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1

On Professional Indemnity

De la responsabilité professionnelle

Über die berufliche Verantwortung

prepared by Working Commission IV of IABSE «Construction Management» and some National Groups of IABSE

coordinated by David W. QUINION Chairman WC IV Tarmac Construction Wolverhampton, UK

SUMMARY

This booklet provides the opinions and observations of a number of organisations and individuals on Professional Liability. These have been obtained in response to a series of questions regarding the responsibilities of Engineers in different countries for the technical advice they provide, the designs and specifications they issue, and for the construction work they undertake. The responses indicate a wide range of concerns and much variation in the cost implications of being found negligent. These responses have been generally in line with the opinions of members of the IABSE Technical Committee who requested the enquiry.

RÉSUMÉ

Cette brochure présente les opinions et observations d'un certain nombre d'organisations et de personnes sur la responsabilité professionnelle. Elles résultent d'une série de questions sur la responsabilité des ingénieurs, dans divers pays, pour leurs prestations techniques, leurs projets et leurs exigences, ainsi que pour les ouvrages qu'ils réalisent. Les réponses présentent un large spectre de considérations et une grande variation dans les conséquences financières résultant de négligences. Ces réponses concordent assez bien avec les opinions des membres du Comité Technique qui ont proposé cette recherche.

ZUSAMMENFASSUNG

Das vorliegende Heft enthält Standpunkte und Beobachtungen mehrerer Organisationen und Personen zur beruflichen Verantwortung. Sie wurden als Antwort auf eine Reihe von Fragen betreffend Verantwortung von Ingenieuren für technische Dienstleistungen, Projekte, Spezifikationen und die Bauausführung in verschiedenen Ländern verfasst. Die Antworten spiegeln eine Fülle von Besorgnissen und grosse Unterschiede in den Kostenfolgen für allfällige Nachlässigkeit. Die Antworten stimmen im wesentlichen mit der Meinung der Mitglieder der Technischen Kommission überein, die diese Untersuchung angeregt hat.



The Technical Committee of IABSE has discussed the liability aspects of the work of Professional Engineers in different parts of the world. It was evident from the discussion that, whereas the extent and consequences of professional liability varies considerably between different countries, there is increasing concern that these liabilities are increasing and that insurance cover to provide professional indemnity is becoming more difficult to obtain as well as expensive.

The Technical Committee requested Working Commission IV to examine this concern and obtain the opinions of its members and the National Groups. It proposed that these opinions and statements should be produced in the format of a Multi-Opinion Booklet to acquaint members of many different national situations and to provide an overview from which future actions might be determined.

To encourage responses from the National Groups and individuals a note was circulated outlining many of the issues. This note asked such questions as:

- What use is made of professional indemnity insurance and are there problems in obtaining it?
- Is there an increase in claims against Professional Engineers and how are these resolved?
- For how long are Professional Engineers held liable for the designs, constructions or advice they have provided?
- Is there joint and several liability among defendants including Professional Engineers?
- Are there limits to the values of damages for which the Professional Engineers can be held liable?

Opinions were obtained from eleven countries and these follow. The opinions usually comprise the observations of several members provided by a contributor and sometimes are Information Sheets on the national situation. They are Opinions and are not Statements of strict professional or legal requirements.

Commentary

There is agreement that engineers are and should be held responsible for the damages which are a direct consequence of their mistakes or professional negligence. The extent of responsibility for consequential losses arising due to a damage is in some countries restricted by reference to the value of the professional services provided or in relation to the value of the project, whereas in other countries there is no such limitation. The response of the Indian Group provides such limitations and it is believed to be applied in a few other countries. In general, there appear to be no limits to the consequential losses which are incurred as a consequence of liability for a damage. Hence a minor professional service can occasionally result in a responsibility being established many years later for major damages.

In some instances, insurance cover for a project is provided by a client who has the incentive to set the sum assured at a reasonable level in relation to the annual premium and can decide for what period the insurance cover is required. The insurer will then usually decide the extent and nature of checking he lequires and the assurances to be provided by those involved in the design and the construction.

In general a client will require that insurance or performance bonding is provided by his design consultants and contractors until the construction and agreed maintenance periods have been completed. Thenafter it is the decision of those designers and contractors as to the value and timing of the insurance cover they require. Such insurance cover is renewable annually and only the terms of the current renewal apply in the event of a claim. Since the costs of remedial works will almost inevitably increase in later years the values of insurance claims increase with time and probably the annual premiums to provide insurance cover.

In some circumstances the cost of effective insurance cover can be so high that it can influence the provision of professional services to the point of restricting these or the use of completed projects. Such aspects can be restricting on the innovative efforts of Professional Engineers unless clients work closely with their engineers and accept a fair share of responsibility for the decisions taken which will usually be intended for the client's benefit.

The Opinions expressed in this booklet are provided to members to show the variations in practices and responsibilities between different countries. The variations often reflect the relationships between client bodies and Professional Engineers. The membership can decide what conclusions to draw in their individual circumstances and collectively whether action needs to be taken and, if so, the role of IABSE.

D. W. QUINION Chairman Working Commission IV

INDEX

Summary

Introduction and Commentary

Comments from the: Australian Group

Austrian Group Federal Republic of Germany Group German Democratic Republic Group Indian Group Japanese Group South African Group Swedish Group Swiss Group

Information Note for members of "The Institution of Civil Engineers

Commentary from "The Structural Engineer"

References to British Group's Colloquium on "Liability" in 1985

COMMENTS FROM THE AUSTRALIAN GROUP

BY JONATHAN O'BRIEN

There is considerable concern in Australia regarding professional liability and working committees have been established to study this problem area. The concern is reflected in the following papers on Legal Liability and Professional Indemnity:

a) Extract from The Institution of Engineers, Australia, Annual Report for 1986

In July Council resolved to establish a Standing Committee on Legal Liability and Professional Indemnity. It consists of representatives from the Institution, the Association of Consulting Engineers, Australia, the Association of Professional Engineers, Australia, and the Australian Council of Local Government Engineering Associations under the chairmanship of Dr. P. O. Miller.

Areas have been identified where action must be taken if the practice of professional engineering is not to be severely inhabited by the increasing "liability" problem.

The Committee has identified three broad issues in relation to liability:

- The perceptions which the engineering profession has of itself, and the effect on these on the way the community views the profession and on the expectations it has of the performance of the profession.
- The expectations which the community, including the engineering profession, has of the ability of the fundamental systems of society to deliver in particular the expectations of systems of compensation and insurance (including professional indemnity insurance) to deliver.
- The processes of the law in disputes over liability, particularly in relation to expert evidence, to the interpretation of language by the courts, and to the unfair responsibilities which have been placed upon certain parties because they appear to have the best capacity to pay.

Initial action included the publication of a series of articles in Engineers Australia, action to secure the amendment of liability legislation, joint action of professional indemnity matters with the Australian Council of Professions and action to facilitate and make more effective the evaluation of technical evidence before courts of law.

b) Article by D. Sprigge in the Journal of The Institution of Engineers, Australia dated June 1987

The IeAust's Standing Committee on Legal Liability and Professional Indemnity believes that communication with the membership at large about their vulnerability to actions in tort is paramount.

The following paper outlines the many issues which are having a dramatic effect on communities and engineering practice both in Australia and overseas. It was written for and presented at the recent meeting of federal, state and territory ministers with responsibilities in the construction industry. The ministers acknowledged the problem and agreed to support endeavours to remedy the situation.



The increase in the number of claims against design professionals, builders and specialist contractors and in the cost of insurance is but a reflection of the increasing litigiousness of our western societies, fuelled by an increase in the education base, increased expectations and marked shifts in risk acceptance. However, it is not only the design professionals and builders who suffer.

The owners, developers and the whole community must eventually bear the increased costs of the services through increases in total life-cycle costs, through inhibitions on innovation and through inhibitions on entry to the industry of the talented.

The liability insurance market is global and heavily influenced by the North American experience which has seen towns literally close down and cease providing essential services such as water, sewerage, police and firefighting through inability to obtain insurance cover.

In the US the legal system is bedevilled by a number of factors:

- contingency fees
- punitive damages
- extended liability periods joint and several liability
- discounting of collateral benefits
- tame expert witnesses -
- jury system

While not all these factors are present in Australia, the shock waves in the insurance industry caused by the liability explosion have been felt world-wide. Reinsurers stopped reinsuring in the US and half the PI underwriters pulled out Local authorities could not obtain insurance and ceased of the market. operations. Doctors refuse to perform certain operations and perform expensive and otherwise unnecessary, defensive medicine.

Nearly 20% of US consulting engineering firms have gone bare. They carry no PI cover and the principals have divested themselves of their assets. Genuine claims will not be met. Innovation is stifled, overdesign becomes a necessary precaution and professional ethical development is endangered.

In Britain, architects' PI premiums have reached 10% of the fee income and limited cover is available. Australia has not yet felt the full impact of the American desease but the signs are here:

- North Sydney Council closed three tidal pools because its public liability insurance tripled to \$220,000.
- Again in North Sydney, school holiday outings have been cancelled because the Council cannot afford the extra supervision required for insurance cover, and playground equipment has been removed on insurance company advice.
- Concord Council, also in Sydney, was offered a strip of parkland by the Water Board for 10c but, because it required \$10,000 for insurance cover, refused the offer.
- \$2.2 million awarded to a Sydney schoolboy for injuries received during a game of rugby at school has caused the Education Department and private schools to rethink their whole policy to organised sport.

6

- The professional indemnity underwriter for one of Australia's leading PI insurance companies advised a Building Science Forum seminar on April 29, that PI premiums for consulting engineers, which currently average 1.5% of gross annual fee income, would increase to 4.0% for companies with no claims record and 6% to 15% with a claims record. There would also be limits on the level of cover available.
- The same underwriter also advised that of the total cost of claims settled 42% is represented by legal costs.
- The difficulty of establishing the causes of damage on construction projects and the predilection to join those with insurance cover encourages multi-defendant proceedings. Witness the recent case in Sydney where a worker on a construction site was hit by a ladder on leaving a lift. There are now 19 parties joined in the action.
- In the US half the cost of an aluminium ladder is accounted for by product liability insurance and the incidence in whooping cough has increased 8-fold following the tripling in cost of the vaccine as a result of heavy claims in respect of illness alleged to have been suffered by children allergic to the vaccine (some 16 out of 2 million recipients).
- The US and Britain have already commenced action to reduce the crippling impact of rising public and product liability, of souring professional indemnity insurance costs and of the decreasing availability of this insurance.
- Australian exporters are finding it expensive if not impossible to obtain product liability insurance for goods being exported to the US.
- Some specialist contractors are refusing to service equipment installed in buildings because of client demands for unlimited public liability to be provided.

It is therefore proposed that there should be an examination of the law and legal procedure in the following areas:

Several concurrent tortfeasors. An example would be an architect, structural engineer, builder and subcontractor who are engaged independently by an owner and are alleged each to have contributed to a specific defect in a structure. Currently, if the architect, engineer and subcontractor were each found to be 10% liable and the builder, who has gone into liquidation, 70% liable, the architect, engineer and subcontractor be required to find 33% of the damages awarded.

Hence, the scattergun is aimed at deep pockets. If the law enabled a party to recover from another party only the amount for which the second party was actually responsible, many cases would not be commenced and the current pressure on innocent parties to settle would be reduced.

Limitation on period of liability. Currently, and even allowing for the impact of the Pirelli case in Britain, the period of design consultants' or contractors' liability is almost limitless in tort. It should be restricted to a period, say 6 years, from the date of the completion of their services, or the project.

Limitation on amount of liability. There is a vast imbalance between the risk assumed and the fees received. For example, on a \$10 million building a structural engineer will receive a once-off post tax margin of \$7500 and incur



an almost endless liability for the \$10 million building which is increasing continuously in value.

Similarly, specialist contractors maintaining an air-conditioning system for fees of \$1000 carry the potential risk for the whole building.

Consideration should be given to introducing a maximum amount of liability corresponding to the fees earned. A possible solution might be to introduce a 2-tier maximum e.g. \$300,000 (to cover most domestic situations) or a multiple of fees whichever were greater.

Determination of technical issues outside the traditional court systems. When technical matters are considered in court by technically unqualified lawyers and judges, the length of a case increases significantly. There should be more facilities for pre-trial exchange of technical reports and opinions and indeed provision for technical disputes to be heard by a technical panel.

Interpretation of building and construction language according to building and construction practice. While the courts wrestle with the meaning of words in building and construction documents and apply normal canons of interpretation, justice will be haphazard. Every standard and building regulation should be prefaced by a statement that the documents are prepared by and intended to be used by practitioners in the building and construction industry and should be interpreted accordingly.

Expert Witnesses. Expert witnesses must be educated in their proper role. They are not there to win a case for their client's team. They are there as objective witnesses to find the truth. They may have different opinions but they must not be biased.

Contingent fees must be resisted in Australia. In the US tort lawyers are briefed for cases on the basis that they will share in the damages awarded to their client if they win and charge nothing if they lose. Their charge could be up to 50% of the damages. Juries will often increase the damages to ensure that the plaintiff will obtain the net amount he should have received. Contingent fees should not be permitted in Australia.

While industry and the design profession are seeking assistance from the legislatures it is also encumbent on them to attempt to minimise claims through loss prevention and risk management education. In conjunction with the insurance industry they should also be examining alternative methods of insurance cover, particularly with a view to reducing the multiparty claims.

Contracts need to be reassessed to ensure that the risks associated with each contract are commensurate with the contract sum and that clients/contractors/ professionals are not providing multiple insurance cover for the one risk.

In the end the clients or public will pay the costs of the increasing risk exposure of industry. Whether this is via increasing costs of insurance or having to bear uninsured or uninsurable risks is immaterial.

c) Commentary by Dr. Peter Miller in the same June Journal

At midnight on September 11, 1985 the small US town of Sykesville, Maryland went out of business.

At 12 o'clock the town's liability insurance had expired and Sykesville had been unable to find any replacement policy. Both the elected and appointed town officials resigned their positions and terminated all services to the town's 2200 citizens.

Their stated reason was the fear that they might be held individually liable for claims arising from the activities or services rendered by the town. These range from street repair and water supply to the enforcement of police laws and traffic control - in short, all those day-to-day functions which we citizens routinely expect and hardly think about.

The Sykesville case is not unique or even special any longer. The loss of liability insurance because it is no longer available, or because the premiums are out of reach, has now extended to all elements of society in the US.

Child care centres are closing, school boards are closing down schools because of asbestos installed many years ago, obstretricians and midwives are leaving the field, and hospitals increasingly raise patient charges to cover ever-increasing premiums.

Of course it couldn't happen here, or could it?

Last December the Sydney Northern Herald newspaper reported that the North Sydney Council could not find an insurer willing to cover the risks associated with three tidal pools in the municipality. The Council threatened to close the pools by the end of 1986 if no insurer could be found by then.

The pools at Neutral Bay, Waverton and McMahon's Point have now been closed and other councils are starting to follow suit.

The liability crisis as it has come to be called is real and has struck the democratic societies with such force that it must be tackled head on. This column will be looking at the impacts it has made on our profession and what is likely to emerge in future.

COMMENTS BY THE AUSTRIAN GROUP

BY PROFESSOR W. J. OBERNDORFER

1. Legal Boundary Conditions for Consulting Engineers

There exist two possibilities for practicing as a consulting engineer:

First way is to hold a licence of the Chamber of Consulting Engineers. In order to obtain such a certificate the engineer must meet some requirements:

- Austrian citizen
- Diploma in engineering at an Austrian Technical University
- 5 years practice and passing of an examination.

Being a practicing member of the Chamber of Consulting Engineers gives the engineer competitive advantages:

- His professional products (calculations, plans, expertises, certificates) have the same weight (are on the same level) as official documents by an authority.
- He does not need to compete with other engineers on the basis of prices because his fee is set according to an official (state-approved) scheme
- The value added tax is 10%

But there exist also some disadvantages:

- He is personally liable with his whole assets and cannot limit his liability.
- He can form partnerships only in such a way that the work to be done is divided among the partners or costs are shared. But the liability can only be shared but not divided.

The second way is to hold a licence of the Chamber of Trade and Commerce. In order to obtain that certificate the engineer must pass a 2 day examination by a board of professors, civil servants and contractors with no further educational requirements. The licence is needed to become a construction contractor but it also entitles the holder to do consulting work. The great advantage is found in the possibility to form a limited company, either alone or with partners. The disadvantages are:

- His professional work is not accepted by many clients without an additional approval by an engineer of the Chamber of Consulting Engineers.
- The value added tax is 10%
- His fees are subjected to negotiations.

The fact is that engineers with an academic training always belong to the Chamber of CE while non-academic consulting engineers belong to the Chamber of Trade and Commerce.

2. Professional Liability

The professional liability for their work and their advice is the same for both kinds of consulting engineers. The Austrian law distinguishes between:

Maintenance (2 years): The engineer has to correct all imperfections of his work that appear (or are discovered) after completion of his work (calculations, plans etc.) and that were already present at the time of completion.

Damage Liability: The engineer has to compensate all damages to the client when:

- his action (or non-action) is the cause for the damage,
- he acted in negligence or perhaps in contract,
- he acted against the contract or against the law,
- the amount of the damage can be proved by the client.

The liability exists for three years beginning with the discovery of the damage and of the liable person/party except for criminal actions (there 30 years of liability). The damage liability exists for any kind of service the engineer has delivered regardless of whether it was a professional or a non-professional service. Of course damages due to non-professional services are difficult to get compensated because of the proof of negligence.

The main professional areas where liability can occur are:

- Design (e.g. spaceprogram in building engineering, choice of materials, structural concept)
- Calculations (e.g. statics, building physics, computations in road engineering)

Site supervision (e.g. measurements, quality control)

Project management (e.g. cost controlling, time scheduling, contract awarding)

The consulting engineers are required to be insured for professional liability. The insurance does not cover:

- imperfections of work which are to be corrected by the engineer; but delay is also an imperfection of the work and damages due to delay are not covered;
- wrong advice with respect to contractors;
- wrong time estimates;
- wrong advice with respect to financial transactions;
- wrong cost estimates;
- wrong advice with respect to insurances.

There exists an added liability of the members of the Chamber of Consulting Engineers because of their unique position. By internal Rules of the Chamber they:



- have to act only in the interest of their clients.
- are not allowed to give or take any "grease money"
- have to give their best advice regardless of any cost considerations.

3. Summary

Professional liability is a very important topic for Austrian consulting engineers. In order to improve the present situation a couple of actions could be taken:

On the national level:

- Alteration of the law (very improbable in Austria)
- Better insurance offers

On the international level:

- Exchange of damages dates and premiums between insurance companies.
- Some sort of definitions:

What is a professional advice and what constitutes negligence?

What is a random (or semi-professional) advice and what constitutes negligence.

COMMENTS FROM THE FEDERAL REPUBLIC OF GERMANY GROUP

BY PROF. DR. R. SEELING

Every citizen is liable in principle for all damages he causes to other persons or organisations and for which he is found guilty.

The liability to the client originates from the contract agreement and arises when the engineer fails in his duties. Different types of contracts correspond to different kinds of liability:

- The contract for works that is used most frequently and that places the liability for deficiency removal and the warranty for the success of the works on the engineer.
- The contract for services in which the success of the activities of the engineer is not a must and his liability is restricted to the case that he failed in his duty.
- Contracts for agent activities that covers extended engineering activities.

A first reason for the liability of an architect or an engineer already may originate from providing incorrect facts about his qualification or other credentials (for example the fact that he would not be allowed to carry the title of registered engineer or architect). However, this case is quite exceptional.

The usual reasons for the liability are errors or mistakes in the areas of technical and economic consulting and design (for example a faulty structural analysis causing an accident).

During the realisation of the project, further errors and mistakes may occur for which the engineer or architect is liable. These reasons for liability include deficiencies of co-ordination, insufficient checking and control on site, time schedules and cost that are not met due to fault of the engineer or architect as well as other insufficient performances (for example a missing or poor signalisation of a traffic deviation).

An engineer and architect who is not competent enough in the field of his contract should engage a specialist consultant. Otherwise he will be responsible for damages already from the fact of his incompetence. If he has engaged a specialist consultant, the latter is liable for his own mistakes.

Every engineer and architect, working on his own or employed, is in principle liable to an unlimited amount with his whole actual and future property. However, employed engineers and architects are proxies of their company or organisation. That means the company or organisation can only have recourse to the engineer or architect if he commits a severe negligence.

COMMENTS BY THE GERMAN DEMOCRATIC REPUBLIC GROUP

PROFESSOR KURT FIEDLER

As is the practice in all parts of the world, structural engineers in the GDR bear responsibility for the quality of structures they have designed and/or supervised during erection. They must also see to it that building operations are safe from a human and environmental point of view. Under a socialist system, the structural engineer is expected to base his work on the latest scientific and technological findings and use these for better and more efficient planning and execution of projects, while at the same time paying due attention to quality and safety.

Professional liability in view of these requirements can only be seen against the background of socialist production relations and socialist law. The overwhelming majority of the GDR's structural engineers are employed by nationally-owned enterprises (including a number who work in research, administration and quality control, but who are left out of consideration here). The enterprises in question may be industrial combines in the construction sector, or individual firms which plan, design and execute complete investment projects as general contractors, provide complete services as main contractors, or perform specific work as subcontractors. Other employers may include combines and firms outside the construction sector, and the structural engineers there may work on capital investment projects or in building departments.

Under these employment conditions, it is the particular combine or firm that is answerable to the client with regard to the quality and safety of building work.

The structural engineer in turn is responsible to his employer. Under GDR commercial law, and specifically the law of contract and its executive provisions, the combine or firm is answerable for possible errors and mistakes made by its employees. The same legislation specifies the duration and sharing of responsibility of the several parties involved, on the basis of differentiation. As a matter of principle, the party that causes damage is answerable to the injured party. This is normally the client in the event of property damage. The injured party may claim damages according to the provisions of the Labour Code or under civil law. If social insurance benefits are paid in cases of personal injury, then the social insurance system may in turn claim damages.

There are binding and uniform government-approved standards for the quality and safety of building work. Technical parameters are governed by national and industrial standards abbreviated as TGL (technical norms, quality specifications and terms of delivery). An elaborate system of regulations exists for occupational safety, health protection and fire prevention, as embodied particularly in the Labour code, the Occupational Safety Decree and various safety directives (ASAO) which have recently been given the character of national standards (TGL).

Depending on how seriously the causer neglects his duties, the structural engineer employed by a nationally-owned combine or firm may face three levels of accountability:

- 1) **Disciplinary** action may be taken by the management in cases of negligence which have not resulted in major damage.
- 2) Financial responsibility under the Labour Code for damage or hazards caused by negligence, as established by the firm's grievance committee (a social court with lay members) or, in severe cases, by a labour court.

3) Individual responsibility under criminal law, the ultimate action in cases of particularly irresponsible conduct leading to extreme losses or hazards. The fact that the employer is financially responsible does not detract from this individual accountability of the structural engineer which may be established in the course of an investigation. This will take place before a regular court of justice, rather than in the combine or firm. The GDR Penal Code contains special passages relating to the duties of structural engineers, with sections on safety hazards, impairment of safety in use, and breaches of the provisions for health protection, safety and fire prevention.

There are no strictly defined demarcations for these three stages, and a separate investigation will be launched in each case., The basic consideration is whether or not, in light of the latest scientific and technological developments, the structural engineer neglected his duties as a whole, and whether or not the person in charge was aware of the resulting hazards or damage.

In the GDR there is no percentage apportioning of financial accountability as exists in some other countries. Basically, the combine or firm is liable for the entire damage caused, and this liability may be passed on to a structural engineer it employes by way of disciplinary action (1) or through procedures under the Labour Code (2) in cases of negligence, with the financial claim limited to a monthly salary. Financial accountability is not limited in cases involving an intentional violation of duties (3), and the entire damage must be made good.

The GDR Penal Code now contains a **risk provision** designed to encourage engineers in their drive for innovation. This is unique on an international scale and says that an engineer (or other person in charge) is not liable for any damage or hazards caused by action he has taken in pursuit of the latest scientific and technological developments, providing that a responsible approach has been chosen.

In summary it can be said that the professional liability of structural engineers in the GDR is closely linked to their position as employees of nationally-owned combines or firms. In a socialist system, commercial law, labour law and penal law are all designed to enhance a sense of responsibility among structural engineers for quality and safety and to encourage scientific and technological advances.

COMMENTS FROM THE INDIAN GROUP

BY DR. T. N. SUBBA RAO

The following comments were obtained by summarising the viewpoints of many Indian Engineers representing different sectors of the construction industry.

Professional Liability Insurance relating to designers, architects and engineers is a new concept in India and this has not so far been given any effective trial.

Insurance companies also are not enthusiastic about this type of insurance and there have been very few proposals according to insurers. The risks involved could have large financial bearing though instances could be few in number.

Few owners in the Private Sector, particularly those based outside India and aware of this type of insurance, insist on the architects taking out Professional Liability Insurance, but the amount of damages to which the architect would become responsible is restricted to a percentage of fees varying from 10% to 30%. An extract from an agreement with a firm of Architects is reproduced below:

"Performance Guarantee by and Liability of Consulting Architects:

The Consulting Architects shall design and supervise the works as per normally accepted rules of engineering standards and in accordance with standard specifications. The Consulting Architects shall be liabile for damage only if the said normally accepted rules of engineering standard have been infringed by them and damages have been caused thereby to the Client/Contractor/Third Parties. The liability of the Consulting Architects towards the said damage will be limited to a maximum of 30% of the actual total fees payable to them under this Agreement."

The fees payable to architects is exclusive of premium. The premium is either reimbursed, if paid by the Architects or the policy is taken directly by the Owners at their cost.

In most of the civil engineering jobs such as dams, tunnels, jetties, wharfs, power houses, buildings etc. executed for Government (Federal) Departments, the design function is carried out by the Government Departments themselves, in which case liability for design is solely on the Owners and the question of taking an Insurance Policy does not arise. For other jobs such as bridges, chimneys, cooling towers, etc. the contractors quote for design and construction and submit designs for approval by clients. The designs are invariably scrutinised, commented on, modified and approved by clients or their consultants. It is a matter of opinion as to the inter-related liability, in the event the design, as finally approved, turns out to be faulty. There are also instances where owners ignore the advice of designers/contractors.

The life of a structure is not normally specified in the contracts.

To avoid failures of structures, design and consutruction should be entrusted to only designers and contractors who are qualified and experienced in this activity. Most of the clients in India are scrutinising the past performance of engineers/architects/contractors and pre-qualifying them before entrusting them with important works and this is a good trend. Professional Liability Insurance covers only professional negligence and before such a policy is provided by the insurers they scrutinise the qualifications, experience and credibility of the Professional.

Designers may become liabile in tort to third parties who are not parties to a contract. Designers' duties and responsibilities are covered both under the law of contract and tort. Even if designers' liability can be restricted under a contract between the owner and the architect, liability of an architect in tort cannot be minimised unless suitable provisions are made by statute.

There are no policies which an owner can take to insure himself against non-performance of a contractor/designer. No doubt the owner takes a Performance Guarantee Bond from the contractor and also Security Bond either in cash form or bank guarantee but there is no assured manner by which he can get the performance guaranteed.

Expensive Litigations

Any legal procedure has become expensive and has become beyond the reach of common man. It is only the fools and the extraordinarily rich who can afford litigation with all expenses and delay but some are forced to go to courts or face tribunals.

Clients should take an ombudsman approach to settle the claims of contractors. Clients should be encouraged to take decisions which are fair and equitable. Contractors should also learn accepting such fair decisions. Clients (particularly Government departments) should have the confidence that their decisions are supported and not questioned.

COMMENTS FROM THE JAPANESE GROUP

BY S. MINO

- 1. Engineers and Architects Errors and Omissions Insurance, a professional indemnity insurance, is a common method of protection for engineers against the consequences of so-called faulty designs. The rate of premium is generally less than several per cent of the design fees. The premium of this level is quite expensive for consulting engineers, but the insurance money may be too little for the client to cover the cost of remedial works.
- 2. Contractors can be insured against foreseeable risks and damages, and the insurance premium can also be included as a part of civil works cost. Contractors' All Risks Insurance generally does not cover the losses and damages due to faulty design. The rate of premium for CAR insurance is usually less than one half of one per cent of the contracted amount of the project.
- 3. In a prestressed concrete bridge construction project in a developing country, the contractor was requested to insure the works in the joint names of the employer, the consulting engineers and the contractor (Appendix-1). The contract value of the project was about US \$20 million. Since the insurance of this kind was unusual, much discussion was made between the contractor and the insurance company until they reached agreement. The rate of premium was set at 1.11% of the contract value.

An insurance of the same type was subsequently applied to a similar but much smaller project in the same country.

- 4. The application of the above-mentioned insurance may be limited to small or medium-size projects, because the risk of the insurer will increase as the scale of the project increases.
- 5. The responsibility of engineers for the performance of the public facilities should be limited to a reasonable degree. Such other parties as the client and contractor should not discourage engineers from using engineering innovations and new developments by forcing them to take a large proportion of responsibility. Once the design has been completed by the engineers and accepted by the client, the responsibility for that design should be born not by the engineers, but by the client. If the consequences of faulty designs were made public, the engineer who had made mistakes or misjudgements would be punished not in monetary terms but in loss of his reputation.
- 6. In Japan, most governmental offices in charge of large public works projects, including such quasi-governmental bodies as Japan Highway Public Corporation and Honshu-Shikoku Bridge Authority, carry out planning and design at their own risks. They do not engage principal engineers who oversee all engineering works. They may hire the services of many engineering consultants at every stage of planning and design, but engineering decisions are made by the owners, who consequently take all the responsibilities for the engineering works. The owners in this system have to maintain rather large engineering staffs, but there is no serious problem of professional liability at the present time.

This Japanese practice simplifies the client-consultant-contractor relationship in international practices into the client (with engineers)-contractor relationship.



Appendix 1: Excerpt from "Special Specification" for a bridge project

1.04 Bridge Design

1.04.1 Design on which the Tender is to be based

The Contractor shall be deemed to have satisfied himself of all data given to him including the design of the works and the sufficiency of his tender, all in accordance with Clauses 11 and 12 of the General Condition.

The Contractor has to have checked the complete design calculations and drawings of the works (superstructure and foundations) by an independent design consultant to be approved by the Employer, the Engineer and the Insurer. This examination is to be carried out independent of whether it is the original design or the Contractor's design.

1.04.3 Insurance

Notwithstanding the insurance requirements laid down in the General Conditions of Contract, the Contractor shall insure the works irrespective of whether based on the original design or his own design, in joint names of the Employer, the Consulting Engineers and the Contractor, against all losses or damages caused either by himself or the Consulting Engineers in connection with the design and supervision of the works, in such a manner that the Employer, the Consulting Engineers and the Contractor are fully covered during the period of construction and maintenance period of the works.

COMMENTS FROM THE SOUTH AFRICAN GROUP

BY HENNIE LEMMER PrEng

There was an increase in claims against professional engineers in the past three or four years. This was not due to a breach of the duty of reasonable skill but invariably negligence and incompetence. Errors also occurred but these could have been eliminated if quality management systems had been implemented.

Professional Indemnity cover is a worldwide problem - not because of bad track records but the hardening of insurance markets. Professional Indemnity is still available but at a price. In America this amounts to 4.1% of professional fees and in South Africa it is now approximately 3.5% of professional fees. In both cases it represents substantial increases over the last few years. If the profit margin could be expected to be 15% then these percentages are disproportionately high.

Whilst the cost of repairs and/or remedial works have always been completely out of proportion to design fees, a further problem experienced nowadays is that the client bodies claim for consequential damages. This in fact is the greatest cost paid out by insurers.

It is our experience that some cases do go to Courts of Law but the majority are in fact settled out of court. There is no doubt, however, that insurers deliberately delay settlement of claims in the hope that such claims might and/or "disappear" diminish. This has а detrimental effect upon client/consultant relationships. It is the experience of our brokers that claims take as long as three years to reach the point of settlement.

Joint responsibility for settlement of claims is really a problem but invariably in South Africa the responsibility for any error is determined and one party is asked to effect settlement. This might be due to the fact that responsibilities in South Africa are fairly clearly defined.

I do not think that litigation costs would be a deterrent for any claim procedure - at least not in South Africa. Consulting engineers are generally well insured and I have no knowledge of a consultant going bankrupt because of insufficient assets when it came to the settlement of a claim. The new concept recently permitted by the SA Association of Consulting Engineers is that consulting engineers can set up practices with limited liability. The philosophy when this permission was granted was the fact that invariably clients are not after the personal assets of their consultants, they merely wish their losses to be paid.

In South Africa independent checking of designs is not yet mandatory, but more and more consultants are introducing quality management systems inside their practices. This entails in-house checking of designs, drawings, documentation, etc. We have recently organised a course in Peer Review. The presenter was Mr. Lester O. Poggemeyer, President of the American Consulting Engineers Council. Peer Review entails a critical review of management systems inside an organisation specifically with the intent of improving quality. The reviewer is also a consulting engineer with knowledge, obviously, of running a practice. In America insurers have given a 5% reduction to practices which have been reviewed and our brokers are currently investigating a similar reduction. 20

COMMENTS FROM THE SWEDISH GROUP

BY W. VON OLNHAUSEN

These questions are of very great interest for many members of our IABSE-group and this initiative in the field seems therefore to be highly appreciated.

On the other hand there are not only national differences in handling these questions. In reality there are differences from one buyer to another and from one project to another.

For example, consider the National Road Administration, which handles thousands of contracts every year, some hundreds of them in the bridge field. It works as much as possible along general rules, established by a task group, with people from the contractors, consultants, private buyers, administrations and juridical experts. These rules are completed by our own regulations and by national and governmental laws and demands.

Taking bridge projects as an example, the order is normally that a project is worked out by the administration or by a consultant. The project must be approved by a certain legal procedure. The technical checking of the project is made by the administration. The project goes then as a proposition drawing together with a lot of specifications, regulations and special prescriptions to tenders, which leads to the appointment of the constructor. The constructor makes - often by a consultant - detailed calculations and working drawings. These are checked and approved by the administration, but remain the responsibility of the constructor during construction and during the guarantee period (normally two years). The administration surveys the material and the construction process by controllers. After two years the total responsibility goes to the owner, in our case the administration.

The need of discussions regarding achieved quality, mistakes, faults (open or hidden) is foreseen. Normally regular courts are prescribed, in some cases an arbitration process. Consultants and constructors have insurances, the state as the final owner has no insurance.

The system of responsibilities is relatively clear. Quality and quality assurance are usually discussed and approved in the construction process, which contains contacts and measurements as demanded in the modern philosophy of quality assurance.

As a result arbitration and legal processes occur seldom. If they arise they are often between the constructor and his consultant (or subcontractor), as the constructors some years ago tried to transfer a large part of the risks to them. It has been shown that especially the consultants are not able to bear these risks, neither by their fees nor by insurances. A new order is growing, based on confidence and on the assumption that the consultant belongs to the team of the constructor. It ought to be observed by the purchaser in the first hand, that the best way to minimise processes is to eliminate risks. That means that a careful determination of all basic facts has to be made for each project.

Another important point of dispute arose from the possibility to find holes in the specifications given by the purchaser and to ask for extra payment for actions which are expected from "good practice", even if they are not detailed in the specifications. However, this kind of legal exercise is decreasing, as those constructors who use it to a greater extent cannot get further orders. They are not qualified. The purchaser writes his specifications and gives his orders in such a way that an experienced constructor can do the work, but not a lawyer-bureau. It is impossible to specify all the methods and operations, e.g.



vibration-intensity, hardening-procedure, temperature-development etc. for concrete.

The above mentioned points of view may show that we in Sweden certainly have problems with the questions under discussion but we have an optimistic view that these problems can be solved within the existing system and without too many processes.

However, the questions include many more details which should be discussed deeper. It seems not possible to do this on the occasion of this letter and it seems necessary to involve other people in the discussion, working on the problems in their professional occupation.

If the IABSE working commission IV wants to go on with the task, we shall try to contact specialists in this country who probably want to be paid for their engagement. Before doing new steps in that direction we would like to hear a reaction from the commission.

COMMENTS OF THE SWISS GROUP

In principle all that is written is a true statement of the factual situation. As it has been expressed, matters differ in individual detail from country to country.

Decisive is the legal situation and the economical system. Some legal systems allow for individual agreements on the subjects of liability and litigation. Others are, however, very strict so that any agreement reached on such matters would be against the law and void. Similarly there is a difference between those countries with liberal and those with planned economies. Leaving aside all peculiarities which exist and do not make it easy to give a generally applicable comment, then - always under the proviso that it is a very general consideration - one may summarise:

Projects where the question of liability and litigation occurs need to have at least two parties. Commonly they are named Employer (or Owner) and Contractor. Their interests are not only fundamentally different but in contradition.

No Employer should be blamed for a design to have a project executed at the best obtainable quality for a minimum price and no Contractor should be blamed for the intention to obtain best prices for its works.

Practice forces both sides to enter into a compromise: the agreement.

Due to the prevailing market situation sometimes Employers and sometimes Contractors obtain conditions more in their favour.

In order not to leave things completely unorganised and to avoid 'accidental' results, standard conditions of contract have been developed such as the FIDIC-Conditions.

However, such conditions give only guide lines. There are very few contracts following exactly and without amendment such patterns. It is again the market which rules.

Only occasionally do projects involve only two parties: the Employer and the Contractor. This appears mainly in design-and-construct types of contract.

The 'classical' contract based on FIDIC-Conditions has at least three parties involved: in addition to Employer and Contractor, the Engineer.

Not to be neglected is a fourth party: insurers.

Although the Engineer is contractually bound only to the Employer, and the insurer may be under different agreements, the picture is only complete as regards liability and litigation if all four parties are examined.

It is clear that the interests of an Engineer and of an insurer do not necessarily or exactly correspond to those of the Employer, the Contractor or in relation to each other.

There may even be involvement of more insurers: each one, Employer, Engineer, and Contractor may engage different companies.

Under such circumstances it is clear that the extent of liability, the cover by insurers and awards in litigation may not be satisfactory at all to a suffering party.



To a certain extent this can be avoided by a careful analysis of risks, proper negotiations and good management in the performance. However, this is easier to formulate than to achieve: it is again the market which rules.

It is prudent, as suggested in the essays, to limit the liability. An Engineer and a Contractor will find it reasonable not to lose more on a project than they receive. They may look for insurance cover. On the other hand insurance companies have a similar concept: not to pay more for a damage than to receive as premium.

When all contractors, engineers and insurers limit their liabilities the Employer may argue that he expected for his investment the best performances and best cover and not at the end to be the only one in trouble.

Leaving the prevailing market situation aside and looking for an 'ideal' compromise balancing the diverging interest of the parties concerned, limitations of liability should not go so far as to abolish any liability. A party that commits a fault should be answerable for this. But it should in cases of negligence (those are the cases considered here - not wilful acts) not risk its existence.

When Employers argue that they they are the only ones really suffering, one should not overlook that not only Contractor, Engineer and Insurer are 'entrepreneurs', the Employer is one as well.

The Employer likes to invest in a project to obtain a benefit. Otherwise no investment would be made. This also applies for government projects with no direct financial return. It is then the benefit to the economy or the people of a state which causes the investment to be undertaken.

If now an Employer decides to have a project executed he is an entrepreneur. He will consider, by his own means or with the help of advisors, the pros and cons, and the risks and circumstances. A successful project will provide benefits for possibly many years. But if there is no success then he has to take that risk, like a normal entrepreneur, and should not limit this by shifting it to the others in not accepting their limitation of liability.

It is not possible to answer generally how in an individual case the 'ideal' distribution of risk should be made. But it is at least prudent not to disregard past experience. This experience is e.g. reflected in the FIDIC-Conditions which give a balanced, fair contract basis. Such conditions are not only distributing liabilities to the party who has normally the control over a risk but consider as well that in international business preferably any disputes shall be decided by a neutral independent body as arbitrators under the auspices of the ICC. FIDIC-Conditions are available for contracts between Employer and Contractor and for agreements between Employer and Engineer.

THE INSTITUTION OF CIVIL ENGINEERS

INFORMATION NOTE FOR INSTITUTION MEMBERS (LAC.88.2)

ON LIABILITY FOR LATENT DAMAGE

Introduction

1. In recent years, professional engineers, like architects, doctors, solicitors, accountants and other professional people, have become increasingly at risk through the bringing against them of actions for negligence. In the past, insurance has generally provided adequate protection, but this is now becoming unduly expensive and is sometimes difficult to obtain. Recently, an attempt was made by Parliament to rationalise this field of liability in the Latent Damage Act 1986.

The Basis of Liability

2. Under the law of England and Wales, professional liability can arise in general in three distinct ways, namely in contract, in tort or under some particular statute. Moreover, liability may arise in more than one way in respect of a single series of events, and may affect individuals personally as well as the consultants, contractors, public authorities or other organisations by which they are employed. Again, while the details may vary, similar precepts apply in other parts of the United Kingdom and, indeed, under nearly all foreign jurisdictions based on common law.

Liability in Contract

- 3. Most working relationships in the construction industry arise by virtue of a contract between the parties. A valid contract will normally be recorded in a written document or an agreement under seal, but can also come into existence orally by the unconditional acceptance of an offer or by performance, that is, when one party starts to carry out work offered by the other party whether or not that offer has been expressly accepted in some other way.
- 4. The rights and obligations of the parties to a contract are, in principle, those set out in the contract itself. However, further obligations will normally be implied by law. Thus, in contracts for services the law will imply obligations that the services shall be carried out with reasonable skill and care and, where the express terms of the contract are silent, that they will be carried out within a reasonable time and for a reasonable price. Where the contract is for the sale of goods and the vendor sells in the course of his business, the goods must be of "merchantable quality" and must be reasonably fit for their purpose. This has always been the position at common law, but these implied conditions have been strengthened in modern times by statute, in particular where the buyer or receiver of services is a "consumer".

Liability in Tort

5. Whether express or implied, the terms of a contract affect only those who are parties to that contract, plus any other claiming through such parties. However, liability can also arise in favour of persons not party to the contract under the law of tort. Tortious liability can result from trespass to land, to goods or to the person, from nuisance, from dangerous premises or chattels, from the escape of fire or other noxious things and in other ways - "the categories of tort are never closed". However, the tort most likely to lead to action against the professional engineer is that of negligence.

- 6. Liability in negligence is based on the infliction of injury upon another person by failure to take such care as the law requires. To succeed, the injured person (the plaintiff) must prove first that the defendant was in breach of that duty, and thirdly that, as a result of that breach of duty, the plaintiff has suffered damage. All three elements must be proved and, if one is absent, the action will fail. However, it makes no difference whether the breach is a wrongful act, a wrongful failure to act, or a negligent or even innocent mis-statement.
- 7. The duty of care is based on foreseeability one must take reasonable care to avoid acts or omissions which can reasonably be foreseen to be likely to result in injury to other people. The standard of care to be exercised is that of the ordinary prudent man or woman and will depend on the particular circumstances of each case. Thus the more serious the probable consequences, if care is not taken, the higher the standard of care. Again, a person setting himself up as having a particular skill must exhibit as much skill as is usually found in such persons, whether or not the defendant does in fact have that skill. Moreover, liability will lie whether or not the defendant is receiving a fee or remuneration or other advantage for the exercise of his skill including, in the case of negligent or innocent mis-statement, free advice offered to persons who then act or refrain from acting through relying on that advice.
- 8. The scope of such reasonable foreseeability and the standard of care to be exercised are both to be assessed in an objective manner. Some potential plaintiffs will be too remote from the events complained of for them to have been reasonably foreseeable, and this concept of remoteness will also exclude claims for injury which, although foreseeable and flowing directly from the breach of duty complained of, are too far removed from the foreseeable immediate effects of such breach. Preoccupation in recent decades of both Parliament and the Courts with "consumerism" has resulted in the creation of new "duty situations" and a move towards compensation for economic loss. Thus the old legal precept of caveat emptor (let the buyer beware) has in practice now largely been replaced by caveat venditor (let the seller beware).

Liability under Statute

9. Statutory liability has increased vastly in recent years. The supply of services is now subject to the Unfair Contract Terms Act 1977 and the Supply of Goods and Services Act 1982, while both goods and services will shortly be subject to the provisions of the Consumer Protection Bill currently before Parliament, which will apply to the United Kingdom various European Commission directives on consumer's rights and product liability. In other fields the Occupiers Liability Acts, the Defective Premises Act and similar statutes lay down duties and standards closely affecting many professional people. Legislation on health and safety, building regulations and the like not only create or extend duties and fix standards but also bring criminal sanctions to their enforcement.

Alternative Actions

10. Liability can arise in contract, in tort or under one or more statutes and one defendant can be liable to the same plaintiff under more than one of these heads. It used to be the law that a plaintiff intending to sue a defendant would have to choose to proceed in contract or in tort, but not both, and, if he chose wrongly and his action failed, he could not then sue again under the alternative head. However, a plaintiff can now sue in the alternative under any or all of the above heads at the same time and, the defendant can then join other potential defendants as third and fourth parties. Complex multi-party action is now common place, often leading to inordinate delay in obtaining judgement with attendant inflation of costs.

Limitation of Actions

- 11. In almost all jurisdictions the time within which civil claims can be brought before the Courts has been restricted. The reason is simple; if trial of claims arising out of a given event is delayed too long the plaintiff suffers by being kept out of his lawful remedy, the defendant may have lost the evidence necessary to support any defence, and the Court is faced with serious problems when all the available evidence is stale. The remedy is to set a time limit beyond which the plaintiff is prevented from bringing his claim.
- 12. UK law prescribes different limitation periods for different kinds of action but, at least until 1963, each period started to run on the date of accrual of the right of action. This "accrual date" also varied with the kind of action; thus, in actions for breach of contract, time began to run from the date of breach; and for torts such as negligence where damage must be proved, the accrual date was the date upon which the damage occurred. However, where the damage resulting from a negligent breach of duty was a kind which could not immediately be discovered by the plaintiff that is, where the damage was "latent" the limitation period could expire before the plaintiff could know that he had a right of action, which would therefore be lost.
- 13. For this reason the Limitation Act 1963 introduced, for cases involving personal injury, extensions of the limitation period to when the victims knew, or with reasonable diligence ought to have known, that damage had occurred. The principle of "discoverability" was then gradually extended by the Courts to other kinds of action, but in 1983 the House of Lords in the **Pirelli** case ruled that in "damage to property" actions the older date of occurrence of damage should be observed.
- 14. With regard to statutory liability, each statute lays down its own starting dates for the limitation periods. The time for actions under the Defective Premises Act 1972 runs from the data upon which the premises are completed, while for actions against local authorities the date is that upon which a dwelling poses a present or imminent danger to public health or safety.
- 15. A further complication arises from the "joint tortfeasor" rule under which a plaintiff is free to sue any single defendant for the full value of his loss even where more than one party has caused or contributed to the damage and the defendant sued is only partly to blame. Claims by the party so sued for contribution from other culpable parties have always been an exception to the normal limitation periods and result, in effect, to an extension of those periods.

The Length of the Limitation Period

16. Periods of limitation have always varied from case to case. Thus, in contract the period was six years (or twelve years in the case of a contract under seal), in tort it was six years and for personal injury it was three years. Bearing in mind that all limitation periods cease to run when a writ is issued, but that the writ need not be served immediately and remains valid until twelve months after it is issued, and that in some

27

cases the Court has a discretion - albeit limited - to extend the validity of a writ, it has seldom been possible to identify with certainty when the risk of being sued would come to an end. In the case of latent damage, actions could in theory be brought against a defendant or his estate many years or even centuries after the events giving rise to the claim. (A diagram showing the various limitation periods which apply since the 1986 Act, is included as an annex to this Note).

The Latent Damage Act 1986

- 17. The Limitation Act 1980 was largely the result of the Law Reform Committee's 21st Report in 1977 on the general law of limitation. The Committee's 24th Report on Latent Damage was presented to Parliament in November 1984 after wide consultation during which the Institution and the other construction bodies made a substantial contribution. In this Report the Committee concluded that the law as it then stood was unjust to plaintiffs and defendants and was in need of reform, but that such reform was bound to be a compromise between conflicting interests. It then went on to recommend that there should be no change in the law of accrual of actions, that in negligence cases involving latent defects the plaintiff should be allowed three years from the date of discovery or reasonable discovery of significant damage in which to bring his claim over and above the existing six-year limitation period, but that in such cases the plaintiff should normally be barred from initiating court action more than fifteen years from the defendant's breach of duty whether or not damage had by then occurred. After further consultations, a Bill was introduced into the House of Lords to implement virtually the whole of the Committee's recommendations as they stood.
- 18. The main effects of the Act may be summarised as follows:
 - The existing law with regard to the date of accrual of actions and to limitation periods remains unaltered. Thus the basic principle that an action in negligence accrues on the date damage occurs is retained;
 - b) In addition to the normal six-year limitation period a further three-year period is made available running from the date on which the plaintiff discovered or ought with reasonable diligence to have discovered that he has an action;
 - c) Notwithstanding the foregoing six-and three-year periods, the plaintiff's action will now become statute-barred after the expiry of a fifteen-year "long-stop" period running from the date of the defendant's breach of duty;
 - d) However, neither the "long-stop" period nor any other limitation period will operate where there has been fraud, mistake or deliberate concealment of material facts by the defendant. It may also be suspended in respect of any period during which the plaintiff is under some legal incapacity;

and

e) Where the property in question changes hands, provision is made for the second or subsequent owner to "inherit" the first owner's right of action and, where the defect was not discoverable before the property changed hands, the three-year limitation period will run from the date on which the subsequent owner discovered or could have discovered it, but subject to the same "long-stop" period as would have applied to the first owner.

Advantages and Disadvantages of the 1986 Act

- 19. While it is too early as yet to be sure that the longer-term effects of the Act will be, it should certainly bring some relief to those who, under the old law, would have lost their right to commence an action before it was possible to know that a defect existed. On the other hand, potential defendants now have a reasonable measure of assurance that they will not be faced with heavy actions for negligence long after the facts on which it is based have been forgotten. There is also the advantage that a halt has been called to the recent ebb and flow of Judge-made law on liability for latent damage, at least for the foreseeable future.
- 20. One of the first requirements of good law is that, so far as possible, its results should be certain, in the sense that a person should be able to predict the likely extent of any liability which may flow from a particular course of action.

While the concept of a "long-stop" period is undoubtedly sound (and leaving aside the length of the period which, at fifteen years, was clearly a compromise on the Committee's part) it is useful only if it allows a potential defendant to ascertain the date upon which liability will come to an end. This should then improve his chances of obtaining adequate insurance cover which, if available, will have the advantage not only of protecting the defendant but of ensuring that reasonably adequate funds will be available to remedy any defect if and when it appears during the period of liability - which is clearly in the best interest of the potential plaintiff as well. But (leaving aside the matter of contribution between co-defendants) it is not enough to have a long-stop period of known length: one must also know when it will start.

- 21. Unfortunately, at least in construction cases, a given item of damage could be caused by one or more of a number of different breaches of duty. Thus a design error can be a breach of duty, as can the failure of someone checking the design to spot the error. Or a perfectly adequate design may fail through poor workmanship during construction which, in turn, may be overlooked through inadequate supervision. The possibilities are legion, and each possible breach occurs at a different time. Again the new Act applies only to actions in negligence. Thus, at least in theory, a plaintiff can circumvent the "long-stop" period by bringing his action in contract or under statute.
- 22. A further problem with the new Act is peculiar to the construction industry. As stated above, the "long-stop" period is not to apply where there has been fraud, mistake or deliberate concealment of material facts. There can be no objection to the loss of protection where the defendant has acted fraudulently but the provision on deliberate concealment is another matter. As enacted, it is "borrowed" directly from the Limitation Act 1980, where it applies principally to actions for personal injury. The problem for the construction industry is that almost every operation in a construction project necessarily involves some degree of deliberate concealment; foundations conceal sub-soil, pouring concrete conceals reinforcement, brickwork is concealed by plaster - the examples are infinite. While there is some reason to hope that the Courts will in practice take a reasonable view of such situations, there is nothing in the Act itself which compels them to do so.
- 23. It is as yet too early to see what the Courts will make of the new legislation.



LIABILITY FOR DAMAGES (excluding personal injury) (UK excluding Scotland) PERIODS WITHIN WHICH ACTION BY PLAINTIFF MUST BE COMMENCED



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AN ARTICLE REPRODUCED FROM 'THE STRUCTURAL ENGINEER'

VOLUME 66, APRIL 1988 ENTITLED "WHOSE RISK IS IT ANYWAY?"

BY MR. J. WARD, PARTNER OF SOLICITORS: BEALE AND COMPANY

"George, one of the precast cladding units has just fallen apart when the contractor tried to lift it into place. Do you think you could pop down to site and have a quick look at it for me?"

George is a well-meaning project engineer working for a firm of structural engineers, who has the misfortune to be on the receiving end of this telephone call from an architect (let's call him 'Rupert'). The firm which employs George has worked with Rupert's firm on many jobs over the years, and George wants to keep Rupert happy. Anyway, looking at a crumbled cladding unit has to be more interesting than checking the vast pile of calculations which one of his junior engineers has just produced for the extension to the Senior Partner's house!

So, without talking to his client, and without talking to any of the Partners of the firm, George goes to site. His firm had not designed the cladding units, or supervised their manufacture, or supervised their fixing to the building. He had a vague recollection of checking the fixings to the loadbearing frame, but nothing more, and then only to make sure that the fixings didn't interfere with the reinforcemt.

When he arrives on site, he finds that about half of the cladding units are already fixed to the building. He also sees the pieces of the shattered unit, shown to him by the Clerk of Works. The Clerk of Works is not employed by Rupert's firm, but by the owner of the site, though he reports to Rupert's firm. 'There was no reinforcement in it', says the Clerk of Works. That wa self-evidently true - not a trace of any reinforcement in the shattered unit. That was Problem solved. Or was it? Were there any other units without reinforcement? Being conscientious, George goes back to his office and fetches his covermeter and runs it over the cladding units already fixed to the building. He obtains variable results. He has no way of knowing what reinforcement should be in the units, because he has never seen the specialist subcontractor's detailed drawings, and the covermeter is no more than a guide. He also finds that some of the units seem to be loose. He goes back to his office and, knowing full well that his firm will not even send in a bill for his day's work, let alone be paid, writes to Rupert recording the simple factual results of his researches on site, and hears no more. Until 10 years later, that is, after mother nature has sprung one of her surprises and baked us for 3 months in Mediterranean sunshine. The cladding units on the building have started to move around and crack.

Investigations are carried out, and it quickly becomes apparent that the cladding units are cracked and moving because of appalling workmanship by the specialist subcontractor in fixing the units to the building. Both main and subcontractor have long since gone out of business. The building owner, faced with an enormous bill to reclad his building, looks around for someone to sue, and finds that only Rupert's firm and George's firm (George, by now, being a Partner) are left in business. The owner knows that Rupert's firm was responsible for the overall design of the building. Rupert is sued, but loses no time in claiming:

a) that the day-to-day supervision was done not by Rupert's firm, but by a Clerk of Works employed by the owner of the building; and

b) that George had examined the cladding units on the building during construction, and that George therefore owed a duty to follow up his researches on site to make sure that the cladding was properly fixed.

George is therefore joined in the action by Rupert.

Let's assume, to help us get to the point, that George has the gumption to fight the case and, given good luck, good lawyers, and honest experts, he wins and is acquitted of all blame. Let's also note, in passing, that the owner's damages recovered from Rupert's firm are reduced by 20% because the owner was responsible for the acts and defaults of the owner's employee, the Clerk of Works.

The point is: what could George have done to avoid getting mixed up in litigation? A cynic might say, perhaps with considerable justification, that nothing can prevent a misguided but determined plaintiff from bringing a spurious claim. However, I would venture to suggest to George that, if he had been a little more aware of the additional risks he might be assuming, not only would he have avoided the pain and suffering involved in litigation, but he might also have prevented his client from ending up with a defectively-clad building. What George should have done, no matter how much it might have upset Rupert (not to mention the contractor and subcontractor), was to have written to his client, as well as to Rupert, reporting his findings and recommending to the client that further investigation into the cladding units was needed. It would have been even better (though I might be accused of being unrealistic to say so) for George to have refused to go on site and to have refused to have anything to do with the cladding units, unless his client gave his firm a full brief to investigate possible defects, and agreed to pay for that investigation.

If the client had not accepted George's advice, no one could subsequently have complained or blamed George for the problems. If a full investigation had been carried out, then, firstly, George's firm would have been paid to do it, i.e. a fair price for the risk thereby assumed, and, secondly, it is likely that the appalling workmanship would have been discovered anyway.

As it is in the story, George might not have wanted to rock the boat, or upset Rupert, or delay the job. However, by making this kind of decision (or, to put it more accurately, by deciding not to make a decision) George might well have shouldered, inadvertently, some of the risk inherent in the bad fixing of the cladding units. George's shoulders are the last place where that risk should lie.

It is axiomatic that, when contracting with your client, you should agree what you will do for him. You should also agree what you will not do for him. If the architect or the client wants you to do something which is outside your brief, agree with your **client** exactly what you are to do and how much you will be paid for it. Don't voluntarily assume other people's risks - you have enough of your own as it is!

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