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POLLUTION INSURANCE

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

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ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

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PREFACE

During 1989 and 1990 the Group of Economic Experts of the Environment Committee carried out a study on pollution insurance in OECD Member countries. This work included a survey of the insurance practice of Member countries, an economic analysis of the possible role of compensation funds and the organisation of seminars on this topic.

The results of this work were presented to the OECD ad hoc Group on Accidents involving Hazardous Substances, to the OECD Insurance Committee and discussed with representatives of the insurance profession and of industry. The Environment Committee adopted in December 1990 the Final Report containing conclusions on this matter. The OECD Council took note of this Report in MArch 1991 and agreed to its derestriction.

The survey of pollution insurance was updated and was submitted to the Environment Committee which in July 1991 recommended its derestriction on the responsibility of the Secretary General, who subsequently agreed.

The main documents arising from this study are included in this Monograph. As new laws on pollution damage compensation are being discussed in Member countries, there is a growing interest in pollution insurance and proposals are being made in some Member countries to set up funds to guarantee full compensation of pollution victims.

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POLLUTION INSURANCE AND COMPENSATION FUNDS FOR ACCIDENTAL POLLUTION

(Report by the Environment Committee)

1. INTRODUCTION

The Group of Economic Experts continued working in 1989 on the subject of insurance and funds as techniques for compensating accidental pollution. It examined various systems of risk cover for accidental pollution, studied pollution liability insurance in Member countries, assessed the likely market in Europe for pollution insurance and debated the merits of compensation funds as a supplement to insurance.

The Report sums up this work and lists the major conclusions from an environmental policy standpoint bearing in mind that the main objective should always be the prevention of accidents. It deals with {damage to third parties } {from accidental pollution in fixed plant}, that is to say, damage from fortuitous events causing {sudden or gradual pollution} which affects persons or public or private legal entities (*). "Damage", within the meaning of the Report, includes clean-up and reinstatement costs initially incurred by public authorities or victims.

The Report does not deal with wilful pollution, pollution which is a normal consequence of wilful acts, or damage for which it is difficult to demonstrate a causal link with accidental pollution (e.g. cancer). It does not consider residual pollution or pollution which is the foreseeable result (such as soil contamination beneath industrial sites) of the normal activity of polluting firms, of pollution-inducing acts (dumping of toxic wastes, heaping of mine tailings) or of normal use of polluting substances (spreading of nitrates or pesticides). Accidental pollution of nuclear origin, or caused by transport, is not examined here since it is covered by special insurance schemes.

(*) In the insurance field, the term "accidental pollution" is generally used in order to describe solely fortuitous pollution which is {sudden}. This Report deals with all potential forms of fortuitous pollution in industry, including gradual pollution. It should be noted that pollution liability often arises in situations not covered by a pollution liability insurance (e.g. pollution caused by normal industrial practice) and that such insurance rarely covers damage from an unknown origin.

2. COMPENSATION FOR VICTIMS

While cases of serious pollution are fortunately rare in Member countries, each year some hundred or more accidents, linked to hazardous substances and considered by Member countries as "major accidents", occur. A few of these accidents involve compensation payments of over US\$ 10 million to third-party victims. Compensation due to victims under current law may amount to sums that are very large compared to the polluters' assets -- and sometimes the damage suffered by accidental pollution victims may exceed their own total assets.

Accidental pollution can place a very heavy financial burden on the firm where the accident occurs, particularly if an aquifer or large area of land is contaminated. Given the stringent safety precautions required in industrial plant, total compensation paid by industry to third parties is proportionately very small compared to the total cost of industry measures to prevent accidental pollution. Even in the sectors reputed to be most dangerous, compensation is a minor item in a firm's operating account, provided that the firm has taken out appropriate insurance against the grave financial risks posed by some accidental pollution.

3. POLLUTION INSURANCE

In this Report, "pollution insurance" is taken to mean compensation paid by an insurer in respect of damage from accidental pollution suffered by third-party victims. It serves both to meet the claims of victims and to spread accidental pollution risks among the potential polluters. When insurance payments to victims exceed what the accidental polluter would himself have been able to pay, insurance fulfils a useful social function by ensuring that victims are not deprived of rightful compensation. It also serves a useful social purpose when it enables the firm at which the accident occurred to get restarted and resume business.

Pollution insurance can play a major role in compensation provided that many firms are insured and their policies cover all risks. In practice, however, there are very few well-insured firms in certain at-risk sectors, the amount insured is usually small and there are many exclusions. Details are given in the next paragraphs.

{a) Amount of guarantee}

Many potential polluters insure against third-party liability for pollution as part of their company liability policy. Cover is usually equal in amount to the ceiling stipulated in the policy. However, it appears that guarantees for property damage in this kind of policy often amount to less than US\$ 1-2 million per incident. Sometimes fire insurance provides very limited cover against property being damaged by pollution resulting from fire. Other facts worth noting are that major corporations are self-insured, that in certain Member countries fewer than half the other firms have company liability insurance, that the least solvent firms are the ones with the least insurance and that only a minority of small and medium-sized concerns are insured specifically against pollution risks.

There is reason to fear that a pollution disaster in one of these smaller firms might not be fully compensated or might bankrupt the firm and force it out of business. People living near these firms and the public authorities might be obliged to bear the financial consequences of serious accidents caused by less wealthy polluters who have failed to take out appropriate insurance.

A number of major corporations, on the other hand, are capable of insuring themselves for large amounts (more than US\$ 50 million per sudden or gradual pollution fortuitous event). Some major oil and chemicals companies are even insured for as much as US\$ 500 million per sudden event.

Some sort of system therefore needs be devised to take account of the fact that, alongside the wealthy and usually well-insured industrial corporations, there are many firms liable to cause very expensive accidental pollution without necessarily having the means to compensate victims. The problem is to make sure that accidental pollution victims receive compensation regardless of the size and finances of the firm responsible. In the case of firms where the financial consequences of their risk potential are clearly out of all proportion to their fixed capital, one solution would be to encourage them to take out pollution insurance, if they are unable to provide sufficient guarantees backed by their bank or industrial group.

One policy option would be the introduction of compulsory pollution insurance for certain firms in at-risk sectors, provided that account was taken of the size of firms, that it was specified which firms were concerned, that the minimum amount of cover was stipulated and that deductibles be adapted to the size of the firms. Moreover one should take into account that hazardous installations are a fairly heterogeneous group of risks. Compulsory insurance for larger firms in at-risk sectors would not be ruled out, although from a financial point of view it does not seem necessary, given their reliable solvency in case of accident. For this reason, the choice between conventional insurance and the provision of financial guarantees should be left open, as it is in several international agreements, and no single solution should be imposed on very different firms. In any case, unwarranted discrimination between firms should be avoided, as should legal requirements which vary with the size of the company.

Several Member countries have already passed legislation making it compulsory to take out liability insurance or to provide financial guarantees for certain types of hazardous activity (as in the case of nuclear facilities, oil pipelines, carriers of hazardous substances or wastes, hazardous waste disposal plants). Similar policies could be introduced for other sectors at risk, with special provision being made for enterprises able to cover their risks without recourse to conventional insurance. One potentially sensitive problem would be the identification of the sectors requiring special insurance treatment and, within these sectors, plants representing a specific risk which would justify the creation of a special insurance scheme. There are few precedents here but one could take into account definitions of hazardous installations which are found in the Seveso Directive or in the Dutch law or the German law on strict liability of operators of hazardous installations.

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Economically speaking, a policy of compulsory insurance would be more effective if firms were left free to choose between conventional insurance, insurance by captive companies or mutual associations, and other financial guarantees. Freedom of choice would also avoid the problem of persistent insurance and reinsurance profession misgivings with regard to certain pollution risks and general distaste for compulsory insurance because of the inflexibility and added expenses that this would entail.

If the public authorities were to make liability insurance compulsory, they would have to resolve the cases of a few uninsured firms lacking suitable financial guarantees. After inspection, the authorities would probably discover why the situation had arisen and could oblige these firms to adopt safety measures for protecting the environment and nearby inhabitants against accidental pollution. Once that was done, the firms would almost certainly be able to obtain the required insurance. Otherwise, the authorities might have to create a specific body to spread and rate risks which are normally uninsurable.

Another policy would be for the authorities to require insurance or financial guarantees on a case by case basis when processing operating permit applications from firms exposing their surroundings to major risk. This type of requirement was recently written into French law.

Lastly, the authorities could create an incentive for taking out pollution insurance by requiring at-risk plant operators to inform local or central government of the main clauses of their pollution insurance policies in respect of pollution damage. A recent Italian law on plants covered by the Seveso Directive contains such an obligation.

{b} Exclusions}

{i} Gradual pollution}

Non-sudden or "gradual" pollution which is unforeseeable or fortuitous and occurs without the knowledge of a firm's management is often excluded from liability insurance even if it is purely accidental. Exclusion works differently according to whether a policy requires the insured party to establish the "sudden" character of the pollution in order for the guarantee to operate or whether the insurer is required to establish the pollution's "non-sudden" (gradual) character in order to withhold the guarantee. There are policies excluding non-sudden pollution whose definitions are so vague that court cases are necessary to obtain rulings. Experience has shown how difficult it is to make a clear distinction between sudden and gradual pollution and between gradual pollution which is fortuitous and gradual pollution which is not entirely fortuitous. Furthermore, opinions differ about what should be considered sudden (the cause of emission, the emission itself, the concentration of pollutants, pollution damage) and about the maximum accepted interval between the cause and the subsequent appearance of damage. Pressure from reinsurers has led to some current policies being amended so as to exclude gradual pollution and cover only the consequences of sudden fortuitous incidents such as explosion or fire. If such a trend, already observed in France and United Kingdom, became general, it would appreciably reduce the social function of insurance by limiting the scope of current policies and the amount of compensation paid to victims.

The exclusion of gradual pollution is especially disturbing where serious pollution from underground fuel tanks and buried pipes belonging to small firms is concerned. Cases are so frequent that special measures have been adopted in the United States to secure adequate financial guarantees to cover the risk of gradual soil pollution. When a firm operates many separate facilities for which a financial guarantee must be provided, it is very unlikely that such guarantee will need to be paid for each facility during the same year. Hence it would be sufficient to require that firm to provide an overall financial guarantee for its facilities which would be smaller than the sum of the guarantees of the individual facilities.

Severe restrictions on gradual pollution cover have induced industry and insurers to look for solutions outside the conventional insurance market. Pooled insurance has been set up in some Member countries to cover gradual as well as sudden pollution (e.g. France, Italy, the Netherlands). In the United Kingdom a pool has been set up to cover the sole risk of gradual pollution in the chemicals industry. These pools did not meet with the expected success to begin with, but today they are making rapid headway. Eventually they should provide guarantees not much less than those available for sudden pollution. In some larger countries, maximum guarantees for gradual pollution now amount to US\$ 25 million per incident, whereas in many others they are still well below US\$ 10 million. This being the case, some potential polluters have chosen to rely on self-insurance, to set up captive companies within their conglomerates (mostly multinational enterprises) or join mutual associations so as to protect themselves against pollution damage risks on what they see as better financial terms (including tax advantages).

{ii) Other forms of damage not covered}

Pollution insurance policies do not cover every kind of damage for which compensation may be due. Some of them exclude government-ordered off-site clean-up operations, contaminated soil removal, and reinstatement; most exclude the cost of evacuating people and financial loss by victims who have not suffered bodily harm or property damage from pollution. In addition, nearly all policies naturally exclude damage due to non-fortuitous pollution for which the policy-holder is liable, such as the deliberate sudden discharge of toxic substances into the environment. What is more, the period covered by the guarantee is often fairly short, so that pollution damage appearing several years after the end of the insurance period is no longer subject to cover (claims made policies without a cover for extended discovery period).

{iii) Reimbursement of government-incurred expenditure}

Pollution insurance policies sometimes provide for the reimbursement of reasonable expenses incurred by the public authorities when the latter are obliged to take action against accidental pollution. In practice, the amounts guaranteed are often very small compared to actual expenditure and the insurer is generally in a better position than the polluter to dispute expenditure that he considers excessive or insufficiently related to the damage requiring compensation. The result is that certain government-incurred expenditure is not reimbursed, either because the polluter becomes insolvent or because the

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courts, after long drawn-out proceedings, decide against reimbursement. Clarification of the terms under which the public authorities are entitled to reimbursement for their action would improve the situation. More especially, it would be of use to specify the cases in which expenditure may be considered reasonable and to establish decision-making procedures that provide the interested parties with the necessary guarantees.

{c) Improved pollution insurance policies}

The gap between the pollution risks run by a firm and those for which it is insured needs to be defined and, if possible, reduced or eliminated in so far as accidental risks are concerned. The problem should be analysed in close co-operation between the partners (public authorities, industry, insurers), with care being taken to protect all interests, especially those of pollution victims. There are some encouraging signs in this respect and the process could gather momentum. For example, industry action could lead to pollution guarantee ceilings being raised gradually to many tens of million dollars, e.g. to US\$ 70 million (1) in the case of major firms. A certain degree of harmonisation of pollution insurance policy contracts, e.g. in Europe, might be beneficial and contribute to amassing sufficient premium revenue internationally to compensate major disasters. Such "new-style" pollution insurance might not only be less expensive but it might also be better suited to requirements.

{d) Identification and rating of risks}

It would seem particularly necessary to consider pollution risk in company liability insurance in at-risk sectors in order to improve the cover for pollution damage and match the premiums to actual risk. To this end, insurers will need to have good information on insured installations and they may wish to carry out a risk assessment and detailed inspection visits. But excluding pollution risk from company liability insurance would seem less well-suited to small and medium-sized firms where the risk of pollution damage is slight; indeed, such exclusion would make pollution liability insurance considerably more expensive, the net "pollution" premium being low in comparison with the cost of administering any pollution riders. It would be better to rate pollution risk separately only where the risk is sufficiently serious. Even then, it may be questioned whether pollution should be separated from fire/explosion/plant breakdown, since it rarely occurs in isolation from these other insured risks.

In all Member countries, there is an information gap in relation to pollution insurance. Insurers, government and industry do not at present possess adequate statistics on compensation paid in cases of pollution damage. It is thus difficult to calculate premiums from reliable and verifiable data. Premiums are inflated firstly because of uncertainty as to the risks covered when or after the policy is taken out, and secondly because of the possibility that compensation payments will balloon as a result of greater public sensitivity to environmental damage. Furthermore, policies cover a limited period, meaning that a polluting firm, or an enterprise which has acquired a polluting plant, is often left to pay for late-appearing damage or even that

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victims themselves will have to pay if the polluting firm goes out of business or becomes insolvent without having a cover for extended discovery period.

One reason for the lack of information is the low probability of accidental pollution with respect to a firm's other liability risks. Another is that, until a recent series of incidents occurred involving third-party compensation on a hitherto unprecedented scale, pollution risks had been largely igno red.

To make the pollution insurance market more fluid, Member country governments might encourage greater transparency by collecting and circulating statistics on accidents with and without insurance, and by setting guarantee minima appropriate to each type of at-risk enterprise and to various sites.

{e) Insurance and risk prevention}

Pollution liability insurance, especially when linked to damage insurance for a firm's direct and indirect losses, greatly reduces the financial risk the firm runs in the case of accident. It might be imagined that taking out such insurance could lead a firm to neglect its efforts at accident prevention. Unless premiums take account of the nature of the risks insured, this possibility cannot be ruled out. But the danger should not be overstated because, when an accident occurs, a firm usually has to face heavy costs not covered by any insurance. In addition, insurers often co-operate with their clients to better manage accidental risks.

In order to protect the environment, insurance policies should provide for penalties in case of accident (high damage excess, for example), premiums scaled to the number of accident claims (retroactive surcharge, for example) and the possibility of redress against an insured party guilty of gross negligence. In this respect it should be noted that, according to BIAC, "industry considers liability insurance as a most effective mechanism for promoting sound environmental practices since the costs of insurance can be linked to a company's environmental and safety record" [C/MIN(90)15]. Governments can reinforce this beneficial aspect of pollution insurance by requiring that all policies include incentive clauses (bonus/surcharge, for example).

Where insurance is not compulsory, insurers have more latitude to modulate premiums or even deny insurance to firms which do not seem to apply adequate risk management programmes or which are flouting safety regulations.

With regard to small and medium sized enterprises, pollution insurers can offer useful advice to their clients on accident prevention, provided premiums are high enough to warrant such a counselling service which can also be obtained from specialised firms.

{f) Integrating pollution insurance policies with environmental protection }
{policies}

Pollution insurance can make a valuable contribution to risk identification and accident prevention, especially if it covers all types of

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damage. It can make firms more accident-conscious, provided that policies continue to supply an economic incentive in favour of accident avoidance.

Contacts between industry, insurance and public authorities could result in better prevention of accident risk, better premium rating and better compensation for victims. Member countries should foster such co-operation, which could lead to pollution insurance more closely matching industry demands and government policies, while eliminating areas of dispute responsible for costly legal proceedings and delays in compensation of the victims.

Co-operation of this sort, along with greater transparency and stepped-up competition in industrial risk insurance, should result in growth in the pollution insurance market, an increase in the sums guaranteed, and lengthier durations for guarantees while at the same time promoting better environment protection (2).

4. COMPENSATION FUNDS AND OTHER SUPPLEMENTARY COMPENSATION SCHEMES

Even though pollution risk may be covered by a liability insurance, full compensation of third-party victims of accidental pollution is not automatically guaranteed. Insurance usually covers damage to persons and property and excludes certain other kinds of damage. Moreover, guarantees may turn out to be inadequate when a disaster occurs in a large enterprise or when serious pollution arises in a smaller undertaking. If the party liable cannot meet its financial responsibilities, victims will not receive compensation and the government will have to assume the cost of the emergency response and for any damage it has itself incurred. This possibility is not conducive to the development of at-risk industries, already struggling with a growing public image problem.

Another reason for the non-compensation of victims is absence of a liable party, either because such a party cannot be identified to the law's satisfaction, or because no identifiable party can be held liable for the accident.

Such situations are quite rare, as generally a firm responsible for accidental pollution is compelled to compensate the victims and is in a position to do so. Every year, however, there are numerous cases of accidental pollution where compensation is difficult to obtain under currently enforceable liability and insurance schemes (3). Compensation funds could make it possible to guarantee compensation for accidental pollution victims in nearly every case where they can establish that damage was due to a specific accidental pollution incident (4).

The Netherlands Air Pollution Fund set up in 1972 was asked each year to provide compensation in at least ten cases of accidental atmospheric pollution because compensation was not otherwise awarded. It recently received a Gld 2.5 million claim for damage sustained by market gardeners. A similar collective insurance scheme was set up in Sweden in 1989 at the instigation of industry and insurers in order to compensate pollution victims not indemnified by other means. In the case of pollution by oil spills at sea, numerous funds have been set up by industry or the authorities to cover the cost of government clean-up measures and to compensate victims more fully.

Such funds or schemes supplement conventional insurance. They help to compensate accidental pollution victims more fully and quickly, for instance victims unable to initiate expensive legal proceedings. They cover compensation to be paid by participants within pre-established upper and lower limits and a right of recourse is exercised against a participant only if the fund has had to pay compensation under the lower limit in his stead. Should a fund be used following pollution caused by a non-participant, then it exercises its right of recourse against that party. For this reason, funds or supplementary schemes pay only a small part of total compensation, since in nearly all instances it is the polluter who pays.

Supplementary compensation schemes may be governmental or private and be set up on a voluntary or compulsory basis. They may be financed by payments from industry, by levies on the sectors most closely concerned, or even by government contributions. The schemes may involve mutual loss distribution among its members and/or have recourse to reinsurance. They may be managed by the authorities, by industry or by the industrial sector concerned.

From an industry standpoint, these supplementary compensation schemes have the financial advantage of reducing premium costs to cover the expenses of a major disaster and the psychological advantage of avoiding the harm that is done to industry's image when victims of an industrial accident fail to receive a penny in compensation. Under industry management, these schemes could provide joint supplementary insurance on a mutual basis, as many examples have shown in the transport and service sectors. If they take the form of mutual associations, their overheads can be extremely modest.

The schemes are of interest from the government's point of view in that they help to internalise pollution damage costs (by applying the principle that the polluter shall pay) and, in the case of serious accidental pollution, relieve the public authorities of the reasonable response costs incurred.

The drawback of compensation schemes covering the cost of damage above a certain ceiling (claim in excess of the amount insured) is that they weaken the incentive supplied to a polluter by the heavy costs he risks having to bear. The effect is, however, slight since excess costs are usually much less than an accident's other economic implications, direct and indirect, for the polluter and since very few payments of this kind are made with regard to the total number of payments made in accidental pollution.

Such a collective "insurance" scheme represents an extra expense for potential polluters (the contributors), for reasons of a group's financial responsibility which is not always recognised or clearly appreciated (differences between competing firms or lack of solidarity between various professional sectors). But extra outlay by at-risk industries for these schemes is very slight and contributions are insignificant compared with the general insurance expenses and the environmental protection charges that they already bear. Even if contributions were unevenly spread between large and small potentially polluting firms or between high risk and low risk contributors, this should not give rise to marked distortions in competition between contributing firms.

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Given the possible advantages of such a supplementary insurance scheme in respect of compensation, it might be desirable for industry, insurers and the public authorities to study whether an accidental pollution compensation scheme could act in appropriate cases as a useful supplement to existing compensation systems, being understood that this supplementary scheme should normally play a minor role. Through such discussions, it might be possible to identify which partners could best take the initiative in this field and to study ways of financing the scheme that would take each partner's specific responsibilities and abilities into account.

It may be noted that under such a supplementary scheme, compensation for victims can be guaranteed without changing the civil liability rules and without introducing compulsory insurance for at-risk undertakings. Furthermore, such a supplementary scheme helps to enhance general awareness of accidental pollution issues among firms contributing to such collective insurance.

5. CONCLUDING REMARK

The large-scale pollution disasters of recent years have convinced the public that OECD countries might in turn experience the kind of technological catastrophe that has occurred in non-member countries. If this were to happen, there is a possibility that the victims of these serious technological risks might not receive full compensation. The time would therefore seem to be ripe for devising a comprehensive system aimed at speedily compensating victims in all kinds of situation.

NOTES

1. This figure is close to the minimal level for third party liability for defective products under the Community Directive (70 millions ECU), to the ceiling of oil tanker owners liability (1984 Protocol, 59.7 million SDR). It exceeds the insured liability of road carriers for hazardous goods (30 million SDR) because many pollution accidents concerning hazardous installations were much more costly than the most costly road transport accident. In the nuclear energy area, the OECD Nuclear Energy Agency, having examined the capacity available on the insurance market, recommended thus nuclear operators bear a third party liability of at least 150 million SDR which would be covered by insurance [NE(90)8 and C(90)60]]. However it should be noted that the available capacity to cover "ordinary" pollution risks depends on general market conditions (premium volume and accident rates) and on possible interventions by public authorities.
2. In 1989, the Working Party on Insurance and Environment Risk of the International Chamber of Commerce concluded that the insurance market lacked capacity for this type of risk, disaster risk especially. In 1990, the CEFIC Insurance/Liability Task Force drew attention to "the deterioration of the insurance market", and observed that "insurers limited the scope and availability of liability coverage, modified the conditions of insurance and drastically increased premiums"; it noted the possibility of creating an industrial "pool for mutual liability insurance" should this prove necessary.
3. In France, at least ten cases per year of damage in excess of FF 50 000 are not indemnified for lack of a liable polluter. In the Netherlands, there are several cases of this kind each year involving atmospheric pollution alone.
4. The funds to supplement pollution insurance, as described here, are entirely different from special funds set up to cover non-accidental or residual pollution control, to pay for damage at the site of a polluter's installation or for reinstating the polluted environment. For example, special funds may be created to clean up and reinstate abandoned toxic waste dumps, purify contaminated ground beneath polluting industrial sites (hydrocarbons, solvents), decontaminate soil around certain other plant (e.g., heavy metals), dispose of dredging sludge containing pesticides or heavy metals, and so on. The cost of this work in some countries is extremely high, very much more than what would be needed to compensate accidental pollution damage. Creation of special funds to control non-accidental pollution would make possible the extra-budgetary financing of certain high-cost pollution control measures carried out by the public authorities and would lead to a reduction in the charges due from certain firms and their liability

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insurers. This Report does not deal with such special funds; it discusses only compensation funds for accidental pollution having ample precedents in the oil industry (CRISTAL, IOPCF, etc.).

CURRENT STATUS OF POLLUTION INSURANCE IN SELECTED OECD COUNTRIES

Summary Report prepared by

John Cowell

1. OVERVIEW

The present summary report was prepared in 1990 for the Group of Economic Experts of the Environment Committee on the basis of the replies to a questionnaire on pollution insurance received from 14 Member countries:

a) {in Europe}:

- Belgium, Denmark, Finland, France, Germany, Italy, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom;

b) {outside Europe}:

- Japan.

The questionnaire was prepared with a view to obtaining a precise picture of the current status of pollution liability insurance in Member countries with regard to fixed industrial installations (including pipelines and waste disposal facilities).

The survey does not deal with pollution caused by:

- transport activities (marine, air, road, rail, river, etc.);
- movement of hazardous waste;
- nuclear installations (radioactive pollution);
- off-shore installations (marine pollution);

because these are often covered by separate insurance systems.

Opinions expressed in this Report are those of the author and do not necessarily represent those of OECD or its Member countries.

Comparatively routine events, e.g. emissions, discharges or waste generation on a continuing or repetitive basis, are generally excluded from civil liability insurance policies while non-routine events, e.g. explosions, spills or other sudden releases, are normally covered by the general liability policy. The majority of replies indicate little or no cover for gradual pollution. Lack of supply of broad pollution cover (cover for both sudden and gradual but necessarily accidental events), however, reflects lack of demand from all but the heaviest polluters.

Demand for pollution insurance has largely been restricted to the smaller firm which is often least able to afford broad pollution cover (including the cost of prior inspection and report).

Most potential polluters seem content to rely upon the sudden and accidental cover provided under the general (or commercial) liability policy. The expression "sudden and accidental" is usually taken to exclude gradual (or non-sudden) events. So far, insurers and insureds in countries responding to the questionnaire appear reluctant to test the definition of a sudden and accidental event before the courts.

The lack of demand for insurance cover reflects an absence of any perceived need for cover. This lack of perception is very largely due to the absence of claims involving pollution which is neither sudden nor accidental. And this because of difficulties faced by potential litigants who have neither the financial means nor the legal basis, e.g. strict liability of the polluter (1), necessary to pursue a successful claim through the courts in most Member countries.

This encourages a certain complacency among insurers and insureds. Of course, the situation may change over the next few years as victims become more aware of their rights. This suggests more claims and more calls for broader insurance coverage.

(1) Current work within the EEC and the Council of Europe on liability for environmental harm will most probably strengthen the current trend in favour of strict liability and wider use of pollution insurance.

2. POLLUTION LIABILITY INSURANCE

2.1 {How is pollution or environmental impairment liability (EIL) usually }
{insured, e.g. under a general business liability policy or under a }
{separate EIL policy?}

Limited pollution cover is usually provided under the general (or commercial) liability policy in most Member countries. In these countries, cover is usually restricted to sudden and accidental events. In the United Kingdom, for example, insurers have recently taken steps to ensure the continued exclusion of claims which do not meet the criteria of sudden and accidental damage.

In France, Italy (where pollution is excluded from the general liability policy) and the Netherlands broad pollution cover is provided under special pooling arrangements (see Section 3 below).

{Remarks}:

- a) Policy conditions vary not only from country to country, but also from insurer to insurer, particularly in those markets where uniform policy conditions do not exist (or no longer exist), e.g. in the majority of Member States of the European Communities.
- b) Broad pollution cover (covering both sudden and gradual pollution) is not normally available under the general liability policy. Separate policies (covering both sudden and gradual pollution), sometimes called environmental impairment liability (EIL) policies, are rarely available. Exceptions include:
 - France, Italy and the Netherlands (under national pooling arrangements mentioned above);
 - Germany (for pollution damage to water resources), Finland and Sweden (for gradual pollution) and, more recently, the United Kingdom (for gradual pollution for members of the Chemical Industries Association).

2.2 {How is pollution or environmental impairment usually defined?}

There does not appear to be any uniform definition of pollution damage under the general liability policy where the scope of cover (including exclusions) is usually defined by the individual insurer.

Subject to the foregoing, the general liability policy usually covers the civil (but not the administrative or criminal) liability of the insured to compensate third parties for damage to persons and property caused, inter alia, by pollution of the air, soil or water.

In Germany cover in respect of liability for damage to water resources is defined under the Wasserhaushalts-gesetz.

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Separate environmental liability policies (including policies written by the pools in France, Italy and the Netherlands) usually contain more detailed definitions (with emphasis on the coverage of all forms of pollution damage other than damage which fails to respond to the criterion of fortuity).

Environmental impairment usually means the emission, discharge, release, dispersal, seepage or escape of solid, liquid or gaseous or thermal contaminants or irritants into the soil, air or water.

2.3 {What damage is usually covered (whether under a general liability policy }
{or under a separate policy), e.g. damage to persons, damage to property, }
{damage to the environment (air, water, soil)? Is cover usually provided }
{in respect of damage occurring or claims arising abroad?}

Cover under the general liability policy is usually provided in respect of damage to persons and property. Damage to the environment is available in some countries, e.g. Finland, the Netherlands and Switzerland, but not in others.

Cover under separate pollution policies (where these exist) is available in respect of environmental damage including reinstatement. In some cases, res nullius may be dealt with by specific legal provisions, e.g. the Italian Law of 8 July 1986.

Cover for pure financial loss may be negotiated in one or two countries, e.g. Germany.

Conditions of cover in respect of damage occurring or claims arising abroad vary from country to country. Foreign claims may be covered in some, e.g. Germany, Belgium (for claims due to operations in Belgium), Finland (for claims arising in Europe), but excluded in others, e.g., Italy or the Netherlands.

Liability covers for damage occurring in U.S. are often more difficult to obtain from European insurers.

In Norway and Sweden general liability cover is restricted to the Nordic countries. In Japan cover varies from policy to policy. In the United Kingdom cover applies to operations at home or to goods supplied abroad.

{Remark}:

The increasing lack of uniformity in different national markets complicates any systematic analysis of cover available under the general liability policy. The situation in France is fairly typical. Among the different general liability policy forms in the French market cover is provided in respect of:

- bodily injury and property damage caused by accidental pollution of rivers (oldest policies);
- bodily injury and property damage as above but extended to include bodily injury caused by non-sudden pollution;

- bodily injury or property damage caused by non-sudden pollution provided the insured is not operating an installation classified under the Law of 1976;
- bodily injury or property damage caused by any "abnormal" functioning of the insured business;
- bodily injury or property damage caused by fortuitous pollution (most recent policies).

2.4 {Does the policy usually cover both sudden and gradual pollution? Does }
 {the policy refer to accidental pollution? What are the usual criteria }
 {of insurability, e.g. fortuity?}

Conditions of cover vary from country to country. In most countries, e.g. Belgium, Switzerland, standard cover is restricted to sudden, accidental and unforeseen (fortuitous) events. In these countries, gradual pollution is usually excluded.

Special covers, e.g. in France, Italy, Germany and Sweden, include both sudden and gradual pollution (while retaining the notion of fortuity). In one or two countries, e.g. Japan, the general liability policy makes no distinction between sudden and gradual events.

{Remark}:

Insurance brokers play a important part in placing risks which may be difficult to cover in the domestic market. This is particularly true of pollution liabilities where low loss frequency must be balanced against high catastrophe potential. Large insurance users often negotiate cover on a "portfolio basis", including both "attractive" business, such as fire insurance, as well as less attractive business, such as liability insurance.

2.5 {What risks can normally be insured, e.g. industrial installations, }
 {storage tanks, waste sites? Is "cradle-to-grave" cover available, e.g. }
 {production, storage, transportation, handling, use, consumption, }
 {disposal or redisposal of hazardous materials?}

Industrial installations or storage tanks can generally be insured in line with the conditions outlined above.

Waste sites are frequently subject to special conditions of cover: insurers often require on-site inspection and reports as well as improvements in loss prevention and loss control before going on cover. Waste site operators face difficulties in many countries, e.g. Denmark, Norway.

Transportation risks are not generally covered by the general liability policy since liability under national road traffic laws is subject to compulsory motor insurance provisions in all Member countries.

Where pollution damage is not covered by motor insurance, e.g. damage caused by the inherently dangerous nature of substances carried, it may be insured under a separate environmental policy, e.g. Italy.

•
Cradle-to-grave cover does not appear to be available. Insurance generally follows the civil law in linking cover to the keeper rather than the substance.

2.6 {Are hazardous installations classified? How many installations are }
{classified at each level?}

This question refers to classification by the public authorities. Replies throw little light on the question. Only Denmark, France, Norway, Portugal and Sweden report any classification by the public authorities.

2.7 {Are hazardous installations usually subject to prior inspection and }
{report by insurers before acceptance for insurance? Are periodic }
{inspections carried out?}

Hazardous installations classified by the public authorities will almost invariably be inspected by insurers before going on cover. In other cases, prior inspection and report will normally depend on the nature and size of risk. Periodic inspections will often be carried out during the currency of the insurance contract.

Prior inspection is almost always required for broad pollution cover, e.g. France, Italy, Sweden.

Under the newly proposed EILI insurance in the U.K., proposers "will have to pay for a full environmental survey carried out by approved environmental consultants".

2.8 {How is cover under the policy triggered, e.g. act committed, loss }
{occurrence, claims made? If claims made, does the policy contain a }
{ "run-off" clause?}

General liability policies in countries responding to the questionnaire are usually written on an occurrence basis. In Switzerland there is a move from act committed towards loss occurrence. Few policies covering domestic risks are written on a claims made basis. Broad pollution policies, however, are usually written on a claims made basis with a "run-off" clause.

2.9 {Does the policy cover the costs of clean-up or reinstatement of the }
{environment after loss? Does the policy also cover the costs of }
{preventing damage (where there is a threat of loss) or limiting further }
{damage, e.g. bunding or retaining wall? Are these costs covered }
{separately or included within the general policy limits?}

The heads of damage under the general liability policy and under separate environmental policies invariably include clean-up costs incurred by third parties. Clean-up costs and other costs incurred by the insured after an event has occurred (or after an imminent threat of loss has occurred) are not usually covered by the liability policy.

Exceptions to this rule in many countries include reasonable costs of limiting further damage, e.g. bunding or retaining wall intended to contain

leakage or seepage from a storage tank. This would not be the case in the United Kingdom. Costs of cleaning-up the premises of the insured can sometimes be covered as a separate head of damage (see section 6.1).

2.10 {Does the policy cover legal costs incurred by the insured to defend a }
{claim? If yes, are legal costs subject to any special limit?}

Legal costs incurred by the insured in defence of a claim are covered under the general liability policy and under separate environmental policies.

Legal costs may be subject to special limits, e.g. Italy, Spain, or contained within the general policy limits, e.g. Germany, the Netherlands. In some cases, there is no limit provided insurers agree to costs incurred, e.g. United Kingdom.

2.11 {What are the main policy exclusions? Can any of these exclusions be }
{deleted, e.g. by endorsement and additional premium?}

Liability policies are subject to the exclusions standard to all insurance policies, e.g. nuclear risks, war risks, bad faith, etc. These exclusions cannot be deleted.

Liability policies may also be subject to exclusions specific to the pollution liability risk, e.g. non-accidental loss or non-respect of pollution regulations. Such exclusions may be deleted or modified by endorsement subject to additional premium, e.g. to cover breaches of pollution regulations by persons other than members of the management of the insured undertaking.

Certain exclusions specific to pollution coverage, e.g. seepage and leakage, can be deleted by effecting broad environmental cover, e.g. Germany.

2.12 {What are the usual (primary) policy limits? Can higher limits be }
{negotiated (whether in the domestic market or in the international }
{market)? What amount of cover is usually purchased for large, medium }
{and small hazardous installations?}

Limits of indemnity (insurance limits as opposed to legal limits) are usually negotiated between the insurer and the insured. Unlimited legal liability cannot usually be insured: among the exceptions are Belgium and France where some pollution policies provide unlimited bodily injury cover. In the smaller markets higher limits of indemnity depend on the international market and international reinsurance support.

A distinction must be drawn between very large industrial risks where substantial levels of cover will be built up in layers using all the resources of the international market (including captives) and smaller and medium-sized enterprises where cover may be wholly arranged in the domestic market.

• Typical limits (in national currency) negotiated in the domestic market include:

- Belgium• : up to 5 million francs (say, 118 000 ecus);
- Denmark• : up to 2 million kroner (say, 255 000 ecus);
- Finland• : up to 3 million marks (say, 620 000 ecus);
- France• : up to 10 million francs (say, 1 450 000 ecus);
- Germany• : up to 1 million marks (say, 500 000 ecus);
- Italy• : up to 10 000 lire (say, 6 500 000 ecus);
- Netherlands : up to 5 million florins (say 2 150 000 ecus);
- Portugal• : up to 100 million escudos (say, 550 000 ecus);
- Sweden• : up to 100 million kroner (say, 13 200 000 ecus);
- Switzerland : up to 5 million francs (say, 3 000 000 ecus);
- United Kingdom : up to 20 million pounds (say 29 000 000 ecus).

Conversion as at 1st September 1990 (ecu equivalents are approximate, 1 ecu = 1.30 US\$).

Primary covers are usually negotiated with a single limit covering damage to both persons and property. Separate limits are usually negotiated in Germany (with higher limits for persons and lower limits for property).

{Remarks:}

- (a) "Typical limits", as supplied by Member countries, differ widely. In practice, however, available limits depend on the readiness of the insurer to provide cover and capacity and the readiness of the buyer to pay the price required. The readiness of the insurer depends, in turn, on the availability and affordability of cover and capacity in the international (reinsurance) market.
- (b) Excess liability covers can be purchased for large sudden pollution risks. Examples are ACE and XL and for Europe the newly created CGL policy HELP (capacity of 50 million ECU on top of a 50 million ecu liability layer). HELP is set up by insurance and reinsurance companies while ACE and XL are managed by brokers and by captives.

2.13 {Do the policy limits apply to all claims rising from any one event? Is }
{there an annual limit?}

Practice varies from country to country. In some countries, e.g. Norway, United Kingdom, there are usually limits per event but no annual (aggregate) limits. In most other countries there are limits per event and per annum.

2.14 {Is the policy usually subject to a deductible? If yes, what is the }
{usual amount?}

Deductibles are normal in all countries except Denmark. They may be negotiated between insurers and insureds or imposed by insurers. Levels vary. Higher deductibles are often required for particularly hazardous risks.

- 2.15 {Is broad pollution cover (sudden and gradual) readily available? Is }
{broad policy cover generally purchased by operators or hazardous }
{installations or sites? If not, why not?}

Broad pollution is not generally available for hazardous risks. In most countries lack of supply appears to have been matched by lack of demand.

In Germany and Sweden there has been little demand for broad cover presently available. In Italy, France and the Netherlands, insurers have anticipated increased demand by forming national pools (see Section 3 below).

- 2.16 {Is there a capacity problem? What has claims experience been like over }
{the last 10-15 years?}

Capacity problems are mentioned in only two countries -- Denmark and Portugal. Danish industry appears sensitive to the lack of market capacity and the inability of insurers to respond to proposed environmental legislation.

Satisfactory experience is reported in all countries -- the only exception is Germany, where contamination of the soil and ground water has caused problems for insurers.

- 2.17 {Is insurance compulsory?}

Pollution liability insurance is not generally compulsory. The only exceptions, in practice, are Belgium for waste risks, Switzerland for oil pipelines, and Germany for hazardous installations (see section 4 below).

In some countries, public authorities have the right to require a liability insurance from an operator of a hazardous installation (e.g. Switzerland for water pollution, France for high risk installations and waste repositories) or have the right to receive information on pollution liability policies subscribed by the operator (e.g. Italy).

- 2.18 {Is cover available through an insurance pool?}

Pollution liability insurance pools have been formed in several Member countries, e.g. France, Italy, Japan, the Netherlands, Sweden (see below).

3. POLLUTION INSURANCE POOLS (Table 1)

- 3.1 {What is the name of the pool? When was the pool set up? Why? How many }
{members does it have? What percentage of the domestic market is }
{represented in the pool?}

Pools operate in France, Italy, the Netherlands and Sweden and, outside Europe, in Japan. The pooling arrangement in the United Kingdom is described as a "facility".

The Japanese Oil Pollution Liability Reinsurance Pool was set up in 1975. In 1989 it had 38 members (22 domestic companies and 16 foreign

•
companies). The pool is supported by the whole market. Cover is written on a loss occurrence basis.

The oldest of the European pools, French GARPOL, was set up in 1977 with the support of 70 companies. GARPOL was replaced at the end of 1988 by ASSURPOL supported by 65 local and foreign companies (51 primary insurance and 14 reinsurers). Cover is written on a claims made basis. The total premium paid was 5.5 MF in 1989 and is growing to 14 MF in 1991.

The formation of the French pool was followed by the setting up of pools in Italy and the Netherlands.

The Italian Pool Inquinamento was set up in 1979. In 1990 it had 84 members representing about 90 per cent of the Italian market: cover is written (as from 1988) on a claims made basis.

The Netherlands MAS-Pool -- Milieu Aansprakelijkheids-verzekering Samenwerkingverbond -- was set up in 1984. In 1989 it had 52 members representing about 80 per cent of the domestic market. Cover is on a claims made basis.

One pool operates in Sweden: it consists of Folksam, Länsförsäkringsbolagen and Wasa. Cover is claims made.

In the United Kingdom the Environmental Impairment Liability Insurance Facility (CEILIF) for member companies of the Chemicals Industries Association was launched at the end of 1989. Cover is claims made.

Pool membership is voluntary. Companies which do not wish to join the pool are not obliged to do so. In Italy, for example, the overwhelming majority of insurers support the pool.

Broadly speaking, pools were set up because liability insurers felt the pooling of resources was the only practical way of handling an expected increased demand for cover not previously available on the market. Greater public awareness of the pollution problem, the evolution of jurisprudence and the introduction of specific laws for the protection of the environment were all thought likely to lead to an upturn in demand from industry for wider cover and greater capacity.

Pool cover is restricted to civil liability. Criminal liability is excluded. Cover under the French and Netherlands pools is presently limited to damage arising from fixed installations within national territory but could, according to experts, easily be extended to include transport risks (to supplement cover, for example, already provided under the compulsory motor liability policy). This extension is already available from the Italian pool.

Environmental impairment, as covered by the pools, means:

- (a) the emission, dispersal, discharge or deposit of any solid, liquid or gaseous substance, which pollutes the air, water or soil;
- (b) the production of smells, noise, vibrations, waves, radiation, rays or abnormal variations in temperature.

Table 1

Table 1 (cont'd)

Table 2. United States

Environmental Impairment Liability Insurance (1991)

(Pollution legal liability, sudden and gradual, third party, claims made)

•Market•••	Limit•••	Comments
AIG•••	\$20 M per occ. •	Defence in limit
National Union••	\$20 M aggregate	
ECS-Reliance••	\$5 M per occ. •	Defence as supplemental
Planet Insurance Company	\$10 M aggregate •	limit where required by
•••	•••	statute.
•••	•••	No retroactive date
ACSTAR••	\$5 M per occ. •	Defence in limit
United Coastal Ins. •	\$5 M aggregate	

Cover is available in respect of fortuitous damage to persons and property (including pure economic damage) whether or not such damage is caused by a sudden or gradual event. Gradual damage is only covered to the extent that it remains unknown to the insured. Cover is also available in respect of on-site and off-site clean-up costs.

Both the French and Italian pools focus on industrial risks. ASSURPOL, for example, targets hazardous installations under Law 76-663 of 19th July 1976. These include a wide range of risks such as waste disposal and waste treatment plants, chemical, pharmaceutical, electronic and metallurgical industries, textile factories.

Post-closure liability for waste repositories can be covered by ASSURPOL if the waste operator liability was covered prior to closure and if the post-closure liability is covered by ASSURPOL every year after closure (renewably yearly contact).

The Japanese pool (as its name suggests) is limited to oil refining and oil storage risks. The Netherlands pool (because of the particular structure of the insurance market where the major industrial risks are by and large insured in the international market) tends to focus on government and so-called provincial risks including, for example, smaller industrial, agricultural and commercial risks.

Limited information on U.S. insurance for sudden and gradual pollution is given in Table 2.

3.2 {Is it a coinsurance or a reinsurance pool? Who underwrites the risk? }
{Who manages the pool?}

The Japanese pool is a reinsurance pool which is managed by Toa Reinsurance.

The French, Italian and Netherlands pools are reinsurance pools. Member companies cede 100 per cent of the risk to their respective pools. The French and Netherlands pools are managed by their respective administrations. The Italian pool is managed by the Unione Italiana di Riassicurazione.

MAS cover is only written in combination with the general liability policy. Italian general liability policies no longer provide any pollution cover. French general liability policies continue to provide limited pollution cover.

The British "facility" is written on a coinsurance basis with cover being issues by the Swiss Re subsidiary, the Palatine.

3.3 {How many risks are covered by the pool? Are most large risks insured }
{with the pool?}

In 1990:

-- most large oil risks were covered by the Japanese pool.

- 1 151 risks were insured with the Italian pool. These represented a small proportion of industrial risks with a pollution exposure.
- 10 000 risks were insured with the Netherlands pool. These were mostly small risks. Few large industrial risks carry broad pollution cover.
- 217 risks were insured with ASSURPOL.

3.4 {What is the pool capacity? Is cover provided from the ground up?}

Japanese capacity is 5 000 000 000 yen (say, 26 500 000 ecus) subject to a 1 000 000 yen deductible (say, 5 300 ecus).

ASSURPOL capacity in 1991 is 134 000 000 francs (say, 18 125 000 ecus).

The Pool Inquinamento capacity is 50 000 000 000 lire (say, 32 000 000 ecus) from the ground up.

The French and Italian pools working together offered a cover of over 200 MF.

MAS-Pool capacity is 15 000 000 guilders (say, 6 450 000 ecus) in any one period of insurance of three years.

CEILIF capacity is 5 million pounds (say, 7.25 million ecus) in any one period of insurance of three years. CELIF will pay a maximum of 10 million pounds (say, 14.5 million ecus) in any one policy period.

3.5 {What has claims experience been like since the pool was set up?}

The pool managers are understandably optimistic. The Italian and Japanese pools record satisfactory experience. The French pool says that it is too soon to evaluate its results. The Netherlands pool reports the small number of policies has not generated many claims. No information is yet available on CEILIF.

The anticipated upturn in demand from potential buyers for wider cover and greater capacity has not yet been realised. And this for a variety of reasons, e.g. comparative infrequency of gradual pollution damage (where the causal link may be difficult to establish), ability of large polluters to pay claims out of assets or earnings, etc.

Stricter rules of liability coupled with improved access to the courts may encourage people to bring claims against polluters where previously this would have been impossible.

Pools, like any other market development, are a response to changing conditions, e.g. the "newness" of risk, the catastrophe potential and the need to maximise capacity. However, the development of the European pools appears to be weakened or at least held back by the continuing coexistence of pool covers and traditional covers. Pools have been discussed in other countries, e.g. Belgium, Germany. In Denmark, the Federation of Danish Industries and the

•
Association of Non-life Insurance Companies are examining the possibilities of establishing a pool scheme regarding environmental liabilities (a new environmental liability act is under preparation), but no decision on their formation has yet been taken.

3.6 {Does the pool cover foreign risks (risks located abroad)?}

Foreign risks are presently excluded from the French, Italian, Japanese, Netherlands and Swedish pools and from the British "facility".

The European pools already compete for domestic risks with non-members. They may, at a later date, compete with each other for both domestic and foreign risks. Within the European Communities, completion of the internal market in 1992 and the adoption of freedom of services for large industrial and commercial risks in 1990 provide a further incentive to competition between insurers.

4. COMPULSORY POLLUTION LIABILITY INSURANCE

4.1 {Is liability insurance compulsory? Is compulsory insurance limited to }
{specified hazardous installations? Who must take out the insurance, }
{e.g. owner, operator?}

Compulsory liability insurance provisions have already been implemented in Belgium, have been adopted but not implemented in Portugal and Germany.

In Belgium compulsory insurance is required under the Law of 22 July 1974 and the Royal Decree of 9th February 1976 on operators of specified toxic waste disposal centres. Cover is provided by individual insurance companies.

Compulsory insurance in Belgium is also required in accordance with:

- the Royal Decree of 2nd June 1987 on waste export, import and transit;
- the Decree of the Flemish Executive of 25th July 1984 on cleaners of domestic waste pipes;
- the Decree of the Flemish Executive of 25th July 1985;
- the Decree of the Walloon Executive of 23rd July 1987 on controlled waste sites;
- the Decree of the Walloon Executive of 12th November 1987 on certain categories of waste.

In Portugal and Germany the necessary decree implementing the provisions of the law on compulsory insurance has not yet been issued.

- 4.2 {What cover is required under the compulsory insurance provisions? What }
{limits are required?}

Civil liability cover is required under Belgian law for 100 000 000 Belgian francs (say, 2 360 000 ecus) per event (per loss). Cover is loss occurrence. In Germany, the ceiling of liability to be insured is 320 million DM.

- 4.3 {Can insurers decline particular risks? If yes, what arrangements exist }
{to cover such risks, e.g. assigned risk pools?}

Insurers can, in principle, refuse cover for particular risks. Replies do not indicate whether they have ever done so or what arrangements, if any, exist to cover such risks. In France, ASSURPOL refused to cover 10 per cent of the risk proposed in 1991.

- 4.4 {Do victims have a right of direct action against the insurer?}

Belgian and Swedish law does not provide for a right of direct action against the insurer.

- 4.5 {Is evidence of insurance required in order to obtain a license to }
{operate an installation?}

Prior evidence of insurance is required before a licence may be issued in Belgium for an installation subject to the Law of 1974 and the Royal Decree of 1976.

- 4.6 {Is there a special fund for insolvent or unidentified polluters? If }
{yes, refer to section 5 below}.

The Belgian Law of 1974 provides for a public fund ({"fonds de garantie }
{pour la destruction des déchets toxiques"}) but the necessary decree setting up the fund has never been issued.

In Sweden compulsory insurance is required under the Law of 1988 (effective July 1989) in respect of unidentified, insolvent or defunct polluters or time-barred claims. The Miljöskade Konsortiet fulfils the function of a fund in this respect.

- 4.7 {Are the authorities entitled to require evidence of insurance prior to }
{the operation of certain hazardous installations, e.g. pipelines, waste }
{disposal sites?}

The Belgian authorities may only require compulsory insurance in respect of installations specified in the Law of 1974 (or regional decrees).

•
5. INSOLVENT OR UNIDENTIFIED POLLUTERS

- 5.1 {Is damage caused by insolvent or unidentified polluters covered by a }
{special fund? If yes, how is the fund financed, e.g. by taxation, by a }
{levy on insurance premiums?}

Funds of the type envisaged by this question only exist in the Netherlands and Sweden. The Netherlands Air Pollution Fund is financed by a levy on fuel (petrol, oil, coal, gas, etc.). The Swedish fund is financed by a levy on a limited number of hazardous installations. Approximately 7500 hazardous installations in Sweden are required to contribute to the Miljöskade Konsortiet.

- 5.2 {Who manages the fund?}

The Netherlands fund is administered by the Minister of Housing, Physical Planning and the Environment.

The Swedish fund is managed by Skandia with claims being handled by Trygg Hansa.

- 5.3 {What damage is covered by the fund, e.g. clean-up of closed waste sites?}

The Netherlands fund covers all forms of air pollution. The Swedish fund covers compensation payable under the civil law or the environmental damage law.

- 5.4 {Does the fund also cover time-barred compensation claims?}

The Swedish fund covers all forms of air pollution. This question was not dealt with in the reply from the Netherlands delegation.

- 5.5 {If no fund exists, how is compensation funded for damage caused by }
{insolvent or unidentified (or uninsured) polluters?}

With the exception of the arrangements in Sweden and the Netherlands, there are no provisions in the remaining twelve Member countries for the compensation of victims of damage caused by insolvent, unidentified or uninsured polluters. This problem, particularly acute in the case of health claims with long latency, will have to be addressed in due course.

6. PROPERTY INSURANCE

- 6.1 {Does the property insurance policy cover pollution damage to the }
{insured's own premises, e.g. smoke damage following fire?}

Property insurance is probably more generally known as fire insurance. Normally, the fire insurance policy only covers damage to the property of the insured (own damage) caused by one or more of the perils specified in the policy, e.g. smoke damage following fire, property damage following boiler explosion. The fire policy does not usually cover pollution damage caused by sudden spills or by regular emissions, discharges or waste generation.

•
6.2 {Is pollution damage limited to named perils only? If yes, please }
{specify}

Limited own damage pollution cover is available as indicated above
under 6.1.

6.3 {Does the property insurance policy cover third party pollution claims }
{following damage to the insured's own premises, e.g. pollution caused by }
{smoke or water?}

Property or first party insurance is not intended to satisfy third party
claims. Third party claims must normally be met under a third party policy.
However, in certain countries in the civil code tradition, the fire insurance
policy also covers the civil liability of the insured for damage to third
parties caused by one or more perils specified in the policy, e.g. Belgium,
France (for material damage only) and Italy.

6.4 I{s pollution cover readily available? Is it usually purchased?}

With the exception of cover indicated above, cover for pollution damage
to own property is not readily available in Member countries. There does not
appear to be any particular demand for such cover.

Summary of Replies on the Cover Available on the Market

-
- •••General*••Pool**
 - Cover••••Liability••Policies
 - •••Policies
-

Pollution event:•••

-- sudden ••••Yes•••Yes

-- gradual••••No (but, occasion-•yes

• •••ally, yes)

Bodily injury••••Yes•••Yes

Property damage••••Yes•••Yes

Pure economic loss:

-- consecutive loss••••Yes•••Yes

-- non-consecutive loss••••No (but, excep-••yes

• •••tionally, yes)

Clean-up (third party costs)••Yes•••Yes

Prevention costs (imminent
threat of loss)••••No••••Yes

Salvage costs (third party)••Yes•••Yes

* For more detailed description of cover see Section 2.

** For more detailed description of cover see Section 3.

Pools mean here European continental pools.

ANNEX

SUMMARY OF REPLIES TO QUESTIONNAIRE CJ-EN 188/3

BY

THE EXPERT COMMITTEE OF THE COUNCIL OF EUROPE

ON

COMPENSATION OF DAMAGE TO THE ENVIRONMENT

This document has been prepared by the European Insurance Committee on the basis of replies to a questionnaire dated 6 January 1989, by the National Associations of the 12 following countries:

Germany (D) -- Belgium (B) -- Denmark (DK) -- Spain (E)
Finland (SF) -- France (F) -- Italy (I) -- Norway (N) -- Netherlands (NL)
United Kingdom (UK) -- Sweden (S) -- Switzerland (CH)

It should be noted that the replies can only reflect current practice and the opinions most frequently expressed on each market.

However, in a climate of free competition and non-compulsory cover, it may be that some insureds benefit from provisions offered by their insurer different to those described below.

A. GENERAL QUESTIONS

A-1 To what extent can the various types of damage envisaged by the Committee, already be covered by insurance? To the extent that they are so covered, are they covered by a single policy or are there separate policies for different types of damage, for instance damage resulting from an impairment of the environment?

The replies are summarised in the following table*.

Table I. Pollution Caused by a Sudden and Accidental Event

••••	SF	B	D•DK	E	F	I	N	NL	UK	S•CH		
. Damage to persons••			x	x	x•x	x	x•	x	x	x	x•x	
. Damage to property••			x	x	x•x	x	x•	x	x	x	x•x	
. Consecutive economic loss•			x	x	x•x	x	x•	x	x	x	x•x	
. Pure economic loss••			no	no	no•	no	x2	x3	no	x4	no	x5•no
. Restoration of the natural• milieu (ecological damage)			x1	x1	no•x	x1	x1	x1	x1	x1	x1	no•x1
. Cost of preventive measures on- site in case of imminent threat			no	no	no•x	x	x2	x3	no	x4	no	no•x7
. Off-site salvage costs•			x	x	x•x	x	x•	x	x	x	x	x•x

* X with no footnote in a reply means that cover is automatically given in a single "General Liability " policy.

Table II. Pollution Caused by a Non-sudden but Foreseeable Event

In those few countries where cover is offered by means of special policies ceded to national pools, the guarantee must result from corrosion or other forms of slow, gradual or repetitive alterations to the insured's installation providing this damage has been caused fortuitously.

 SF B D•DK E F I N NL UK S•CH

. Damage to persons••	x6	no	no	•no	no	x2	x3	no	x4	x5	x6	•no
. Damage to property••	x6	no	no	•no	no	x2	x3	no	x4	x5	x6	•no
. Consecutive economic loss•	x6	no	no	•no	no	x2	x3	no	x4	x5	x6	•no
. Pure economic loss••	no	no	no	•no	no	x2	no	no	x4	x5	x6	•no
. Restoration of the natural• milieu (ecological damage)	x6	no	no	•no	no	x2	x3	no	x4	no	x6	•no
. Cost of preventive measures on- site in case of imminent threat	no	no	no	•no	no	x2	x3	no	x4	no	no	•no
. Off-site salvage costs•	x6	no	no	•no	no	x2	x3	no	x4	no	x6	•no

-
- (1) The concept of "restoration of the natural milieu" is interpreted in different ways depending on the country and with the reservations expressed under question B - 3 on the concept of "reasonable measures of reinstatement". Replies are, therefore, difficult to compare.
 - (2) By separate contracts, GARPOL since 1978 and ASSURPOL, since 1989.
 - (3) By specific ASIA contracts, since 1980.
 - (4) By specific MAS contracts, since 1985.
 - (5) Usually offered for normal risks.
 - (6) By specific contracts.
 - (7) Excluding prevention costs due to events occurring in nuclear installations.

A-2 What is the current supply and demand situation for insurance cover for the risks concerned? Are supply and demand increasing, stationary or declining? Are there significant differences in this respect in different countries or in different branches of industry?

- The following six countries show a stable supply and demand situation: Germany (because a large number of undertakings concerned have spontaneously taken out insurance cover extended to pollution risks over the last few years), Denmark, Norway, Finland, Netherlands and the United Kingdom.
- The following five countries indicate an increased demand by large industrial undertakings: Spain, France, Italy, Sweden and Switzerland.
- Belgium shows stable demand by large industrial undertakings but increasing demand from firms undertaking the neutralisation and elimination of waste based on the compulsory insurance requirements of the Royal Decree dated 9th February 1976 giving effect to the Law of 24th July 1974.

A-3 What percentage of civil liability insurance claims is represented by claims relating to damage covered by the study? How often are claims of the latter category made?

No country could give overall a percentage of claims for environmental impairment compared with all industrial enterprise liability claims because there is no single body which collects this information from insurers. However, it seems that the frequency and average cost of claims are still relatively low (with the exception of the remarks made by Germany under Question A-4).

A-4 Insofar as it is possible to single out damage as envisaged in the study, what, approximately, have been the changes in premiums and in sums paid out in the past 5-10 years? Could separate indications be given with respect to loss of profit resulting from impairment of the environment and costs of reasonable measures of reinstatement?

For the same reasons given in Question A-3, no country could show, for its market overall, premium or claim changes over the last 5 to 10 years. However, the German reply noted that, based on the individual experience of insurers, costs rapidly increased, especially for indemnification of damage caused by pollution of industrial sites where the causal link dates from some time ago.

A-5 To what extent and how often do claims for compensation for damage under consideration exceed the maximum sums covered by policies? Are these maxima always freely negotiated by insurer and insured?

In all countries, limits of cover in amount are freely negotiated between insurer and insured, subject to reinsurance possibilities for very high amounts. It is not possible to state which amounts and how frequently damage suffered by third parties as a result of the same event has exceeded cover

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limits. Such cases would seem relatively rare and it is true to say that over the last 5 to 10 years all victims have been correctly indemnified by insurers.

A-6 What are at present the maximum amounts of cover offered by insurers? How do these amounts compare with the claims made after a disaster or estimated claims for such disasters? Can these amounts be increased if necessary, for example, by increasing the sum which the insured party must pay himself?

The following amounts are obviously only indications. The survey made of 11 national Associations replying to the questionnaire showed that:

- a) an amount limited to 1 to 2 million ECUs per loss (event) may be currently awarded;
- b) {in special cases, an appreciably higher amount per loss and generally }
{per year can be agreed but providing that:}
- i) the definition of damage covered is acceptable and in particular:
 - that ecological damage (restoration of the natural milieu) is covered by an exclusion or a sub-limit,
 - that normally foreseeable and non-fortuitous damage is deliberately excluded;
- ii) that the insurer obtains the necessary reinsurance;
- iii) that the insured agrees to pay the appropriate premium.

In reply to the latter point, increasing the deductible has, in principle, no effect on the insurer's capacity to offer cover in excess of deductibles.

A-7 Under the policies currently available on the insurance market, can the risk be insured throughout the limitation period during which claims may be made against the insured under national law?

Depending on the country, the limitation period (prescription period) during which claims may be made against the polluter varies between 3 and 30 years.

If the insurance contract includes a clause accepting liability for claims whatever the date of notification if they refer to acts committed or to damage whose first manifestation occurred during the duration of the contract, the cover applies to all late and non-prescribed claims.

On the contrary, if the contract includes a clause which limits liability for claims notified during the duration of the contract, late claims and non-prescribed claims are not covered.

The following table shows the replies per country.

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..
.. Criterion of limitation
..   in time
.. -----
.. COUNTRY• Date of first• Date of• COMMENTS
.. manifestation• claim*
..   of damage*
-----
Finland*•   YES•   YES•   For held business covering
..   •   •   accidental pollution. New trend.
-----
Germany••   YES•   •   - In general policies covering
..   ••   •   accidental pollution.
..   ••   YES•   - Unusual, but tendency to limit
..   ••   •   subsequent guarantee.
-----
Belgium••   YES•   •   - For the majority of held
..   ••   •   business covering accidental
..   ••   •   pollution.
..   ••   YES•   - Still the exception.
-----
Denmark••   YES•   -•   - For all accidental pollution of
..   ••   •   water, soil and air.
..   ••   YES•   - New trend.
-----
Spain••     YES•   -•   - In general policies concerning
..   ••   •   accidental pollution.
..   ••   YES•   - Only in a few specific policies
..   ••   •   subject to the problems caused
..   ••   •   by the insurance legislation.
-----
France••     YES•   -•   - For the majority of held
..   ••   •   business covering accidental
..   ••   •   pollution.
..   ••   YES•   - New trend despite jurisprudence
..   ••   •   which disputes the validity of
..   ••   •   the clause and always in
..   ••   •   specific policies covering
..   ••   •   gradual pollution.
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Italy••     YES•   •   - For the majority of held
..   ••   •   business.
..   ••   -•   YES•   - New trend in general policies
..   ••   •   and always in specific policies
..   ••   •   covering gradual pollution.
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(continued)

.. Criterion of limitation
.. in time

.. -----

COUNTRY	Date of first manifestation	Date of claim*	COMMENTS
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Norway.. YES. -. - For the majority of held and
.. .. . new business.
.. -. YES. - Still the exception.

Netherlands.. YES. -. - In general policies covering
.. .. . accidental pollution.
.. -. YES. - Only in specific policies.

United Kingdom.. YES. -. - For held business covering
.. .. . accidental pollution.
.. -. YES. - Still the exception.

Sweden.. YES. -. - For held business covering
.. .. . accidental pollution.
.. .. YES. - New trend.

Switzerland.. Date of act.. YES. - By general policies for all
.. .. . committed installations other
.. .. . than waste sites and waste
.. .. . treatment/elimination
.. .. . installations.
.. .. . - By special policies for waste
.. .. . sites and waste and rubbish
.. .. . treatment installations.

* During the period of validity of contract.

B. SPECIFIC QUESTIONS

The following questions are designed to elicit comments from insurers on the practicability and implications of the solutions envisaged by the Committee.

B-1 Can the insurance industry provide the necessary insurance cover to ensure the operation of the strict liability system outlined above?

All the replies agreed that it would be possible to insure strict liability of polluters:

- providing that:

- a) the law laying down such liability is sufficiently precise to enable the insurer to assess the weight of the risk;
- b) the insurer is not hindered by "in concreto" supervision of risks to be covered;
- c) the insurer can limit his intervention to damage resulting from unforeseen and fortuitous causes;

-- and subject to maintaining the classic cases of exemption for force majeure, third party fault or contributory negligence.

Insurers insist that their rights of recourse through subrogation against liable third parties be maintained.

It should be noted, furthermore, that in some countries (Spain, Switzerland), various laws on the pollution of water or the atmosphere have already laid down the principle of strict liability (liability for risk) and that it does not appear therefore necessary to introduce this principle into a general law.

B-2 Could all dangerous activities be insured?

In principle, all dangerous installations and substances are insurable if the general and special rules concerning security and prevention of pollution risks are complied with.

It should be noted that this reply applies to fixed and operating installations.

B-3 Is the concept of "reasonable measures of reinstatement" sufficiently certain for the insurance industry (i.e. measures taken to restore, rehabilitate or acquire the equivalent of spoiled natural resources)?

All the replies showed that this concept was, in fact, insufficiently clear for insurers.

Who would judge the "reasonable" nature of such measures? How far would the obligation to restore an eco-system go? What would be the time limit for the reinstatement to be considered satisfactory?

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Insurers are concerned at the replies given to this serious question, on which their capacity to cover the expenditure incurred for such measures depends.

B-4 In the Committee's view, the incident from which damage originates would not necessarily be an instantaneous, accidental or deliberate occurrence; it could be a continuous emission. Is there a problem in supplying insurance cover for damage which does not result from a sudden occurrence? What exclusions or restrictions to insurability might have to be considered (fortuity, abnormality, unforeseeability...)?

As shown by the summary table under Question A-1, covering the consequences of pollution of non-sudden and gradual origin is:

- possible in France, Italy, Netherlands, Sweden (except for foreseeable or voluntary pollution), Finland (except for foreseeable or voluntary pollution);
- exceptional in Belgium, Denmark, United Kingdom (except for foreseeable or voluntary pollution);
- not offered in Germany, Spain and Switzerland.

Two separate facts are combined in the question: the cause of the emission (e.g. failure of a filter) and the manifestation of the emission. The question should be made clearer to enable more detailed responses to be given.

B-5 What implications for the premiums stem from a channelling of the strict liability to the operator? What insurance problems can arise in the case of recourse?

Channelling liability to the operator of the installation which is the source of the pollution, without any possibility of recourse, would lead most certainly to an appreciable increase in premium for that operator.

Channelling liability to the operator, linked to possible recourse, would also lead, to a lesser degree, to an increase in the insurance premium because:

- a) of the hypothetical nature of the success of recourse against third parties who may be insolvent;
- b) of the increase in legal costs.

B-6 In case a limitation of liability is envisaged, what amounts of limitation could be reasonably insurable? Would it be appropriate to make distinctions between damage resulting from different categories of dangerous activities or between different types of damage (personal damage and other damage)?

As the markets currently stand, the limits considered as reasonably insurable are those which have already been indicated in response to question

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A-6, i.e. up to 2 million ECU per event whilst higher limits could only be envisaged for definitively insurable risks.

B-7 Two different prescription periods have been provisionally singled out by the Committee (3 years with effect from the date on which the person had knowledge or should have had knowledge of the damage and the identity of the operator and 10 years with effect from the date of the causal event). What consequence would an extension or shortening of the 10 years' prescription period have on insurability?

All the replies show that the shorter the prescription period, the easier the insurance. Uncertainty as to the start date for the deadline is to be feared, however. This start date normally should be the date of the causal event but may be open to discussion in the event of gradual pollution.

B-8 If the damage has become known after the closure of a waste disposal site, the liability resting on the last operator might not extend beyond a certain number of years having elapsed since the closure of the installation in conformity with the existing requirements. Could insurers give advice about the appropriate number of years?

Insurers think that this should not exceed 2 to 3 years after the closure of the waste site. However, the risk only remains insurable if the waste site continued to be supervised with adequate on-site surveillance.

B-9 Could insurers operate a system of compulsory insurance? Should, for insurance purposes, a reasonable limit of compensation be considered? Would it be appropriate to provide compulsory insurance for some of the most dangerous activities? If so, which activities should be recognised as such? Would a restriction of compulsory insurance to some dangerous activities have an impact on the premiums? Would a possibility of direct action against insurers cause problems?

Generally speaking, insurers consider that calling on insurance must remain a spontaneous act on the part of individuals and undertakings who risk incurring civil liability in their activities whatever they may be. It is therefore up to the public authorities and to them alone to decide if insurance must be compulsory in the event of environmental impairment.

From a technical point of view, insurers have the following comments:

- some risks may appear to be totally uninsurable;
- insurance made compulsory removes the flexibility from the discussion on deductibles borne by the persons responsible for the damage. Even the absence of deductibles may make the insured deviate from his individual prevention efforts';
- whereas the needs of cover vary depending on the undertaking, compulsory insurance does not allow "made to measure" solutions;
- supervising compliance with obligation would appear to be difficult and costly if it were to apply to every undertaking whatever the degree of danger inherent in its activities;

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-- however, the decision to restrict the obligation to some installations or certain activities would raise delicate problems of the danger threshold.

With the exception of the views expressed by the British Association, all replies considered that direct action by victims against insurers would not constitute an obstacle, even in countries where such direct action is not yet the case.

B-10 Can a system of compulsory insurance be expected to strengthen the industry's effort to minimise pollution? In this respect, do insurers benefit from the services of engineers or other specialists for the inspection of installations or sites and the assessment of risks? Does the insurer in effect impose certain safety measures on the prospective insured?

Is a premium system conceivable, in which the taking of safety measures involves a reduction of the premium?

-- Almost all replies indicate that compulsory insurance would have no effect on the efforts of undertakings to prevent pollution;

-- Insurers definitely make use of engineers and other specialists who can, before the policy is concluded and during its application, impose prevention and safety measures;

-- Normally, noting appropriate safety measures is a condition of insurability but it cannot be said that, of itself, this leads to an entitlement to a reduction of premium.***

B-11 What would be the reaction of insurers to the possibility of participating in the administration of an international or national fund to provide compensation supplementary to the operator's liability, when for example the operator is unknown or insolvent, or when the limitation period has expired?

Would insurers be willing to enter any (insurance) arrangements with a view to providing compensation through such a fund supplementary to or in place of operator's liability?

Further consideration would need to be given to the setting up of a fund which would function in addition to insurance or insurance participation in such a fund. It is not possible, a priori, to reply to this question without knowing how the fund would be set up or how it would operate.

Table 1. Pollution insurance pools

	GARPOL (1977) ASSURPOL (1989) (France)	MAS (Netherlands)	ANIA (Italy)	OPLRP (Japan)	CEILIF (United Kingdom)	EILI (United Kingdom)
Date of creation	1989	1989	1984	1979	1975	1990
Capacity (per accident)	30 MF (1988) 131 MF (1991)	15 MF (1990)	5 MF (1989) only	50 000 ML (1990) (gradual poll.)	5 000 MY and gradual	5 M£/3 y
Members	51 ms + 14 reins. (1990) ...domestic market)	..... (80% of the market)	52 (90% of the market)	84 (1990) (Italian market)	38.....	.....
Premium paid (gross)	4.2 MF (1988) 5.5 MF (1989) 10.3 MF (1990)	.....	0.431 MF (1987)	12 000 ML (1990)	.....	.....
Premium (net)	3.9 MF (1988) 5 MF (1989) 9.7 MF (1990) 14 MF (1991)	.....	0.279 MF (1987)	8 750 ML (1990)	.....	.....
Technical results	1.22 MF (1988) 1.11 MF (1989)	.....	-0.247 MF (1987)	5 196 ML (1990) record	Good	.....
Losses	3.6 MF (1990) 0.48 MF (1988)	.....	0.015 MF (1985-87)	-	.....	.....
Number policies	217 (1990) 10 000 (1989) .....	.....	1 163 (1987) risks	1 151 (1990)	.....	Most large oil (1991)

Table 1. (continued)

	GARPOL (1977) ASSURPOL (1989) (France)	MAS (Netherlands)	ANIA (Italy)	OPLRP (Japan)	CEILIF (United Kingdom)	EILI (United Kingdom)
Distribution of policies by nature:		1990	1987	1990		
Waste	33.4%	400 pol.	93 000 Fl	Oil ind. 19.6 %	Only for members of the Chemical Industry As	
Oil ind.	10.2%	7 pol.	96 000 Fl	Waste storage	Metallurg. ind. 10.2 % (U.K and foreign plants)	
Surface treatment	10.2%	Industry		and water treatment 20% Other 18.2%		
Chemical ind.	23.1%	6 pol.	98 000 Fl			yes
Agricult. ind.	7.7%	SME				
Water treat.	15.4%	750 pol.	144 000 Fl			
Deductible	Yes	Yes	10 %	1 MY		
Neutralisation/clean up cost	Yes (up to 20% cover)			-	Yes	
Legal costs	Within the limit	Within the limit		In addition but to 25% of compensation paid		
Type of policy	Claims made			Claims made		Claims made

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END-OF-TEXT