dispossession of any building resulting from the unlawful occupation by any person of such building.

APPENDIX L (continued)

Provided nevertheless that the insurers are not relieved under b) or c) above of any liability to the insured in respect of physical damage to the property insured occurring before dispossession or during temporary dispossession.

2. This insurance does not cover any loss or damage occasioned by or through or in consequence, directly or indirectly, of any of the following occurrences, namely:-
- a) War, invasion, act of foreign enemy, hostilities or warlike operations (whether war be declared or not), civil war;
 - b) Mutiny, civil commotion assuming the proportion of or amounting to a popular rising, military rising, insurrection, rebellion, revolution, military or usurped power;
 - c) Any act of any person acting on behalf of or in connection with any organisation with activities directed towards the overthrow by force of the government de jure or de facto or to the influencing of it by terrorism or violence.

In any action, suit or other proceeding, where the insurers allege that by reason of the provisions of this condition any loss or damage is not covered by this insurance, the burden of proving that such loss or damage is covered shall be upon the insured.

APPENDIX L (continued)

3. This insurance may at any time be terminated by the insurers on notice to that effect being given by registered post to the insured's last known address, in which case the insurers shall be liable to repay a rateable proportion of the premium for the unexpired term from the date of cancellation.

APPENDIX L (continued)

Cover for Extra Charges for Overtime,
Night Work, Work on Public Holidays,
Express Freight

This insurance is extended to cover extra charges for overtime, night work, work on public holidays and express freight (excluding airfreight) for an amount not exceeding

Provided always that such extra charges are incurred in connection with any loss of or damage to the insured items recoverable under the policy.

APPENDIX L (continued)

Cover for Professional Fees Etc.

This insurance is extended to cover architects', surveyors' and other professional fees for an amount not exceeding

Provided always that such architects', surveyors' and other professional fees are incurred in connection with any loss of or damage to the insured items recoverable under the policy.

APPENDIX M

Questionnaire

The following is a schedule giving details of the scope of cover which could be provided under a construction all risks (CAR) policy. Each cover component of the schedule is weighted according to its importance as judged by a contractor, an employer, a loss adjuster and an insurer respectively, all operating in the Arab Gulf area. The average weight for each item is calculated and given hereunder. The sum of the weights is equal to 100 i.e. full protection. The basic cover is meant to be against unforeseen physical loss and/or damage on the site to the works and materials comprising the contract price. The basic cover does not automatically include any of the 14 supplements listed thereunder. The construction all risks (CAR) policy that provides the basic cover and the 14 supplements shown in the schedule is considered a policy providing adequate protection. Evaluation of adequacy of cover provided by a CAR policy can be found out by adding the weights opposite to each cover component provided by the policy. The nearer the sum to 100 the more adequate is the cover provided by the policy.

Please study carefully the schedule hereunder and mark your independent opinion of the level of usefulness of the schedule and its average weights when negotiating and checking a CAR policy.

- Helpful for all projects
- Helpful for most projects
- Helpful for some projects
- Of little or no value

Position:

Name of organization:

Signature:

Date:

APPENDIX M (continued)

SCHEDULE

<u>Cover Component</u>	<u>Weight</u>
Basic cover (as explained above)	37
1. Policy in joint names (Employer, Contractor and Sub-contractor)	3
2. Insurance of construction machinery during construction operation	11
3. Insurance of construction machinery during maintenance	2
4. Insurance of third party liability during construction and maintenance	9
5. Cross liability extension when the insured is more than one party	4
6. Aggregate third party limit of policy liability should exceed the single limit of liability	5
7. Insurance on full replacement value basis	5
8. Insurance of maintenance risks	5
9. Insurance of loss and/or damage due to consequences of faulty design	4
10. Insurance of materials etc. during inland transit to the site	5
11. Insurance against loss and/or damage due to strikes and riots	3
12. Clearance of debris extension	4
13. Extra charges for overtime, night work, express freight etc. extension	2
14. Professional fees extension	$\frac{1}{100}$

BIBLIOGRAPHY

Books and Thesis

- ABU ZAHRA, M. (undated). Possession and the Theory of Contract in Islamic Shari'a. (in Arabic). Egypt.
- AL-HAFNAWI, A.M.M. (undated). The Principles of Legislation in Saudi Arabia. (in Arabic). Saudi Arabia.
- AL-NAKEEB, A.K. (undated). Encyclopedia of Comparative Laws, Legislations and Orders. (in Arabic). Kuwait: M. Al-Nakeeb Est.
- AL-SANHURI, A.R. (1964) Insurance Contract. (in Arabic). Egypt: Dar Al Nahda, 7.
- AL-SANHURI, A.R. (1964). Sources of Obligations. (in Arabic) Egypt: Dar Al Nahda, 1.
- ATHEARN, James L. (1969). Risk and Insurance. USA: Prentice-Hall Inc.
- AZ-ZARQA, M. (1961). Al-Figh Al-Islami Fi Thawbihi Al-Jadid. (in Arabic). Damascus, 1(1).
- AZ-ZARQA, M. (1964). The Insurance System - Its Origins and the Shari'a View (in Arabic). Beirut: Al-Resala Inst.
- BANNISTER, J.E. and BAWCUTT, P.A. (1981). Practical Risk Management. London: Witherby and Co. Ltd.
- BAZ, S.R. (1923). The Majalla Annotated. 3rd ed. (in Arabic). Beirut: Al-Adabyia Press.
- BAZARIAN, Carl (1980). The Gulf State. New York: Chase World Information Corporation.
- BENJAMIN, B. (1977). General Insurance. London: Heinemann.
- BIRDS, John (1982). Modern Insurance Law. London: Sweet and Maxwell.
- BRYANT, E.C. (1966). Statistical Analysis. New York: McGraw Hill Book Co.
- BUGLASS, Leslie J. (1973). Marine Insurance and General Average in the United States. USA: Cornell Maritime Press Inc.
- CARTER, R.L. (1983). Reinsurance. UK: Kluwer Publishing in association with the Mercantile and General Reinsurance Co. plc.

Books and Thesis (contd.)

- CHISHOLM, R. and McCARTY, M. (1978). Principles of Economics. USA: Scott, Foresman and Co.
- CONSTRUCTION AND ERECTION INSURANCE. REPORT BY ADVANCED STUDY GROUP NO. 208A (1985). The Insurance Institute of London.
- DENENBERG, H.S., EILERS, R.D., MELONE J.J. and ZELTEN R.A. (1974). Risk and Insurance. USA: Prentice-Hall Inc.
- DINSDALE, W.A. (1963). Elements of Insurance. London: Pitman.
- EAGLESTONE, F.N. (1979). Insurance for the Construction Industry. London: George Godwin Limited.
- FARIS, Basim A. (1983). Insurance and Reinsurance in the Arab World. Great Britain: Kluwer Publishing.
- HAGART, George T.N. (1983). Conditions of Contract and Insurance. Great Britain: Witherby and Co. Ltd.
- HORRIGAN, W. (1969). Risk, Risk Management and Insurance. The Withdean papers No.1. U.K.: Withdean Publications Ltd.
- IVAMY, E.R. Hardy (1977). Casebook on Insurance Law. London: Butterworths.
- IVAMY, E.R. Hardy (1978). Fire and Motor Insurance. London: Butterworths.
- IVAMY, E.R. Hardy (1979). General Principles of Insurance Law. London: Butterworths.
- IVAMY, E.R. Hardy (1980). Personal Accident, Life and Other Insurances. London: Butterworths.
- JOHNSON, Elliot A. (1962). Toward Professional Insurance Management, in the "Growing Job of Risk Management". New York: American Management Association Inc.
- KASSIM, A.F. (1986). Legal Aspects of Doing Business in the Middle East - Kuwait. in D. Campbell: Netherland: Kluwer Law and Taxation Publishers, 5.
- KASSIM, A.F. The Kuwaiti Commercial Law: A comparative study. (unpublished thesis submitted to the University of Miami Law School, Florida, 1968 for Masters in Comparative Law).

Books and Thesis (contd.)

- KEETON, R.E. (1971). Basic Text on Insurance Law.
St. Paul, Minn., USA: West Publishing Co.
- LAMBERT, J.D. and WHITE, L. (1982). Handbook of Modern Construction Law. USA: Prentice-Hall Inc.
- LIEBESNY, H.J. (1955). The Development of Western Judicial Privileges, in "Law in the Middle East" edited by Khadduri, M. and Liebesny, H.J., Washington D.C.: The Middle East Institute.
- MADGE, Peter (1968). Professional Indemnity Insurance.
London: Butterworths.
- MAHMASANI, S. (1955). Transactions in the Shari'a, in "Law in the Middle East" edited by Khadduri, M. and Liebesny, H.J., Washington D.C.: The Middle East Institute.
- MARDIN, E.U. (1955). Development of the Sharia under the Ottoman Empire, in "Law in the Middle East" edited by Khadduri M. and Liebesny H.J., Washington D.C.: The Middle East Institute.
- MARSH, P.D.V. (1981). Contracting for engineering and Construction projects. Great Britain: Gower.
- MAYDANI, R. (1955). Uqubat: Penal Law, in "Law in the Middle East" edited by Khadduri M. and Liebesny H.J. Washington D.C.: The Middle East Institute.
- MEHR, Robert J. and CAMMACK, Emerson (1972). Principles of Insurance. USA: Richard D. Irwin Inc.
- MOOR, P.G. (1974). Principles of Statistical Techniques.
London: Cambridge University Press.
- MOWBRAY, A.H., BLANCHARD R.H. and WILLIAMS, C.A. jr.
(1969). Insurance. USA: McGraw-Hill Inc.
- NOTES ON DOCUMENTS FOR CIVIL ENGINEERING CONTRACTS (1977).
The Hague, Netherlands: Federation Internationale des Ingénieurs - Conseils.
- ONAR, S.S. (1955). The Majalla in "Law in the Middle East" edited by Khadduri M. and Liebesny H.J. Washington D.C.: The Middle East Institute.

Books and Thesis (contd.)

- PARKINSON, J.R. (1976). Role of the Risk Manager in Commerce and Industry. Keith and Shipton Development Ltd.
- PATTERSON, Edwin W. (1957). Essentials of Insurance Law USA: McGraw-Hill Book Company Inc.
- QOWATLY, A. (1960). Introduction to the Civil Law. (in Arabic). Damascus University.
- RIEGEL, R., MILLER, J.S. and WILLIAMS, C.A. jr. (1976). Insurance Principles and Practices, Property and Liability. USA: Prentice-Hall Inc.
- RODDA, William H. (1966). Property and Liability Insurance. USA: Prentice-Hall Inc.
- RODDA, William H. (1970). Marine Insurance: Ocean and Inland. USA: Prentice-Hall Inc.
- ROSEN, Harold J. (1974). Construction Specification Writing Principles and Procedures. New York: John Wiley and Sons Inc.
- SAMUELSON, Paul A. (1980). Economics. USA: McGraw-Hill Inc.
- SCHACHT, J. (1955). Pre-Islamic Background and Early Development of Jurisprudence, in "Law in the Middle East" edited by Khadduri, M. and Liebesny, H.J., Washington D.C.: The Middle East Institute.
- SCHACHT, J. (1955). The Schools of Law and Later Developments of Jurisprudence, in "Law in the Middle East" edited by Khadduri, M. and Liebesny, H.J. Washington D.C.: The Middle East Institute.
- SCHACHT, J. (1964). An Introduction to Islamic Law. Oxford: Clarendon Press.
- STOKES, McNeill (1977). Construction Law in Contractors' Language. USA: McGraw-Hill Inc.
- STUDY COURSE 313. Management II: Risk Management (1981). London: C.I.I.
- TAYLOR, I.M. (1968). The Law of Insurance. New York: Oceana Publications Inc.
- UFF, John (1981). Construction Law. London: Sweet and Maxwell

Books and Thesis (contd.)

- VAUGHAN, E.J. (1982). Fundamentals of Risk and Insurance. New York: John Wiley and Sons.
- VESEY-FITZGERALD, S.G. (1955). Nature and Sources of the Shari'a in "Law in the Middle East" edited by Khadduri M. and Liebesny H.J. Washington D.C.: The Middle East Institute.
- VOLPE, S. Teter (1972). Construction Management Practice. USA: Wiley - Interscience.
- WALLACE, I.N. Duncan (1969). Building and Civil Engineering Standard Forms "A commentary on the four principal R.I.B.A. Forms of contract, the F.A.S.S. form of Sub-contract, the R.I.B.A. fixed fee contract and the I.C.E. contract". London: Sweet and Maxwell.
- WALLACE, I.N. Duncan. Building and Civil Engineering Standard forms. 1st supplement 1970. 2nd supplement 1973.
- WALLACE, I.N. Duncan (1973). Further Building and Engineering Standard Forms. London: Sweet and Maxwell.
- WALLACE, I.N. Duncan (1974). The International Civil Engineering Contract "A commentary on the F.I.D.I.C. International Standard form of civil engineering and Building Contract". London: Sweet and Maxwell.
- WASS, Alonzo (1972). Construction Management and Contracting. New Jersey, USA: Prentice-Hall, Inc.
- WILLIAMS, C. Arthur jr. and HEINS, Richard M. (1971). Risk Management and Insurance. USA: McGraw-Hill Inc.
- WINTER, William D. (1952). Marine Insurance, Its Principles and Practice. USA: McGraw-Hill Book Co.
- ZAHLAN, A.B. (1984). The Arab Construction Industry. Beckenham, Kent: Croom Hilm Ltd.

BIBLIOGRAPHY

Periodicals, Conferences and Seminars

- ABDUL MUNIM, Al-Nimr (1982). New Approach to Insurance Contract. (in Arabic). Egypt: Al-Ahram 15th Nov. 1982.
- ABDUL MUNIM, Al-Nimr (1982). New Outlook for Insurance Companies. (in Arabic). Egypt: Al-Ahram 24th Nov. 1982.
- ACRA, Victor M. (1978). Clearance of Debris Insurances. The Review.
- AL-ATTAR, Abdul Naser (1983). In Search of a New Insurance Order. (in Arabic). Egypt: Al-Ahram 3rd Jan. 1983.
- AL-TAMIMI, A.M.K. (1981). The Arabic Gulf: A Study in the Economic and Social History. "The Journal of Social Science". (in Arabic). Kuwait: Kuwait University.
- ALTHERBAN, I. (1982). Management of Kuwait Stock of Exchange. (in Arabic). Kuwait.
- ANNUAL INSURANCE STATISTICS (1978-1985). Kuwait: Ministry of Commerce and Industry.
- ANNUAL INSURANCE STATISTICS (1978-1985). UAE: Ministry of Planning.
- ANNUAL STATISTICAL ABSTRACTS (1975-1987). Kuwait: Ministry of Planning.
- ARAB BANKING AND FINANCE (June 1983). London: MEED Group, 2(4).
- BADR, G.M. (1956). The New Egyptian Civil Code and the Unification of the Laws of the Arab Countries. Tulane Law Rev., 30.
- BAZARIAN, Carl. Economic Developments, Kuwait, UAE, Bahrain and Qatar. USA: AEI Foreign Policy and Defence Review, 2(2)(4).
- BEDFORD, Peter (1978). Competition for Brokers in Middle East Construction Insurance. The Review.
- BUILDERS RISK INSURANCE. International Risk Management Institute Inc. USA: Construction Risk Management. August 1984.
- CAKE, S. (1987). Settlement of Commercial Disputes in the Sultanate. Middle East Executive Report.

Periodicals, Conferences and Seminars (contd.)

- CENTRAL BANKS AND MONETARY AGENCIES OF ARAB GULF STATES (1981 and 1983). Economic Bulletin. (in Arabic).
Kuwait: Central Bank of Kuwait, 2, 4.
- CHECKLISTS OF CRITERIA (February 1982). The Review.
- CLARKSON, H. & CO. (1985). London.
- CONARD, K. Member of Board of Management, Munich Reinsurance Co. The Significance of the Sum Insured in the Insurance of Construction Projects Abroad.
- CONSIDERATION OF THE ARAB MARKETS (April 1983). Reinsurance.
- CONSTRUCTIVE GROWTH (December 1982). Re Actions.
- DABDAB, N.J. and MOHYUDDIN, B.I. (1983). Oil based and Non-Oil based Industrial Development in the Arab Gulf Region.
London: The Arab Gulf Journal, 3.
- DEPREZ, T.J. (1980). Co-ordinating the Cover. A paper presented at a conference on "Insurance and Construction Contracts". London: Company Communications Centre.
- DIGEST, THE GULF CO-OPERATION COUNCIL (1981). (in Arabic).
Kuwait: Kuwait News Agency. 9th edition.
- DOUGLAS, B.J. (3rd June 1977). Insurance and the Contractor. The U.K.: The Review.
- DUNN, M.G. (29th June 1978). EAR AND CAR: Market Peculiarities. The U.K.: The Post Magazine and Insurance Monitor.
- ECONOMIC ENCYCLOPEDIA (1982). Kuwait: The Arab Information Centre.
- ECONOMIC REPORTS (1969-1984). Kuwait: Central Bank of Kuwait.
- EXPERIODICA, ECONOMIC STUDIES (June 1983). Zurich, Switzerland: Swiss Reinsurance Co., 6.
- FARAJ, Abdul Munim (6th Dec. 1982). The Legal Regulation of the Insurance Contract. (in Arabic). Egypt: Al-Ahram.
- GNICHTEL, W.V.O. (1986). The Arab States Gulf Cooperation Council - Unified Rules for Trade and Industry. The International Lawyer, 20(1).

Periodicals, Conferences and Seminars (contd.)

- GUECIOUER, Adda (1982). Problems and Prospects of Economic Integration among the Member Countries of the Arab Gulf Co-Operation Council. London: The Arab Gulf Journal, 2(2).
- GULF CO-OPERATION COUNCIL IN FIGURES (1987). Kuwait: The National Bank of Kuwait.
- HAYES, R.W. (1985). Management of Risk in Engineering: Risk Allocation through Contractual Approaches. The Geneva Papers on Risk and Insurance.
- HENDERSON, Edward (1981). Development in the Arab Gulf. London: The Arab Gulf Journal, 1.
- HILL, T.W. (1983). The Commercial Legal System of the Sultanate of Oman. The International Lawyer.
- INDEMNITY AND INSURANCE ASPECTS OF CONSTRUCTION AND ENGINEERING CONTRACTS (1982). Proceedings of Conference. London: Grosvenor Conferences.
- INSURANCE AND CONSTRUCTION CONTRACTS (October 1980). Proceedings of Conference. London: Company Communications Centre.
- INSURANCE FOR CONSTRUCTION AND ENGINEERING CONTRACTS (June 1981). Proceedings of Conference. England: Gower.
- INSURANCE SEMINAR ON AVIATION AND ENGINEERING (September 1985). Held under the auspices of the Federation of Afro-Asian Insurers and Reinsurers. Proceedings of Seminar.
- INTERNATIONAL MONETARY FUND. DOCUMENT SM/81/134 (11th June 1981). Saudi Arabia.
- ISAACS, John (1981). Transit and Marine Risks - Current Trends. A paper presented at a conference on "Insurance for Construction and Engineering Contracts". England: Gower.
- JWAIDEH, Z.E. (1953). The New Civil Code of Iraq. George Washington Law Rev., 22.
- KHADDURI, M. (1953). Nature and Sources of Islamic Law. Law Review. USA: George Washington University, 22.
- KUWAIT - RECENT ECONOMIC DEVELOPMENT. DOCUMENT SM/82/25. (1982). International Monetary Fund.

Periodicals, Conferences and Seminars (contd.)

- LIEBESNY, H.J. (1953). Religious Law and Westernization in the Near East. Am. Comparative Law Journal, 2.
- MADGE, Peter (1974). Liability Insurances for Contractors. Journal of the Chartered Insurance Institute.
- MADGE, Peter (1982). The Conditions of Contract: Who is responsible for what? A paper presented at a conference on "Indemnity and Insurance Aspects of Construction and Engineering Contracts". London: Grosvenor Conferences.
- MARSHALL, Ernest (1981). Focus on the CAR Contract. London: The Review.
- MOHYUDDIN, B.I. (1984). Policy Structure for Promoting Manufacturing Industry: A Framework for the States of the Arabian Peninsula. London: The Arab Gulf Journal, 4.
- MOORE, A.E. (1982). Offshore Banking Units. London: The Arab Gulf Journal, 2(1).
- NAWFAL, S. (1981). Insurance and the Islamic Alternative. (in Arabic). Egypt: Journal of Islamic Banks, 18.
- O'CONNEL, Jeffrey (Feb. 1980). No-Fault of Political Practicalities. USA: The Insurance Law Journal.
- OFFICIAL GAZETTE OF KUWAIT Nos. 1340, 1367 and 1443.
- OIL REFINING POISED FOR DRAMATIC GROWTH (July 1983). MEED Special Report on Saudi Arabia. London: MEED.
- OPEC Annual Statistical Bulletin (1985). Vienna: The Secretariat of OPEC.
- O'SULLIVAN, Edmund (10th March 1982). The Policies that are still hardest to sell. London: Times.
- POLICIES FOR BUILDERS (1980). Insurance Mail.
- POOL, Thomas F. (17th May 1973). Taking Possession and the Liability to Insure. U.K.: New Law Journal.
- PROCEEDINGS OF THE CONFERENCE ON THE UNIFICATION OF THE G.C.C. LAWS, Held at Kuwait University. December 1987.
- SAUDI ARABIA - RECENT ECONOMIC DEVELOPMENT. DOCUMENT SM/81/134 (1981). International Monetary Fund.
- SCOTT, David W. (May 1981). Unravelling "the Exception within an Exception" Clause in a Builders' All Risks Policy. USA: Risk Management.

Periodicals, Conferences and Seminars (contd.)

- SHARAF ED-DIN, A. (1983). Moslim Shari'a as a Source of the New Civil Code of Kuwait. Kuwait: The Legal Advice and Legislation Dept. Magazine, 3.
- SPOLIANSKY, L.G.R. (1979). Modern Business Law in the Sultanate of Oman. The International Lawyer.
- STOURNARS, Y.A. (1985). Is the Industrialisation of the Arab Gulf a Rational Policy? London: The Arab Gulf Journal, 5.
- SWEIS, R.K. (1985). Towards Promoting Sufficient Adequacy in Construction Insurance Covers. A paper presented at F.A.I.R. Insurance Seminar on Aviation and Engineering.
- THE PROBLEMS OF DESIGN AND CONSTRUCT POLICIES (1985). The Post Magazine and Insurance Monitor.
- UNIFIED ARAB ECONOMIC REPORTS (1981, 1984 and 1987). Arab League, Arab Monetary Fund, Arab Fund for Social and Economic Development (in Arabic).
- UNITED NATIONS STATISTICAL ABSTRACT OF THE REGION OF THE ECONOMIC COMMISSION FOR WESTERN ASIA (1968-1977). Third issue, (1974-1983) eighth issue and (1977-1985) tenth issue.
- WHAT CONSTITUTES THE CONTRACT WORKS (1981). The Post Magazine and Insurance Monitor.
- WILSON, R.J.A. (1984). The Role of Islamic Banks in Financial Markets. London: The Arab Gulf Journal, 4.
- WILSON, R.J.A. (1985). The Impact of Falling Oil Revenue on Saudi Arabia's Import Policy. London: The Arab Gulf Journal, 5.
- WORLD DEVELOPMENT REPORTS (1980/82/83/84/85/86). The World Bank.

BIBLIOGRAPHY

Forms of Contract Conditions

BOOK OF TENDER. DOCUMENT II GENERAL CONDITIONS.

DOCUMENT 11-1 (May 1985 edition). Legal Clauses and Conditions (1971). Kuwait: Ministry of Public Works.

CONDITIONS OF CONTRACT AND FORMS OF TENDER, AGREEMENT AND BOND FOR USE IN CONNECTION WITH WORKS OF CIVIL

ENGINEERING CONSTRUCTION (June 1973). Fifth edition (Revised January 1979). Westminster, U.K.: The Institute of Civil Engineers.

CONDITIONS OF CONTRACT (INTERNATIONAL) FOR WORKS OF CIVIL ENGINEERING CONSTRUCTION, WITH FORMS OF TENDER AND

AGREEMENT (March 1977). The Hague, The Netherlands: Fédération Internationale Des Ingénieurs - Conseils.

CONDITIONS OF CONTRACT (INTERNATIONAL) FOR WORKS OF CIVIL ENGINEERING CONSTRUCTION, WITH FORMS OF TENDER AND

AGREEMENT (July 1969). Reprinted 1973. The Hague, The Netherlands: Fédération Internationale Des Ingénieurs - Conseils.

CONDITIONS OF CONTRACT (June 1978). Saudi Arabia: Consult.

CONDITIONS OF CONTRACT (Undated). Qatar: Ministry of Public Works, Engineering Services Dept.

EXECUTIVE COUNCIL RESOLUTION NO.(23) (1981). Re: General Conditions for Civil Works Contracts. Abu Dhabi: UAE Press Service.

GENERAL CONDITIONS OF CONTRACT CONDITIONS OF ADJUDICATION

AND INSTRUCTIONS TO TENDERERS PARTICIPATING IN THE MINISTRY OF ELECTRICITY AND WATER TENDERS CALLING FOR CIVIL WORKS (Undated. Kuwait: Central Tenders Committee.

GENERAL CONDITIONS OF CONTRACT CONDITIONS OF ADJUDICATION

AND INSTRUCTIONS TO TENDERERS PARTICIPATING IN THE MINISTRY OF ELECTRICITY AND WATER TENDERS CALLING FOR SUPPLY AND INSTALLATION (1981). Kuwait: Central Tenders Committee.

Forms of Contract Conditions (contd.)

GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION (AIA DOCUMENT A201 (1976 Edition). USA: The American Institute of Architects.

GENERAL CONDITIONS OF CONTRACT ISSUED BY THE MINISTRY OF PUBLIC WORKS AND DEPT. OF PUBLIC WORKS (Undated). Abu-Dhabi: UAE, UAE Press Service Daily Newsletter.

GENERAL CONDITIONS OF CONTRACT ISSUED BY THE WATER AND ELECTRICITY DEPT. (Undated). Abu-Dhabi: UAE.

LUMP SUM CONTRACT, AGREEMENT AND CONDITIONS OF BUILDING CONTRACT (January 1971). Australia: The Royal Australian Institute of Architects.

MODEL FORM OF CONDITIONS OF CONTRACT FOR PROCESS PLANTS (Revised April 1981). Rugby, U.K.: The Institution of Chemical Engineers.

MODEL FORM OF GENERAL CONDITIONS OF CONTRACT, INCLUDING FORMS OF AGREEMENT AND GUARANTEE, FOR USE IN CONNECTION WITH EXPORT CONTRACTS (INCLUDING DELIVERY TO AND ERECTION ON SITE) (1971). Second edition. U.K.: The Institution of Electrical Engineers.

STANDARD DOCUMENTS FOR BUILDING AND CIVIL ENGINEERING WORKS (July 1981). Third edition. Oman.

BIBLIOGRAPHY

Laws, Regulations and Decrees

- ACT NO.4 CONCERNING TENDERS AUCTIONS AND STORES (1977).
Abu-Dhabi Emirate.
- CIVIL CODE (1980). Kuwait.
- CIVIL CONTRAVENTION ACT (1970). Bahrain.
- COMMERCIAL COMPANIES LAW NO.15 (1960). Kuwait.
- COMMERCIAL COMPANIES LAW (1974). Oman.
- CONSTITUTION OF KUWAIT (1962). Kuwait.
- CONTRACTS LAW (1969). Bahrain.
- CONTRACTS LAW (1971). Dubai.
- DECREE REGULATING BUILDING WORKS (1979). Kuwait.
- DECREE NO.30 REGULATING BUILDING WORKS (1985). Kuwait.
- EGYPTIAN CIVIL CODE (1949). Egypt.
- FEDERAL LAW NO.9 (1984). Concerning Insurance Companies and Agents. UAE.
- FEDERAL MARITIME LAW NO.26 (1981). UAE.
- LABOUR LAW NO.38 AMENDED BY DECREE NO.66 (1964 and 1983).
Kuwait.
- LABOUR LAW ORDINANCE. Saudi Arabia.
- LAW OF EVIDENCE CONCERNING CIVIL AND COMMERCIAL ARTICLES.
Kuwait.
- LAW OF MOTOR VEHICLES COMPULSORY LIABILITY INSURANCE. Oman.
- LAW NO.1 (1966). Concerning Supervision of Insurance Companies. Qatar.
- LAW NO.3 (1978). Motor Third Party Obligatory Insurance.
Bahrain.
- LAW NO.16 (1971). Concerning Civil and Commercial Matters.
Qatar.
- LAW NO.24 (1961). Kuwait.
- LAW NO.30 (1984). Concerning Supervision of Insurance Companies. Jordan.
- LAW NO.67 AND DECREE NO.18 (1976). Concerning Motor Traffic. Kuwait.
- LAWS OF COMMERCIAL ACTS. Oman.
- LEGISLATIVE DECREE NO.3 (1987). Motor Traffic Liability Obligatory Insurance. Bahrain.

Laws, Regulations and Decrees (contd.)

LEGISLATIVE DECREE NO.17 (1987). Concerning Insurance
Companies. Bahrain.

MOTOR TRAFFIC LAW (1968). UAE.

MOTOR VEHICLES (THIRD PARTY INSURANCE) REGULATION (1957).
Bahrain.

THE MAJALLA.

TRAFFIC ORDINANCE. Saudi Arabia.