REPORT

TECHNICAL PROVISIONS IN NON-LIFE INSURANCE

CONFERENCE OF THE INSURANCE SUPERVISORY AUTHORITIES OF THE MEMBER STATES OF THE EUROPEAN UNION

CONFERENCE OF THE INSURANCE SUPERVISORY AUTHORITIES OF THE MEMBER STATES OF THE EUROPEAN UNION

This report was drawn up under the chairmanship of Mr Giovanni Manghetti, President of ISVAP (Italian insurance supervisor)

For further information on this publication, please contact the Conference Secretariat:

Philippe VECCHIERINI, Secretary: Tél.: +33.1.55.07.42.17

Fax: +33.1.55.07.41.50

philippe.vecchierini@cca.finances.gouv.fr

1. INTRODUCTION

2. PROVISION FOR CLAIMS OUTSTANDING

- 2.1 THE PRINCIPLE OF THE ULTIMATE COST
 - 2.1.1 General Remarks
 - 2.1.2 Results of the works
- 2.2 RULES OF CALCULATION
 - 2.2.1 Valuation Methods
 - **2.2.1.1** Claims incurred and reported by the balance-sheet date
 - **2.2.1.2** Results of the works
 - **2.2.1.3** Claims Incurred but not Reported by the Balance-Sheet Date (IBNR)
 - **2.2.1.4** Results of the works
- 2.3 PROVISION FOR CLAIMS SETTLEMENT COSTS
 - 2.3.1 Results of the works
- 2.4 EXPLICIT DEDUCTIONS OF CLAIMS OUTSTANDING
 - 2.4.1 General Remarks
 - 2.4.2 Claims Outstanding Net of Recoveries
 - **2.4.2.1** Results of the works
 - 2.4.3 Discounted Provision for Claims Outstanding
 - **2.4.3.1** Results of the works
- 2.5 MOTOR VEHICLE AND SHIPS LIABILITY INSURANCE: PROVISIONS FOR BIOLOGICAL DAMAGE
- **2.6** GENERAL THIRD-PARTY LIABILITY: PROVISIONS FOR CLAIMS WITH DEFERRED EFFECTS (CLAIMS INCURRED BUT WHOSE EFFECTS HAVE NOT BECOME MANIFEST), LATENT CLAIMS
 - 2.6.1 General Remarks
 - 2.6.2 Construction Risk in France
 - 2.6.3 Results of the works
 - 2.6.4 Latent claims
 - 2.6.5 Results of the works
- 2.7 FIRE AND NATURAL FORCES: CLAIMS FOR NATURAL CATASTROPHES
- 3. THE PROVISION FOR CLAIMS OUTSTANDING IN REINSURANCE
 - 3.1 General Remarks
 - 3.2 Results of the works
- 4. PROVISION FOR CLAIMS OUTSTANDING TO BE BORNE BY REINSURERS
 - 4.1 Results of the works
- 5. EQUALISATION PROVISIONS
 - 5.1 General Remarks
 - 5.2 Results of the works
- 6. PREMIUM PROVISION

6.1 THE PROVISION FOR UNEARNED PREMIUMS

- **6.1.1 Calculation Rules**
 - **6.1.1.1** Valuation Methods
 - **6.1.1.2** Results of the works

6.2 PROVISION FOR UNEXPIRED RISKS

- **6.2.1 Accounting Treatment**
 - **6.2.1.1** General Remarks
 - **6.2.1.2** Results of the works
- 6.2.2. Calculation Rules
 - **6.2.2.1** Valuation Methods
 - **6.2.2.1.1** General Remarks
 - **6.2.2.1.2** Results of the works

7. PREMIUM PROVISION FOR REINSURANCE

7.1 RESULTS OF THE WORKS

8. PREMIUM PROVISION TO BE BORNE BY REINSURERS

8.1 RESULTS OF THE WORKS

- 9. AGEING PROVISION
 - 9.1 GENERAL REMARKS
 - 9.2 RESULTS OF THE WORKS

10. LLOYD'S: Technical Provisions for Non-Life Insurance Classes

11. FISCAL TREATMENT OF TECHNICAL PROVISIONS

- 11.1 GENERAL REMARKS
- 11.2 RESULTS OF THE WORKS

12. THE ROLE OF THE ACTUARY IN CALCULATING AND CONTROLLING TECHNICAL PROVISIONS IN GENERAL BUSINESS

- 12.1 GENERAL REMARKS
- 12.2 RESULTS OF THE WORKS

13. SUPERVISION OVER TECHNICAL PROVISIONS

- 13.1 GENERAL REMARKS
- 13.2 RESULTS OF THE WORKS
- 14. THE RIGHT TERM: "reserves" or "provisions"?

15. SUMMARY AND FINDINGS

List of Annexes

- Annex 1: Statistical data
- Annex 2: Economic-financial differences between an undertaking (A) which operates with the provision for claims outstanding at the ultimate cost and another one (B) which applies discounting.
- Annex 3: Provisions techniques d'assurance construction en France.
- Annex 4: Latent claims and the EU Rome working Group (Danish delegation).
- Annex 5: Insurance against natural perils or disasters the Norwegian case.
- Annex 6: Contribution of the Groupe Consultatif des Associations d'Actuaires.
- Annex 7: Summary tables on the regulations implementing Directive 91/674 on the annual accounts and consolidated accounts adopted by delegations.
- Annex 8: Denomination of the main technical provisions in each country's mother tongue.

1. INTRODUCTION

At the end of the 1970s the subject of technical provisions in non-life insurance classes was scrutinized by a working party (the Angerer Group). After a detailed examination of existing law on technical provisions in the various countries of the European Community and in those participating in the Conference, it formulated some basic concepts for each type of provision (which are by now commonly accepted in the Community), and also made some harmonisation proposals.

Afterwards the report of the "Müller Group", at the conclusion of its examination of the solvency margin, observed that generally speaking the "solvency margin, although functioning as a warning system and financial safeguard, was not a substitute for a practical analysis of the individual companies and a prudent establishment and coverage of technical provisions".

In practice one of the main technical risks for the solvency of insurance companies is certainly that of underestimating technical provisions. This risk concerns the impossibility on the part of the companies to meet their commitments towards the insured and the claimants due to insufficient technical provisions.

The risk of insufficient technical provisions should therefore be forestalled both by companies by adopting prudential (this term is to be interpreted in relation to the specific and precise methodologies for calculating technical provisions described in the report)¹ calculation procedures and methodologies when setting up the provisions, and by supervisory authorities.

If the possession of sufficient technical provisions is an indispensable requisite for the company's solvency, the level of harmonisation among the methodologies adopted in the various countries is equally important. In fact the absence of full convergence between the methods and evaluation criteria underlying such fundamental balance sheet items determines, all operating conditions being equal, differences in operating results, company's capital and solvency margin.

Rules on the setting up and valuation of technical provisions can be found both in the IAD and in the prudential directives. Whereas in life assurance the most important regulations on technical provisions are included in art. 17 of the directive 79/267/EEC, in non-life insurance prudential directives refer to the IAD as regards the establishment and valuation of technical provisions. However, the calculation of the equalisation provision is regulated in directive 73/239/EEC.

The Working Group, presided over by the Italian delegation, with the mandate of the Conference of Insurance Supervisory Authorities was, therefore, set up to continue the work of the above-mentioned Angerer Group.

The Working Group chaired by the president of ISVAP, Mr Giovanni Manghetti and made up of the supervisory authorities of the EU countries and of the other countries participating in the Conference commenced its work in February 1999 with the objective of presenting to the Conference, and thus to the Commission, an up-to-date overview of the procedures used to calculate technical provisions at present being used in the various markets and the degree of convergence between the underlying evaluation methods and criteria.

On the one hand, directive 91/674 represented a step forward as regards technical provisions for non-life insurance as it bridged a statutory gap. However, on the other hand, each State was left to choose among the important options in the evaluation of technical provisions, first of which being the option of posting provisions for claims outstanding to the balance sheet at ultimate cost or at discounted value. Furthermore, for some types of provision such as the equalization provision, the directive deferred the decision to future harmonisation, while for others it supplied general definitions without stating any specific technical parameters for their calculation or even for reference purposes (for example, provision for unexpired risks).

6

The term does not imply any discretionary power in the valuation but only the compliance with technical calculation principles.

The Working Group focused upon the concept of ultimate cost and discounting, examined the objective elements that make up ultimate cost as well as the practical procedures for its calculation. It emerged that an identical criterion of valuation of the provisions for claims outstanding at the ultimate cost must be used as a basis even when this provision is discounted. The examination of the calculation methods, including the use of statistical techniques was conducted taking due account of the critical aspects that characterise non-life insurance, such as long-tail classes (conventionally identified but on which a good level of agreement was found) and latent claims. As concerns the discounting of the provision the Working Group also availed itself of simulations (of a deterministic type) for a detailed investigation of the question from certain points of view: for example, the analysis of solvency, the compatibility of the discount with supervisory objectives and the comparability between balance sheets.

The work, therefore, continued with the examination of the other most important technical provisions for non-life insurance, such as the equalization provision, the premium provision and the ageing provision.

An initial attempt was also made to collate general information on how technical provisions are taxed in the various European countries. In conclusion the actuary's function (or similar professions) was discussed in relation to the auditing of technical provisions and, more generally, in non-life insurance.

Finally, the procedures adopted by supervisory authorities for the control of technical provisions were also examined.

2. PROVISION FOR CLAIMS OUTSTANDING

Article 28 of DIRECTIVE 91/674/EEC reads: "The provision for claims outstanding shall be the total estimated ultimate cost to an insurance undertaking of settling all claims arising from events which have occurred up to the end of the financial year, whether reported or not, less amounts already paid in respect of such claims".

2.1 THE PRINCIPLE OF THE ULTIMATE COST

2.1.1 General Remarks

The definition of claims outstanding contained in article 28 of the Directive is of particular importance on account of the introduction, within Europe, of the "ultimate cost" valuation principle.

Laying down this principle marked a great step forward in the harmonisation of rules for the calculation of claims outstanding with respect to what was established by the first non-life Directive 73/239, which simply let the single Member States fix the national rules for the creation of sufficient technical provisions.

The definition of article 28 equates the amount of the provision for claims outstanding with the total estimated cost for settling all claims together with the provisions - contained in the following article 60^2 of Directive 91/674 - for taking account, for each individual claim, of the costs still expected to arise, as well as, at the level of the total cost of settling claims, all those factors that could increase it. As such, and for the first time as regards insurers and States, this definition represents a common reference environment on which to base the valuation of this item.

² Article 60, respectively, par. 1, letter a) and par. 8, point iii).

These explicit, although general, references to costs expected to arise and to incremental cost factors have required the Group to make a brief analysis, as a preparatory stage in the work, so as to single out the elements to be taken account of in the valuation of the provision for claims outstanding in order to enable the ultimate cost philosophy to be applied in full.

2.1.2 Results of the works

All the delegations agreed that the principle of the ultimate cost is equivalent in practice to a valuation of the provision that would be constantly in line with the needs of exhaustiveness and sufficiency.

In this regard, it has been underlined that a valuation in conformity to the foregoing principle implies that the insurer, as early as the first registration of a claim to provision, must make a prudential valuation of the final value of its total outlay. The latter, for every individual claim, can be calculated with certainty as that amount to be paid to the beneficiary, while as regards a generation of claims, it is equivalent to the total outlay sustained by the insurer, once that generation of claims is completely settled. In both cases the final value of the claim must take account of any other cost sustained by the insurer, even indirectly, in relation to the claim itself.

Therefore the principle of the ultimate cost implies that the provision for claims outstanding must be set aside on a prudent basis so that the number of cases of subsequent insufficiency can be reasonably limited³.

When valuing the provision it appeared necessary, in first place, to take account of all those elements that objectively contribute to its formation and which also substantially refer, for all the delegations, and regardless of the class of insurance, and for <u>claims incurred and reported</u> by the balance-sheet date, to:

- the amount of the damage or the indemnity;
- any foreseeable expenses or legal interests if the claim has led to litigation;
- the costs to be reimbursed to the insured party in order to limit damages where this is provided for in the policy (for example, the expenses of extinguishing a fire in fire insurance or salvage expenses in marine or aviation insurance);
- other settlement costs directly ascribable to the claim.

In addition to the foregoing objectively identifiable elements, there is the practice, in all countries, and moreover, explicitly provided for in the Directive, of setting up a provision for claims incurred but not reported (IBNR), by the balance-sheet date.

Finally, to complete the provision for claims outstanding, a specific fund is set up to cover the indirect costs of claims settlements.

Right from the start of the work, it appeared clear that, in general, the estimate of the provision allocations pose various levels of difficulties for insurers on account of the information available to them. The reason is that even reported claims can present, when the provisions have to be valued, various levels of uncertainty (varying from those just reported on which information is very limited to those definitively quantified and for which only the settlement has to be concluded). In particular, the highest level of uncertainty regards precisely those claims whose elements are not known or too limited at the moment when the annual accounts are drawn up.

prudential assumptions.

³ UK pointed out that the fundamental requirement for UK regulated companies relating to provision outstanding claims is that "The amount of technical provisions must all times be sufficient to cover any liability arising out of insurance contracts as far as can be reasonably foreseen." (Para 43 of Schedule 9a, Companies Act 1985). UK has also made clear that this requirement does not require overstatement, which would result from the consistent use of

Another source of uncertainty, common to all claims for which the settlement has not been concluded, derives from forecasting <u>incremental cost factors</u> that influence the final settlement, (and significantly so for some classes of risk), and which, in line with the principle of the ultimate costs, must be included in the sums allocated to the provision.

The Group has in particular identified the following factors:

- economic inflation in general or that characterising a particular class of risk;
- court rulings that tend in general to be in favour of increasing indemnities for personal injuries;
- changes in laws and the behaviour of insured parties, generally defined as social inflation.

It has, anyhow, been found that in general there are no rules for identifying single factors.

The principle of the ultimate cost as a general technical rule

In practice, all the delegations in referring to the prohibition on making implicit deductions or discounting, under any form, as established by article 60, letter g), asserted that in no way can the principle of the ultimate cost be derogated as a general technical rule for the calculation of the provision for claims outstanding.

The principle must, therefore, always be respected even when States, on basis of the indications in the Directive, permit explicit deductions for recoverable amounts and the writing to the annual accounts of the discounted provision for claims outstanding (see paragraph 2.4).

2.2 RULES OF CALCULATION

2.2.1 Valuation Methods

2.2.1.1 Claims incurred and reported by the balance-sheet date

DIRECTIVE 91/674/EEC. Article 60, paragraph 1, letter a) states that in principle *the provision for claims outstanding must be computed separately for each case* while *statistical methods* can be used on condition that, taking account of the nature of the risks, the provision is sufficient. In this respect, the regulations foresee the possibility of subordinating the use of such methods to the approval of the Supervisory Authority.

2.2.1.2 Results of the works

Valuation methods - case by case or inventory method

Generally speaking, the inventory method, or the examination of every single claim, is the basic rule for the valuation of the provision for claims outstanding and is adopted in all countries.

On this question, the Group has examined the following questions:

a) if the inventory method can be held to be identical in its contents for all markets, or if the loss adjuster in valuing the individual claim should limit himself to only considering the objective elements contained in the documentation, or can consider increasing their value

(also at the request of the undertaking) in order to take account of probable inflation or any other incremental cost factor of a claim.

b) If the inventory method can by itself lead (and, in particular, as early as the first registration to the provision) to a valuation in line with the philosophy of the ultimate cost given the various types of damage and the features of the various classes of insurance. The estimate of this provision and the verification of its conformity to the foregoing principle of valuation presents various levels of difficulty for the insurer. Thus it immediately became clear to all the delegations that the definition of the amount that the company will pay to the beneficiary possesses elements of uncertainty varying from class to class that reflect the fact that to the various classes there correspond risks with different characteristics and that the concept of ultimate cost will inevitably be affected in the concrete application by the different types of risk and of claims, notwithstanding the fact that it is a general valuation clause.

With reference to the first aspect, it appears that no rules exist. In practice, the two possibilities coexist and vary from company to company. Therefore the loss adjuster may or may not consider (on a subjective basis or upon the indication of the company) future inflation or other incremental cost factors, even if in general the first possibility seems to prevail.

The analysis of the second question called for a preliminary examination regarding the characteristics of the claims and the classes that can be defined short or long tail⁴. The following common position emerged on this question:

- short-tailed claims (and classes) are characterised by losses where the *an*⁵ can easily be determined under the cover and whose amount can be calculated almost exactly either because they are reimbursement of expenses or because they are closely linked to specific contract terms (capital assured, excess, deductible);
- long-tailed claims (or classes) are characterised by losses where the *an* is more difficult to define (for example as to the degree of liability), and whose amount can sensibly vary (for example biological damage). The classes falling within this group are often characterised by a high number of litigations.

The following chart shows the answers given by delegations with regard to the different insurance classes according to the classification in Annex A to Directive 73/239 (as modified by Directives 87/344 and 84/641). However the statistical data relating to some indicators (ENCL. N. 1) have shown that this classification of insurance classes is not always consistent with the classification used by undertakings in their annual accounts.

As shown in the chart, from the survey it has come out that the Group has almost unanimously defined as short-tail those risks classified under 3, 8, 9, 14, 16 and 18, while the long-tail risks are those under 10, 12 and 13. The answers relating to classes 1 and 2 have underscored in particular how the differences in the insurance markets or in pensions schemes and welfare systems in force in the different countries can influence the classification of covers within the different classes⁶.

The definition of short or long-tail was proposed as an empirical definition depending on the time necessary to extinguish at least 90-95% of the number of claims and /or 90-95% of the amount of a class. They were respectively up to 4 years for short-tail classes and over 4 years for long-tail classes. The minimum period of 4 years (understood in this case as the overall length of a generation of claims) was tentatively chosen on the basis of the provisions of article 60, letter g) point i) for the financial discounting.

⁵ Latin word indicating, in insurance of goods, if the claim is covered and, in liability insurance, the verification that the person causing the damage is to be held liable.

⁶ For example insurance class 2 includes the long term cover "Workers compensation" in Norway and Sweden or the reimbursement of medical expenses in Italy (which, on the contrary, is a short-tailed class).

After carrying out this preliminary survey, the debate on the question under b) has shown the following common position:

- for damages that can be easily quantified (e.g. contained material damage⁷, reimbursements of expenses based on documents, etc.) and in general for insurance classes marked by short-tail claims, the case by case method leads with *almost* practical certainty to the value of the claim at the ultimate cost *from the first time the claim is shown in the provision*. Therefore, it does not cause the company problems of possible integration. In this regard, however, it was underlined that in different countries for this type of damages, inventory valuation is replaced by amounts evaluated on the basis of statistical evidence or on a flat-rate base;
- for complex claims and, in general, for insurance classes marked by long-tail claims, the estimate made with the inventory method requires verification by the insurance company generally aimed at integrating the loss adjuster's estimate. This verification can be done by using actuarial methods or, according to some delegations, other methods as long as they meet prudential requirements.

• Statistical Methods

As to statistical methods two possible scenarios have emerged and have required deeper investigation by the Group:

a) Use of statistical methods for valuation purposes, fully or partially replacing the inventory method

Most of the delegations have stated that a limited and regulated use⁸ of statistical methods (Table N.1) and in particular of the average cost is generally allowed to assess similar claims of minor entity and whose number is sufficiently high or (in just one case) when the inventory method cannot be used. It came out that these claims are, for instance, material damage in motor vehicle liability or the claims reported by not more than two years. In some cases the use of the average cost is not allowed for some given classes (i.e. Credit and Suretyship in Italy) or is objectively limited (i.e. in Austria and Germany the result of a valuation at the average cost must not differ considerably from the result the inventory method would produce, while in Greece the statistical method is applied as an alternative to the inventory method for non-life classes, except for motor vehicle liability insurance. In this latter class both the statistical and inventory methods are used for damage relating to the last year to be examined, and the higher value is taken as a provision).

From a statistical point of view, the average cost used for material or easily assessable damage and for short-tail insurance classes, where the effect of inflation is negligible, does not seem to be generally based on complex statistical methods that presume assumptions on the distribution of settlements over time or of the financial type, but simply on valuations similar to any other flat-rate calculation.

b) <u>Use of statistical methods for the supervision over the estimate obtained by using the inventory method</u>

For long-tail insurance classes, which are often characterised complex damage or bodily injuries, all the delegations do not normally expect the use of flat-rate methods or of the average cost as defined under the above point a) for the calculation of the provision for claims outstanding. As already pointed out, in this case too we can never leave aside the analytical examination of each position. At the same time the delegations have stressed the need that this

⁷ This type of damage is also present in the long-tailed insurance classes, such as material damage in insurance class 10 (motor vehicle liability).

⁸ A, B, D, DK, F, Fin, I, N, P, S and UK.

inventory value, assessed according to the undertaking's claims settlement structure, must be subject to a statistical or actuarial verification to establish its compliance with the principle of the ultimate cost. This control, which on some markets is recommended or regulated and in others is in practice exercised by undertakings, can lead to rectifications – generally only to increases – of the inventory provision, so that in practice a complex multiphase procedure for the estimate of the provision is adopted, and several subjects with different professional qualifications take part in it⁹.

In this case the statistical methods¹⁰ used for the control are detailed and complex and require the contribution of an actuary or a similar professional or in any case of qualified staff¹¹. In fact these models generally reproduce the future claims settlement process under particular conjectures of inflation and take into account the undertaking's historical cycles. These methodologies make it possible for the company to judge whether the valuation of case by case estimates is sufficient and possibly establish the need for integration. In some countries this verification is one of the statutory tasks of the appointed actuary. 12

2.2.1.3 Claims Incurred but not Reported by the Balance-Sheet Date (IBNR)

Article 60 (1) b) of DIRECTIVE 91/674/EEC reads that the provision shall also allow for claims incurred but not reported by the balance-sheet date; its amount shall be determined having regard to past experience as to the number and magnitude of claims reported after the balance-sheet date.

2.2.1.4 Results of the works

This provision is always calculated on the basis of statistical methods, having considered the experience coming from the undertaking's historical cycles.

In most countries the calculation of IBNR is not regulated: each undertaking can freely choose its method. In some countries these methods are applied or checked by an actuary. Only some delegations¹³ envisage provisions contained in by-laws. The Group has given its unfavourable opinion on the introduction of additional rules, at the European level, for the calculation of IBNR, for the present system is considered effective in all countries due to its flexibility.

From the works it also came out that for short-tailed insurance classes the insurer has no special problem in gathering data about the past experience on IBNR and therefore about the estimate of their expected number and average cost. On the other hand some delegations have drawn the Group's attention to the problems connected with the calculation of IBNR for longtailed insurance classes for which, in some cases¹⁴, there is a high number of unreported claims whose effects appear many years after the event which caused them. In these cases when closing the balance-sheet the insurer does not have sufficient data for the estimate of frequency and average cost, while the past experience can be no longer reliable for a forecast.

I. DK. Fin and N.

The methods mainly used for the verification of provisions for claims outstanding are those of a link-ratio type (in particular chain-ladder), based on the projection of the average cost, of the loss ratio as well as on the Bornhuetter-Ferguson technique.

For **D** and **F** in this case the statistical methods used for the control require the professional contribution of qualified staff and in the UK staff may be qualified by suitable experience rather than professional qualification.

Fin, N and P.

I. GR. P and E.

Examples for that are construction risks. However, there are a lot of other areas (pollution, product liability, disease claims from employers liability, etc.) where the IBNR is difficult to calculate due to the long period between occurrence of a claim and manifestation of the claim.

During the works it also came out that a minority of delegations¹⁵ include in the estimate of IBNR also an estimate of those claims already closed for which it is envisaged that the settlement procedure will be re-opened (the so-called re-opened claims).

2.3 PROVISION FOR CLAIMS SETTLEMENT COSTS

Article 60 (1) c) of DIRECTIVE 91/674/EEC reads that claims settlement costs shall be included in the calculation of the provision irrespective of their origin.

2.3.1 Results of the works

With regard to the determination of costs, none of the delegations had any difficulty in indicating the distinction between costs external to the company and internal costs, where:

- by external costs is meant in general fees paid to professionals for their contribution in the settlement of claims;
- and by internal costs is meant the indirect costs linked to claims management, i.e. to the personnel and goods used for this end.

Not all countries make an explicit distinction between external and internal claims management costs. In Austria the provision for claims management may include both types of costs (the external and internal costs). However, a distinction is made between claims settlement costs directly attributable to individual claims and those costs for which such a direct relationship does not exist. The provision for claims settlement costs only covers the latter, whereas the costs which are directly linked to individual claims are covered by the provision for claims outstanding.

As regards the estimate of future costs, it is common practice to use flat rate or statistical calculation methods mainly for indirect costs, while in general no rule has been established and the choice of the methods to be used is left to the undertakings' discretion¹⁶. However many delegations have underlined the difficulties that the Supervisory Authority may have to face when controlling the provision for claims settlement costs due to the absence of statistics of reference to use for countering undertakings or when undertakings outsource claims settlement, or else when the methods used vary considerably. Most of the delegations have highlighted the need to gather greater experience in this field and hope that companies will progressively abandon the flat rate practice and that they will adopt analytic accounting whose criteria should be systematically communicated to the supervisory authority.

2.4 EXPLICIT DEDUCTIONS OF CLAIMS OUTSTANDING

2.4.1 General Remarks

As already pointed out under point 2.2.2 the principle of the ultimate cost is a general valuation rule for claims outstanding and as such cannot be derogated. In fact the provision must always be assessed according to this rule, also when Member States have chosen to adopt the options under d) and g) of article 60 of DIRECTIVE 91/674/EEC. More precisely this point is made clear under g) – iii), where it is stated that, in case of discounting of the provision, when

¹⁵ **D, UK, Isl, Fin, F** and **N**.

Although no method has been established by law, in some countries (for example Austria) statistical methods have been worked out for computing the provision for claims settlement costs. In Austria a method is usually applied by insurance companies and must be approved by the supervisory authority.

calculating the total cost of settling claims, an undertaking takes account of all factors that could cause increases in that cost.

The principle that the assessment at the ultimate cost must always be the rule is also confirmed by the disclosure that the Directive requires for the discounting. In fact such Directive establishes that undertakings must, in the notes on their accounts, disclose the total amount of provisions before discounting and the relevant financial benefit. The same disclosure is required for provisions shown in the balance-sheet net of recoverable amounts, which must also be disclosed in the notes on the accounts (only where such amounts are material).

2.4.2 Claims Outstanding Net of Recoveries

Article 60, (1) d) of DIRECTIVE 91/674/EEC lays down that recoverable amounts arising out of the acquisition of the rights of policyholders with respect to third parties (subrogation) or of the legal ownership of insured property (salvage) shall be deducted from the provision for claims outstanding and shall be estimated on a prudent basis. Where such amounts are material, they shall be disclosed in the notes on the accounts.

By way of derogation to this provision, letter e) of the same article envisages that Member States may require or permit the disclosure of recoverable amounts as assets.

(If this latter solution is adopted, the provision for claims outstanding must be shown under liabilities gross of these amounts).

2.4.2.1 Results of the works

As to the possibility to deduct recoverable amounts from the provision for claims outstanding and therefore to show them in the accounts net of these estimated amounts, the vast majority of countries envisage this possibility¹⁷ and in some countries¹⁸ undertakings are given the faculty granted under e) of article 60. Two delegations¹⁹ have adopted neither of the solutions provided for by the said article, and therefore do not allow undertakings to show in the balance sheet the expected recoverable amounts in relation to claims still in the provision.

During the works, a few issues have been brought to the Group's attention, with special regard to the following aspects:

- <u>prudence in valuation of recoverable amounts</u>: generally speaking, the need for prudence prevails without any particular regulations, while in various cases guarantees are required or quantitative limits set based on the past experience of real recoverableness of the sums to be recovered;
- comparability and transparency of accounts: this requires that information regarding estimated recoveries deducted from the provision for claims outstanding must always be explicit (for example, by obligating that it be disclosed in the notes on the accounts regardless of the materiality of their amount) and available both to the supervisory authorities and to financial analysts. In fact the deduction of expected recoverable amounts from the provision for claims outstanding is a practice similar to a financial discount of the

¹⁷ A, D, DK, Fin, GR, Isl, FL, N, NL, UK, Irl, F and S.

¹⁸ **Fin, GR, N** and **P**.

E and I, where it is envisaged that recoverable amounts can be shown as assets only after the claim has been settled, for only in this case can the insurer - as per the Civil Code – take subrogating action or take over legal ownership of the policyholder's goods. However for I, as to the possibility to deduct (the expected) recoverable amounts from the provision for claims outstanding, a by-law concerning only credit and suretyship is still in force. Nonetheless in practice this provision is not respected by undertakings, which do not even show recoverable amounts as assets. Moreover, Spanish regulations on credit and suretyship allow recoverable amounts not to be represented by assets covering technical provisions. So recoveries are deductible only for coverage but they can never be deducted from provisions.

same. Therefore third parties should always be able to reconstruct the amount of the provision gross of this deduction;

- admissibility of expected recoverable amounts between constituting elements of the solvency margin and provisions for claims outstanding: delegations have not shown a common approach as to the treatment of expected recoverable amounts in relation to provisions for claims outstanding with regard to the margin held or the coverage of technical provisions (in this latter case only for the option under letter e) of article 60).

Finally the statistics gathered by some delegations have made it possible to evaluate the incidence of expected recoverable amounts in relation to the corresponding provision for claims outstanding, which varied, in general, between 0.4% and $6.5\%^{20}$

2.4.3 Discounted Provision for Claims Outstanding

DIRECTIVE 91/674/EEC. Article 60 (1) g), by way of derogation from the prohibition to effect any implicit discounting or deduction, lays down that Member States may permit the explicit discounting of the provision to take account of investments. Such discounting shall be permissible only under the following conditions:

- i) the expected average date for the settlement of claims is at least four years after the accounting date;
- ii) the implicit discounting or deduction is effected on a recognised prudential basis; the competent authority must be given advance notification of any change in method;
- iii) when calculating the total cost of settling claims, an undertaking takes account of all factors that could cause increases in that cost;
- iv) an undertaking has adequate data at its disposal to construct a reliable model of the rate of claims settlements;
- v) the rate of interest used for the calculation of present values does not exceed a prudent estimate of the investment income from assets invested as a provision for claims during the period necessary for the payment of such claims.

Moreover, the Directive establishes that such rate must not exceed either the investment income over the preceding five years or the investment income during the year preceding the balance-sheet date.

Finally, in case of discounting of the provision for claims outstanding, article 60 requires the undertaking to disclose, in the notes on its accounts, information such as the total amount of provisions before discounting, the categories of claims which are discounted and the methods used.

2.4.3.1 Results of the works

As to the option concerning financial discounting, nine delegations²¹ have opted for not allowing financial discounting of claims outstanding and this on account of different reasons, which are however all connected with prudential criteria. More precisely some delegations have

²⁰ **B** 1.4%; **F** 6.5%; **Fin** and **NL** 0.5%; **L** 0.4%; **D** 0.6%; **N** 1.8% and **P** 0.7%.

²¹ **A, F, D, GR, I, FL, L, P** and **E**.

pointed out the great difficulty in obtaining an estimate at the ultimate cost for the specific case of long-tail classes. These in general meet the duration requirements set for applying the regulation and at the same time present a high uncertainty as to future financial yields.

Various questions were dealt with by the Group in relation to the alternative choice of discounting the provision²², which the other half of the delegations practise.

Although a certain number of the latter delegations declared that they had implemented to the letter the conditions laid down in the Directive for discounting, it emerged in the course of discussions that interpretative discrepancies exist as regards the methodology to be followed. These concerned:

- The calculation of the "expected average" date for the settlement of claims and for which operative difficulties were reported in terms of the analytic calculation as well as the fact that the former would not permit the rule to be applied²³.
- The technique for the discounting of claims; that is, if the discounting must be carried out analytically claim by claim and thus applied to the inventory. In this respect the interpretation that it should be carried out on a category of claims prevailed. This position would seem to resolve the problem indicated in the foregoing point, insofar as it would imply that the concept of average date must be understood as the duration of a generation of claims rather than the result of an analytic calculation.
- The duration of the time period when the discounting must be effected. In this connection it was not altogether clear if after having established the expected average duration or the characteristic duration of a generation of claims or of a specific class, the discounting could be exclusively carried out for the financial years four years after the accounting date (and thus for the fifth year onwards). Or if the four years requested by the Directive only represented a minimum requirement for allowing a category of claims to be discounted. In this case once established that the class (or the category of claims) is characterised by a settlement period higher than the minimum 4 years, it would, in any case, be subjected to the discounting procedure.

All the delegations that had opted for discounting stated that in practice insurers regard this operation as an option. In this respect, it emerged that in all the countries where this procedure is permitted, the number of insurers actually making use of it is limited.

However, common positions emerged with regard to the following aspects:

- The calculation of the discount must always be carried out on the basis of the amount determined for the provision on basis of the principle of the ultimate cost;
- the discount is always allowed for indemnities provided in the form of annuity. In this case the sums to be put to provisions must be calculated according to recognised actuarial methods.²⁴

The Group, in response to many delegations' requests, declared that it would be useful to make further investigations into the question of discounting claims outstanding from the following standpoints:

-

² B, DK, Fin, Irl, Isl, N, NL, UK and S.

²³ The value of the "expected average date", which in order to make the discounting possible must be at least four years after the accounting date. The calculation of the average date seems to entail an analytic type operation applied to single claims. In this case the operative difficulties of foreseeing a future payment date for each claim in the inventory by the balance-sheet date are obvious.

²⁴ This form of indemnity is especially widespread in **B**, **D**, **DK**, **F**, **Fin**, **GR**, **S** and **NL**.

- the analysis of solvency according to the actuarial rules regulating the calculation of the margin to be set up;
- the compatibility of the discounting procedure with supervisory objectives;
- the safeguarding of the insured and injured parties in the case of compulsory winding-up of the insurer that effected the discount;
- the comparability of annual accounts for competitive purposes.

<u>Simulation: Economic and Financial Differences between an Undertaking Assessing</u> its Provisions at the Ultimate Cost and an Undertaking that Discounts Them

The analysis has been done on the basis of the results of a deterministic type of simulation. The simulation was conceived in order to understand the economic and financial differences between two companies, one of which operates with discounted provisions and the other with ultimate cost provisions (ENCL. N. 2).

The results (which obviously could not include all the possible variations of a real situation) were determined in relation to *particular managerial assumptions* representing situations that might be of interest for the supervisor and that could allow to study the following aspects for both companies:

- the differences in provisions for claims outstanding to be entered in the balance sheet, which must be covered by the assets provided for by law;
- the impact of discounting on the method of calculating the solvency margin required by regulations according to the claims criterion;
- the differences in their free assets and the solvency ratio (own funds/minimum margin required);
- the differences as to distributed profits;
- the variation of the solvency ratio according to different scenarios.

The working assumption for the two undertakings was a limited initial amount of the own funds against premiums, while a simulation took place (starting from the beginning of the activity) for management of 10 fiscal years running, determining for each the profit and loss account, the balance-sheet and the parameters for calculation of the minimum solvency margin of the two companies. With regard to two cases of (progressive) sufficient and insufficient tariffs a comparison was made of the absolute and relative differences with reference to the following items:

- operating results (for which the distribution of a share of expected profits to shareholders was taken into account);
- provisions for claims outstanding;
- net worth:
- solvency margin to be created;
- existing solvency margin,

according to the variation of the following quantities:

- speed of payment of claims;
- discounting rates (for which a situation of financial shock was also assumed).

The results emerged from the selected scenarios lead us to the following general remarks:

- the discounting of provisions for claims outstanding has a marginal impact on the present methods of calculating the minimum margin to set up (according to claims);
- from the viewpoint of the existing margin, instead, discounting can imply major differences in comparison to an undertaking which given the same management conditions assesses its provisions at the ultimate cost. Indeed, differences increase if there is a lower level of capitalisation. Moreover this has implications for the comparability of balance sheets, i.e. for competition between undertakings, as well as from a prudential viewpoint;

in fact:

- given the same speed of claims payment the undertaking which applies discounting shows in its balance sheet provisions for claims outstanding at a lower value than an undertaking which shows them at the ultimate cost, and this difference increases according to the increase of the discounting rate applied²⁵;
- given the same net worth the undertaking which discounts its provisions shows a higher margin;
- an undertaking which applies discounting can distribute more profits to shareholders in advance. Moreover, so doing, an undertaking which applies discounting is more exposed to the risk of rate, which implies (in case rates decrease) a certain loss in the claims to be paid.

finally:

iiiidiiy

- discounting rewards undertakings which are less efficient as regards the claims payment speed;
- discounting may delay supervisory action as, in comparison to insurers with the same equity, and in the case of a financially inadequate management, deficits in the margin emerge slowly (and even more sluggish in the case of slow claims paying insurers);
- the insurer that discounts provisions enters the amount of claims outstanding in the annual accounts with a value inferior to that of the ultimate cost, which can lead to disparities in the treatment of guarantees for insured and injured parties in case of compulsory winding-up in respect of insurers that work on the basis of the ultimate cost.

It is, in conclusion, very important to emphasise that the basic rule in the simulation is that the provision for claims outstanding should be exactly valued at ultimate cost by the two insurers so that, in full conformity to the rules that determine the choice of rates, the risks highlighted will essentially derive from the degree to which the insurers are undercapitalised. It is clear that the dangers to which the insurer's solvency is exposed will be notably magnified if when discounting the insurer fails to make a prior ultimate cost valuation of the provision. In addition, as the boundary between the latter and discounting is very critical, the level of the technical provisions calls for appropriate and continual monitoring by the supervisory authorities.

This consideration is generally valid apart from the present business cycle, which is characterised by low returns on assets.

A large majority of the Group declared itself in favour of the necessity for measures regarding:

- the obligation of always indicating the discounting technique used in detail and the value of the financial benefit deriving from the discounting procedure in the notes on the accounts²⁶;
- the reduction of the available solvency margin, in the course of its determination by insurers that discount the provision for claims outstanding, by the difference between undiscounted provisions, as shown in the notes on the accounts, and the discounted provisions.

The Working Group is well aware of the developments of the ongoing debate on fair value and in particular on the modernisation of the accounting directives. The Group underlines the reliability of the calculation method based on the ultimate cost, which cannot in any case be left out of consideration.

2.5 MOTOR VEHICLE AND SHIPS LIABILITY INSURANCE: PROVISIONS FOR BIOLOGICAL DAMAGE

With respect to classes 10 and 12 regarding third-party liability guarantees, obligatory in all countries, all the delegations stressed the difficulties of estimating the provision for claims outstanding in cases of bodily injury²⁷. Precisely due to the nature of the damage to the psychophysical integrity of the person (in all its components) and recognised by all countries, albeit each with its own peculiarities, claims in these classes can be very long tailed. Furthermore, such claims are the main determinants of the uncertainty surrounding the ultimate cost valuation of the provisions. The critical issues in making the valuation are essentially related to four aspects:

- the assessment of the extent of the insurer's liability;
- the time needed for assessment and the acquisition of medical data²⁸;
- the indemnity and quantification criteria used for the damage.

With particular reference to this last aspect, the criteria actually applied, with some exceptions²⁹, in the single States, depend upon the discretionary powers of the competent courts in the absence of any statutory measure to regulate the question or even to act as a reference. In such a situation different and sometimes significantly divergent valuations can be made, between the various judicial authorities. In fact the assessment tables are at variance one with another and are used in territorially limited areas that tend to correspond to the jurisdiction of the authorities drawing them up. Clearly, in this context, biological reservations make the

• The main solvency margin requirements are imposed on companies.

Given that there is such disclosure, there should be no problem for companies in providing accounts showing the discounted value of provisions for claims outstanding as required by the accounting principle of the fair value.

UK underlined that accounts may be drawn up for different purposes. In particular, with reference to the requirement for discounted provisions for outstanding claims for accounts subject to the fair value concept, it is essential that:

Accounts show both the undiscounted and discounted value, together with discounted rates and durations

[•] Details on the discounting process and assumptions are provided,

The 109th Conference of the Supervisory Authorities held in Siena in October 1997 specifically addressed the question of bodily injury in Europe. The results of the proceedings are summarised in this paragraph.

There are biological reservations also for class 13 (i.e. latent claims that can emerge from employer's liability business) where the time delay between the occurrence of the event and the appearance of its effects represents a particular source of uncertainty.

²⁹ **Isl, E, N, F** and **S**. These countries make use of assessment tables that although not absolutely binding on judges nevertheless exercise considerable influence. As regards Italy, there has been a recent legislative measure to quantify minor damages, while discussion is still taking place on a general regulation of biological damage.

allocations to the provisions for the classes of risk in question structurally scarce. Consequently, continual control over inventory estimates is necessary by the insurer; and most of the delegations report that is usually carried out with the use of statistical and actuarial techniques.

2.6 GENERAL THIRD-PARTY LIABILITY: PROVISIONS FOR CLAIMS WITH DEFERRED EFFECTS (CLAIMS INCURRED WHOSE EFFECTS HAVE NOT BECOME MANIFEST), LATENT CLAIMS.

2.6.1 General Remarks

In the case of property insurance the event causing the damage and the materialisation of the damage are directly and closely related in time. Thus to determine the validity of a guarantee, reference must be made to the date on which the event took place. In third-party liability classes, on the other hand, various types of guarantees exist for which the moment in which the event occurs (thus giving rise to the liability of the insured) can differ, sometimes significantly, from the date on which the relative damage begins to appear and the claim is made to the insurer.

In this regard we can distinguish two kinds of claims:

- a) claims where the events causing the damage are known when the policy is issued and are therefore taken into account in the insurance cover;
- b) claims where the events causing the damage are not covered when the policy is issued but for which the undertaking can be held liable in the future in the light of scientific progress, political decisions, decisions of the courts or consumers' pressure. This kind of claims is also commonly referred to as latent claims³⁰;

Both types of risk raise the following problems:

- it is not always easy to identify the moment in which the event producing the damage took place;
- the damage, apart from being deferred in time, can manifest itself in different moments and in sequence.

With regard to the claims envisaged in the cover insurers can adopt marketing strategies aimed to limit the temporal extension of these guarantees through contractual clauses of the *claim-made type* – and in this case there will be no deferred claims - or combinations of *claim-made* and *loss occurring clauses*.

However it is worth pointing out that while for claims under point a) the main problem essentially derives from the time delay in which the effects of the damage become manifest, latent claims represent a real riddle for companies since they are unknown when the cover is issued and their list varies over time and from country to country.

The issues connected to premium rates and the calculation of technical provisions are different for the two kinds of deferred claims.

As to the former group of claims the critical aspects are mainly connected with:

- the calculation of the premium and the relative provision for unearned premiums;
- the estimate of the relative provision for claims outstanding.

More than one delegation reckoned that the real latent claims are those defined under point b). As to the others, it is only a question of time delay but they have already been envisaged in the cover.

As concerns the first aspect, given the long periods of observation for the verification of claims, the insurer hardly ever possesses a sufficient amount of updated data for the correct calculation of premiums, which tend, therefore, to be insufficient, with the attendant negative impact on income, assets and solvency. Moreover, the second aspect seems to produce particularly uncertain results, not only because the risks involved are long-tailed but mainly because at the moment in which the accounts are closed, the number of losses already reported (and to be valued according to the inventory method) is limited as also the number of claims occurred but still not reported; however, it should be noted that those (unknown) claims whose effects will manifest themselves after the lapse of many financial years are even more difficult to predict.

As to latent claims, the question is more complex, given that it is absolutely impossible to determine their amount and therefore to set aside a sufficient provision for claims outstanding by using the traditional methods. However it has been observed that traditional methods can be replaced by particular methods. In fact all delegations agreed that latent claims can seriously jeopardize the solvency of those undertakings for which the incidence of these risks on their portfolio is particularly high.

Given the very high level of difficulty that characterises the valuation process of the provisions for claims outstanding for deferred risks in general, especially from the point of view of the respect of the ultimate cost enshrined by the accounts Directive, the Group believed it important to tackle this point as well.

As regards the deferred claims falling within the meaning of point a), the French delegation drew the Group's attention to some solutions adopted in this country in relation to the construction risk (ENCL. N. 3), while the Danish delegation submitted a general overview of latent claims (ENCL. N. 4).

2.6.2 Construction Risk in France

This cover is obligatory and decennial (ENCL. N. 3) and concerns both the client, who is obliged to take out insurance against works damage that will be indemnified by the insurer – independently from the assessment of responsibility – and the constructor who must, instead, take out his own third-party insurance. In view of the period of time elapsing between the beginning of the work and the consignment of the property, claims can normally begin to reveal themselves within the 13 years following the stipulation of the contracts. Within this period of time, therefore, the insurer is obliged to forecast claims which, even if they have actually occurred, will manifest themselves with delay. This forecast can only be conducted on a statistical basis but in view of the lack of data of this type and the delicacy that characterises this question at national level, the law has imposed a calculation rule that fixes minimum thresholds for claims with deferred effects, both as regards the premium issued initially and the losses already occurred.

2.6.3 Results of the works

_

Construction risk insurance (even if not wholly in line with the French model) creates general problems on the markets where it has been introduced³¹ regarding both the adequacy of the tariffs and the forecast of claims with deferred effects. In general, specific rules of calculation are not foreseen and the choice of the solutions to be adopted is left to insurers. Regarding the French system, but also a more general panorama, one theme aroused the interest of all delegations: the definition of the nature of the provision for claims outstanding that have

A, B, E, Fin, S and Isl. In Irl, Fin and DK the insurance is new or the companies that offer them are only a few. In FL and GR national companies do not offer this insurance. In I obligatory insurance is only foreseen for contract works with public authorities (until the consignment of the work) and is offered in the class Suretyship, but it does not have the characteristics of the French model.

still not become manifest, as required by the French construction law. A certain number of delegates sustained that this provision has the nature of a *provision for unexpired risks*, while others defined it as a *provision for claims outstanding*, even if the Group agreed that such a provision could only be estimated statistically. In this regard, the French delegation pointed out that for a correct interpretation of the nature of this provision account must be taken of the fact that the event generating losses in construction insurance has already occurred when the contract is stipulated since this is constituted by the construction or the assignment of the property to the client. Therefore given that the provision covers events which have already occurred, it has the characteristics of a provision for claims outstanding.

However, generally speaking, the answer to the question depends on the kind of the contract. For example, in case of claims-made policies such provisions are provisions for unexpired claims as the event relevant for the policy (=submission of the claim) has not occurred.

In case of policies where the date of loss occurrence is the relevant factor the claims have to be covered by the IBNR part of the provision.

Furthermore, with respect to the nature of the provision for handling technical imbalance – a very likely event in the case of such guarantees and generally the result of insufficient statistics on these claims – the difference in accounting procedure (lacking a uniform approach and from the viewpoint of prudence) plays a major role if the provision can be written to the balance sheet as a premium provision or as a provision for claims outstanding (for IBNR).

2.6.4. Latent claims

As already indicated, the types of latent claims change over time and their deferment from the insurance cover and the event causing the damage is much wider than that of other claims with deferred effects as foreseen by the policy (such as construction risk in France). As regards asbestos risk, as is well known, the period of latency is 30 years. At present the list of identified latent claims, which refer almost exclusively to the coverage of general liability, is the following:

- asbestos biological damage
- asbestos construction damage
- pollution
- electromagnetic fields
- synthetic oestrogen
- orange agent
- deafness
- other

Obviously the foregoing list is only an example and cannot be considered exhaustive since this field is undergoing continuous development.

In addition, given the differences between member States some types of latent claims are specific to individual countries even if many of them are common to all.

2.6.5. Results of the works

The problem of latent claims is recognised by all member countries, although its importance varies in relation to the more or less marked impact of such cases on the national insurance market. In some European countries the case of asbestos claims has been most generally perceived as a problem. The potential cases accruing from electromagnetic fields are still in a latent phase as scientific investigations are still being conducted and thus in future the courts could foresee the indemnifiability of such claims on the basis of existing insurance

policies. With reference to the management of such risks (once known) it has been observed that only good internal corporate procedures can guarantee a correct verification of the real liability of insurance companies. The reason is that it is necessary go back to insurance policies issued many years ago to identify the beneficiaries of coverage, which, in turn, entails the problem of keeping these policies over time.

As regards the law operating in various countries, only one delegation referred to a forthcoming generic law whereby companies are expected to make an annual indication of potential latent risks and their cover. However, it is impossible to introduce detailed rules on the question, given that both the causes and the claims are at present unknown. In general no set of rules exist, not even at a second level, that obliges companies to disclose latent risks in their annual accounts or to make specific provisions for them. All delegations agreed that it is impossible to evaluate the impact of such claims upon the relative provisions and precisely for this aspect real worries exist for companies' solvency.

In brief, the Working Group identified the following questions related to latent claims that would call for a solution, even in terms of a general approach:

- rules of calculation do not exist in the various countries;
- there are objective difficulties in identifying a list of latent claims as they would vary over time;
- there is the need to provide shareholders, third parties and supervisory authorities with information on such risks in the annual accounts;
- as regards the estimates made by statistical methodologies to arrive at the provisions for such risks a different approach by the tax authorities is necessary which would consider the admissibility of the deduction of such provisions from taxable income.
- The supervisory authority should be able to carry out an evaluation of these risks for each undertaking in order to verify the need for additional provisions. The underestimation of risks may lead to the distribution of capital instead of profits.

2.7 FIRE AND NATURAL FORCES: CLAIMS FOR NATURAL CATASTROPHES

The question of catastrophe risks was also included in the work as like latent claims it represents a particular type of case with which the non-life insurer has to come to terms. The Norwegian delegation illustrated its own experience as regards compulsory insurance against natural catastrophes (ENCL. N. 6).

In general this type of coverage is coupled with those already foreseen for fire insurance and concerns the direct material damage suffered mainly after the following events:

- atmospheric events: hurricanes, storms, tempests, wind, whirlwinds, etc.
- flooding, inundation
- earthquake and volcanic eruption

An important aspect concerning this question regards the existence of specific rules that regulate the relations between State and the insurance market for the coverage of these risks as well as the setting up of technical provisions.

In European markets different situations coexist, some of which involve compulsory coverage; and in the latter case systems are envisaged which in general, as in the case of Norway, depend upon insurance pools or upon national funds set up for this purpose.

However, as regards technical provisions, generally speaking there are no specific rules for catastrophe risks whereas, in this context, equalization provisions are very common and have been designed to compensate the frequent fluctuations in claims that characterise natural events and which the Working Group specifically addressed (see par. 5).

3. THE PROVISION FOR CLAIMS OUTSTANDING IN REINSURANCE

DIRECTIVE 91/674/EEC. Article 61 reads that, pending further co-ordination, Member States may require or permit the application of one of the two methods ... where, because of the nature of the class or type of insurance in question, information about premiums receivable, claims payable or both for the underwriting years is insufficient when the annual accounts are drawn up for accurate estimates to be made.

3.1 GENERAL REMARKS

The difficulty of evaluating the provision for claims outstanding for risks accepted in reinsurance was taken into account by the Directive on annual accounts, which gives the States the right to allow use of methods that diverge from those customarily employed for this type of provision. As is commonly known, problems arise to the extent that the reinsurance company does not have global, direct knowledge of the claims to be shown in the provision at the closing of the balance. It is therefore subject to the notifications of the ceding companies from which it has assumed the risk.

From an accounting point of view, the persistence of the two methods, envisaged by Article 61 "pending further co-ordination", contrasts with the progress made in information technology and enterprise management, which should make rapid data transmission by the ceding companies concretely possible. This would mean regular entry of the provision for claims outstanding in the reinsurance company's balance sheet. In addition, deferment of the operating results in reinsurance may lead to delays in the Supervisory Authority's recognition of any changes in the management balance due to systematic under- or overestimates of the undertaking's own funds in case the related technical results are favourable or, analogously, unfavourable.

3.2 RESULTS OF THE WORKS

Delegations have been invited to express their opinion on the application of the principle of the ultimate cost or of the valuation of the adequacy of the provision for claims outstanding notified by the ceding companies, and on the criteria followed in the application of one of the two methods envisaged by the Directive.

The discussion underlined that:

- from a prudential point of view, almost all the delegations agreed that the provision for claims outstanding set up on the basis of the notifications by the ceding companies must necessarily be integrated, either based on the experience of the reinsurance company or the professional reinsurer, should it be considered potentially insufficient. However the UK has pointed out that, although the reinsurer is expected to hold reserves sufficient to meet its obligations, it is possible that where a reinsurer has many reinsured cedents, with a wide spread of risk, the total IBNR requirement of the reinsurer may be appropriately less than the sum of those of the reinsured, as the reinsurers have less volatility in the much wider pool of claims:
 - from an accounting point of view, the options for the use of the two methods (entry of an interim provision for claims outstanding or deferment of entry of provision until the following fiscal year) are implemented in very different ways in different countries³². It

The first method envisaged by article 61 is allowed in the UK, E and F; the second in A (only for reinsurance business accepted) and I. In B, L, D and S undertakings can choose both methods (in L subject to the prior approval by the supervisory authority), while in Fin, FL, Irl, Is, P and N these options are not envisaged.

appeared to emerge from the discussion however that companies are using these options less and less by. One reason for this is that in some countries (e.g. in Austria) the use of the deferment in the setting up of a provision to the following year is not allowed for consolidated accounts.

4. PROVISION FOR CLAIMS OUTSTANDING TO BE BORNE BY REINSURERS

4.1 RESULTS OF THE WORKS

All the delegations agreed that claims outstanding to be borne by reinsurers are assessed on the basis of the gross amounts of claims outstanding for direct insurance calculated according to the principles and rules specified under chapter 2, taking account also of the terms of the reinsurance treaties. As to how this provision is shown in the balance sheet, there are two systems that guarantee the necessary accounting transparency in all the countries (claims outstanding for direct insurance are shown in the liabilities while claims outstanding to be borne by reinsurers are shown in the assets or calculation of net claims outstanding for direct insurance shown in the liabilities by making the difference between the gross provision minus the provision to be borne by reinsurers, where the reinsurer's share is indicated).

5. EQUALISATION PROVISIONS

DIRECTIVE 91/674/EEC. Article 30 reads that the equalisation provision shall comprise any amounts set aside in compliance with legal or administrative requirements to equalise fluctuations in loss ratios in future years or to provide for special risks. Article 62 requires Member States, pending further co-ordination, to prescribe the valuations rules for this provision.

In addition, a prudential regulation (art. 15a of the Directive 73/239/EEC) foresees that for credit insurance under certain conditions an equalization provision has to be set up.

5.1 GENERAL REMARKS

The equalisation provision mainly rests on the notion that the technical balance for some risks is not achieved in only one year but generally over a longer period. Therefore the insurer, during the more favourable years, sets aside the financial means necessary to cover the losses sustained in unfavourable years. Consequently the scope of this definition includes both the risks generally characterised by highly variable claims settlement costs but whose frequency is not negligible (i.e. risks linked to the weather), and the risks whose occurrence is very rare but that can cause a huge amount of damages (i.e. atomic risks). This distinction has implications for calculation methodologies. In the former case, actuarial calculation bases are generally used, given that "important" fluctuations in the claims/premiums ratio occurred in a given period are taken into account, while in the latter case flat-rate calculations (usually a percentage of premiums written) are the general rule. Here in fact the fluctuations in the claims rate are not taken into account, since the number of claims is insignificant and therefore the coverage of exceptional events requires financial means that are the result of provisions set aside during more than one financial year. A correct technical valuation of the equalisation provision can represent an alternative to a reinsurance policy and is particularly important in case of discounted provisions for claims outstanding.

With the exception of the credit insurance class the equalisation provisions are, by definition, a sector with little harmonisation. As it is logical to expect, this means that notable differences emerged with reference to both prudential and tax regulations in force in the various States. At the moment, these provisions are not included in the rules used to calculate the minimum solvency margin, while they influence the margin held through standardisation of the

operating results and therefore undertaking's own funds. Here too there are problems regarding the comparability of prudential controls and balance sheets.

5.2 RESULTS OF THE WORKS

The discussion underlined, regarding the other insurance classes or risks other than credit, an extreme variability of national regulations on equalisation provisions (Table N. 2).

In particular:

- <u>for the obligatory nature</u>: four countries³³ require the creation of equalisation provisions for all non-life insurance classes, while another three³⁴ limit this obligation only to the recently harmonised insurance class of credit. For the remaining delegations, the more frequently covered risks are nuclear and hail (or natural forces) risks;
- <u>for tax treatment</u>: in general, for insurance classes or risks for which there is no obligation to set up equalisation provisions, these provisions (made on a voluntary basis) are subject to taxation (see point 6);
- <u>rules of calculation</u>: these rules are specific to each country and therefore they vary considerably.

6. PREMIUM PROVISION

The definition of premium provision that can be inferred from articles 25 and 26 of the Directive is of particular importance since it allows to distinguish two main components having a distinct importance from an economic and actuarial point of view.

6.1 THE PROVISION FOR UNEARNED PREMIUMS

DIRECTIVE 91/674/EEC. Article 25 reads that "the provision for unearned premiums shall comprise the amount representing that part of gross premiums written which is to be allocated to the following financial year or to subsequent financial years ..."; if this item, shown under liabilities in the balance sheet under item C1 "... pursuant to Article 26, also includes the amount of the provision for unexpired risks, the description of the item shall be 'Provision for unearned premiums and unexpired risks'...".

6.1.1 Calculation Rules

6.1.1.1 Valuation Methods

DIRECTIVE 91/674/EEC. Article 57 lays down that the provision for unearned premiums "... shall in principle be computed separately for each insurance contract. Member States may, however, permit the use of statistical methods, and in particular proportional and flat-rate methods, where they may be expected to give approximately the same results as individual calculations. In classes of insurance where the assumption of a temporal correlation between risk experience and premium is not appropriate, calculation methods shall be applied that take account of the differing pattern of risk over time."

³³ D, Fin, A and N (A except those classes which are transacted according to the technical principles of life assurance).

³⁴ (Irl, DK and GR).

6.1.1.2 Results of the works

The discussion underlined a substantially uniform situation. The method most widely used in all countries is the analytical method based on the temporal correlation between risk experience and premium. Gross premiums written constitute the calculation basis, but there are differences as to the possibility to deduct costs. As shown in table N. 3, except for a minority of delegations, it is possible to deduct acquisition costs and in some cases also administrative costs from gross premiums. In some countries there are no specific rules but in practice it is permitted to deduct acquisition costs.

As to the use of flat-rate or statistical methods, for all the delegations but one this use is always permitted (table N. 4), often provided that the results are approximately the same as those obtained with the *pro-rata temporis* method or the calculation on a policy-by-policy basis. However in practice flat-rate or statistical methods are not widely used.

6.2 PROVISION FOR UNEXPIRED RISKS

DIRECTIVE 91/674/EEC. Article 26 reads:

Shall comprise "inter alia, the provision for unexpired risks, i.e. the amount set aside in addition to unearned premiums in respect of risks to be borne by the insurance undertaking after the end of the financial year, in order to provide for all claims and expenses in connection with insurance contracts in force in excess of the related unearned premiums and any premiums receivable on those contracts. However, if national legislation so provides, the provision for unexpired risks may be added to the provision for unearned premiums, as defined in Article 25, and included in the amount shown under item C (1)...".

6.2.1 Accounting Treatment

6.2.1.1 General Remarks

The Directive has given Member States the faculty to choose the accounting treatment for the provision for unexpired risks. However when this is included under the item "other technical provisions" this cannot immediately be determined, for example when calculating the total amount of the premium provision and its two components. On the contrary this is possible if the provision for unexpired risks is shown in the balance sheet together with the provision for unearned premiums, as laid down in articles 25 and 26. This problem has been discussed during the meetings in relation to the statistics of the ratio between the premium provision and premiums written (ENCL. N. 1).

Moreover, independently from the accounting system adopted, the Directive establishes that the amount of the provisions for unexpired risks must be disclosed in the notes on the accounts only where this amount is material.

6.2.1.2 Results of the works

About half of the delegations envisage that the provision for unexpired risks is shown as a single item, together with the provision for unearned premiums³⁵ (item C1 of the balance

³⁵ I, B, Fin, E, Irl, Is, S and L. In Is and L it is also possible to show it separately; in FL the accounting treatment is not specified in an analytic way.

sheet), while the other countries enter it under other technical provisions (item C6 of the balance sheet)³⁶.

However, independently from the accounting treatment envisaged, the large majority of countries require a separate disclosure of the provision for unexpired risks in the notes on the accounts³⁷.

6.2.2 Calculation Rules

6.2.2.1 Valuation Methods

DIRECTIVE 91/674/EEC. Article 58 lays down that the provision for unexpired risks shall be computed "on the basis of claims and administrative expenses likely to arise after the end of the financial year from contracts concluded before that date, in so far as their estimated value exceeds the provision for unearned premiums and any premiums receivable under those contracts".

6.2.2.1.1 General Remarks

It is evident that this provision is aimed to make up for insufficient premiums, which can be due to numerous technical reasons but which the Directive mainly refers to an aggravation of the amount of claims and therefore requires each undertaking to constantly monitor the calculation of premium rates in order to maintain the technical balance. The Directive does not establish calculation rules for the estimate of future amounts of claims and therefore, if the country has not set specific regulations, undertakings are free to choose the theoretical model or the empirical criteria to use as a basis for such estimates. As was already pointed out, these estimates may be particularly difficult in case of latent claims.

Therefore the Group has focused its attention on verifying whether national regulations contain reference criteria or rules for the estimate of future amounts of claims and therefore of the possible need to integrate premiums.

6.2.2.1.2 Results of the works

All the delegations have agreed that this provision is aimed to make up for insufficient premiums. Only in a minority of countries there are detailed regulations (although only as a reference) for the estimate of the probable amount of claims³⁸, and therefore for the calculation of the provision for unexpired risks. In some cases (i.e. Greece) the relevant parameters or calculation criteria have been established in minute detail. However most supervisory authorities³⁹ have not given any specific directive in this regard and therefore the estimate of future claims is left to the undertakings. In the absence of any rule the role of supervisory authorities becomes of paramount importance, even though the nature of this item is such that there are objective difficulties in verifying the adequacy of this provision (i.e. latent claims) and each undertaking can therefore represent a special case. More specifically the estimates of the amounts of claims are particularly difficult to verify when, in its calculations, the undertaking has also taken into account the future investment income or the expected recoverable amounts,

A, D, DK, P, F, GR and UK. (For Is and L see also footnote 34). N indicates it separately under item 'equalisation provisions etc'.

N, D, NL, P, F, Is, Irl, GR, L, S, E and UK. (In Fin, A and D the provision for unexpired risks has to be disclosed if the amount is material).

I. E. F and P.

A, B, DK, D, N, NL, L, UK, Irl, S and Fin.

thus making deductions which, if not adequately pondered, certainly result in an underestimation of the provision and therefore in its inadequacy⁴⁰.

7. PREMIUM PROVISION FOR REINSURANCE

7.1 **Results of the Works**

The calculation of the premium provision for risks accepted by the reinsurer generally concerns proportional treaties. All the delegations agreed that this provision is calculated according to the communications done by ceding companies which, in turn, should have respected the calculation rules specified under paragraph 5 above (pro-rata temporis and provision for unexpired risks). From a prudential point of view delegations confirmed that, as is the case for claims outstanding in reinsurance, the premium provision set up in this way must necessarily be supplemented when the experience of the accepting undertaking or the professional reinsurer shows that it can be considered as potentially insufficient. From an accounting point of view, when at balance-sheet date the information sent by ceding companies is insufficient to determine the economic result of reinsurance, the same remarks made under par. 3.2 regarding the options envisaged by article 61 of Directive 91/674 apply here.

8. PREMIUM PROVISION TO BE BORNE BY REINSURERS

8.1 Results of the Works

In this case too the provision concerns proportional treaties and all the delegations agreed that the same principles and the same rules applied for the provision in direct insurance must be complied with when calculating of this provision, taking account of the terms established by the reinsurance treaty. As to how this provision is shown in the balance sheet, as for claims outstanding, there are two systems that guarantee the necessary accounting transparency (claims outstanding for direct insurance are shown in the liabilities while claims outstanding to be borne by reinsurers are shown in the assets or calculation of net claims outstanding for direct insurance shown in the liabilities by making the difference between the gross provision minus the provision to be borne by reinsurers, where the reinsurer's share is indicated).

One delegation raised the question of how to take account of the possible insolvency of reinsurers from an accounting and/or prudential point of view. In this regard the debate showed that only a minority of delegations⁴¹ set up a specific provision in case of insolvency of the reinsurer, while one country requires the notification of information aimed to assess the reinsurer's financial stability.

9. AGEING PROVISION

DIRECTIVE 91/674/EEC. The Directive does not define the ageing provision but mentions it in article 26, where it is stated under which item it must be shown. More precisely it must be shown on the liabilities side of the balance sheet under item C6, among other technical provisions, unless Member States have exercised the option provided for in the second paragraph of article 3, under which health insurance can be operated according to the principles of life assurance.

⁴⁰ This happens when future investment income is calculated in an imprudent way. In the UK, companies that take future investment income into account are required to supply additional information in the annual statutory returns, which are on public record, relating to assets covering discounted provisions. $^{41}\;$ N, F and E

9.1 GENERAL REMARKS

The purpose of the ageing provision is to make up for the increased risk due to the advancing age of policyholders; it must be set up for annual or multi-annual health insurance contracts, when the insurer is obliged to renew the contract at its expiry date. This provision must therefore be calculated having regard to the foreseeable term of the contract, to the age of policyholders and to the actuarial technical bases generally used by the undertaking.

9.2 RESULTS OF THE WORKS

In most European countries⁴² these provisions are envisaged and regulated, and the calculation method adopted is similar to the technical principles of life assurance (*current value of the insurer's commitments less the policyholder's commitments*), although in one case the use of a flat-rate method is permitted. Six delegations⁴³ do not envisage this kind of provisions. In some cases⁴⁴ the supervisory authority exerts strict controls over this kind of insurance given that the technical bases used here are generally less well-established than in life assurance.

10. LLOYD'S: Technical Provisions for Non-Life Insurance Classes

In the United Kingdom the general rule is that every company must set up sufficient provisions to cover all its commitments in accordance with the provisions set by the Treasury.

Currently, Lloyd's annually submit the basis for the calculation of technical provisions to the FSA's approval. This basis, if subsequently approved by the FSA on behalf of the Treasury, would be the required basis for use by Lloyd's syndicates when setting provisions. The submitted basis is discussed with the regulatory authority to ensure that it is sufficiently robust and complies with the Directive requirements. Extensive advice is also obtained from the Government Actuary's Department. The approved basis should provide provisions broadly in line with those required from non-life companies.

In recent years, the process agreed with Lloyd's has required provisions used by Lloyd's syndicates to be actuarially certified (for which the Institute and Faculty of Actuaries have provided a special guidance note). Failure by a syndicate to obtain an unqualified actuarial opinion is a serious matter, and imposes further requirements and closer supervision, In this situation the provisions would now be set by the Lloyd's actuary, who is required to notify the FSA of the principles he is applying when valuing future commitments (liabilities) and discuss their applicability as necessary. This is a change from the previous situation when the syndicate was required to apply punitive ratios, approved by the Treasury following analysis at the global level.

The approved rules currently in force, *inter alia*, include requirements that:

• Provision requirements are determined both gross and net of reinsurance.

.

⁴² **A, D, DK, GR, P, E, B, F, I, NL, E** and **L**. In **E** the ageing reserve is compulsory only for insurance covering burial expenses and for the coverage of medical expenses in case of assets managed according to the technical principles of life assurance. In **I** it is possible to calculate the provision on a flat-rate basis (10% of gross premiums of the financial year relating to the contracts for which the provision must be set up).

⁴³ Fin, Is, FL, N, S and UK. In these countries health insurance is, or can be, regarded as life assurance in accordance with the faculty given by article 3 of DIRECTIVE 91/674/EEC.

⁴⁴ **F, NL, I** and **L**.

- Provisions requirements for closed years contemporaneously being reinsured into a syndicate must be at least equal to the premium received.
- Provisions are subject to actuarial opinion, which should be performed in accordance with the guidance issued by the Institute and Faculty of Actuaries.
- Provisions for unallocated claims handling costs fall within the scope of the actuarial opinion.
- Provisions for reinsurance bad debts fall within the scope of the actuarial opinion.
- Gross provisions (before reinsurance) referred to above must not be less than the full expected costs (including inflation, etc.) of settling all liabilities in respect of the underwriting year including all costs associated of settling claims. Future premiums, salvage and subrogation rights may be allowed for.
- Discounting of provisions is not permitted.
- Reinsurances should be taken into account at the level ultimately expected to be received (net of future reinsurance premiums and other costs associated with its recovery).
- Separate estimation is required for US and Canadian dollar currency risks and for Euro currency risks.
- Liabilities in respect of date related (Y2K) risks needed to be considered as part of the process of establishing provision.

11. FISCAL TREATMENT OF TECHNICAL PROVISIONS

11.1 GENERAL REMARKS

The tax system used for insurers is generally based upon adjustment of the year-end profit and loss result following the whole or partial recognition, by the tax authorities, of the costs written to the profit and loss account for a given year. In the case of items that are certain or easily valuable according to precise accounting principles, the deductibility limits can be easily set by the tax authorities. However, in the case of insurers' technical provisions, it is very difficult to fix thresholds, as generally speaking they are also the products of statistical-actuarial forecasts. The impossibility or difficulty of fixing maximum limits that is strictly correlated to the statistical nature of such items is linked to the danger that an ill-conceived tax levy can lead to an unfair impoverishment of the insurer and can, over time, endanger its solvency. In fact it is quite frequent that insurance and supervisory law (which tax law often refers to for the application of taxes) in the single countries fixes the minimum thresholds for technical provisions rather than the maximum, and this practice often causes difficulties of assessment to the tax authorities and thus, in practice, limits their scope of intervention.

Even if the above subject-matter shows common objective aspects due to the peculiarities of the insurance industry the Group has devoted part of the works to their issue to the only purpose of taking note of the solutions adopted by the various countries. In fact the Group is aware that any differences in the tax treatment of technical provisions can have repercussions on competition, prudence and solvency of European insurance undertakings.

11.2 RESULTS OF THE WORKS

The discussions substantially confirmed the foregoing premises concerning the difficulties of formulating a correct tax approach to technical provisions given the latter's essential nature as a statistical estimate.

However, the levels of deductibility vary from country to country (Table N. 5) depending upon:

- whether the provisions are obligatory or voluntary

It emerged that there was a generalised exemption for provision for claims outstanding and premium provisions, unless they appear clearly over-valued. The differences between countries seem to turn, instead, on the tax treatment accorded to obligatory equalisation provisions. Thus despite a general exemption of the latter (see table), the various legislations do not foresee obligatory setting up of equalisation provisions for the same classes. This brings about widespread differences in tax treatment among insurers.

- the arrangements with which the deductibility limits are fixed

The voluntary provisions accumulated by insurers for classes not provided for in insurance law are always subjected to income tax levies. As concerns obligatory technical provisions, deductibility is always permitted and in general the maximum ceilings for provision allocation (where fixed) are either easily determined (for the equalisation provisions) or can be identified by the same calculation method (e.g. *pro-rata temporis* for the premium provision). Under this head, the major technical problems concern the provision for claims outstanding for which it is practically impossible to determine at the closing of accounts an objective maximum deductibility ceiling, whereas in the cases in which this entry is systematically subject to tax, this takes place over time and only for the purpose of recovering the interest earned on liquid assets.

12. THE ROLE OF THE ACTUARY IN CALCULATING AND CONTROLLING TECHNICAL PROVISIONS IN GENERAL BUSINESS

12.1 GENERAL REMARKS

Delegations agreed that the contribution of the Groupe Consultatif des Associations d'Actuaires des Pays de la Communauté Européenne could be useful to tackle the issue of the role of the actuary, During the works, delegations have several times underlined that undertakings frequently use statistical methods for the monitoring of technical provisions and actuaries obviously play an important role in that matter.

To sum up, the Groupe Consultatif submitted its stance to the delegations (ENCL. N. 6), both with regard to claims outstanding and more in general to the actuarial profession in non-life insurance.

As to the first aspect, the Groupe Consultatif, when dealing with the main issues (ultimate cost and discounting), underlined the importance of statistical methods (stochastic and deterministic) as a support and monitoring of the method *dossier by dossier* used by undertakings' claims departments, and left the technical choice to the actuary.

With regard to the second aspect, the Groupe Consultatif expressed its general point of view on the need that the non-life undertaking should be subject to a general monitoring of its financial position (and therefore not only of its technical provisions). According to the Groupe Consultatif this monitoring could be done by requiring any non-life undertaking to submit an annual report on its own financial position both to the management and the supervisory body.

The Groupe Consultatif hoped for a general introduction of this report in the Member States and offered its collaboration in defining the guidelines for its drawing up.

12. 2 Result of the works

During the debate the term *actuary* was used in a broad meaning, thus including also similar professionals, and this is how it must be intended hereafter.

In the various countries the actuarial profession is not regulated in a homogeneous way; only some countries require a specific educational qualification while, in general, the knowledge

of statistical, probabilistic or mathematical subjects is considered sufficient to deal with actuarial issues. This situation is even more evident as regards the use of statistical methods for the calculation of technical provisions, where some delegations were against the principle of the exclusive competence of the actuary to the detriment of other professional figures (i.e. mathematicians, statisticians, etc.).

Moreover, the role of the actuary is very diversified: it varies from country to country and depends on the internal organization of each undertaking. Undertakings frequently avail themselves of an internal or an external actuary on a voluntary basis for the calculation of premiums and for the calculation and/or verification of the adequacy of technical provisions. Actuaries play also a role in other technical fields and there is a move by some companies to broaden the scope of work that their actuary are involved in.

The debate focused on the role of the actuary in controlling technical provisions according to national regulations.

- In four countries⁴⁵, regulations provide for an appointed actuary. In those countries, regulations generally assign the appointed actuary to tasks that include, apart from the control over compliance of technical provisions with current legislation, responsibility towards the company's management for the calculation of premium rates both for the launch of new products and for those already marketed. Moreover undertakings continuously consult the appointed actuary also for questions about solvency and the choice of reinsurance treaties. The actuary is always a sort of an interface for the supervisor which can ask him actuarial studies to be used as a support for the supervisory activity as well as technical and statistical information on the undertaking's situation. In some cases undertakings also ask the supervisory authority to carry out a preliminary verification of the professional requirements and compatibility of the applicant for this job.
- In two countries⁴⁶, the external auditor must avail himself of an actuary for the certification of technical provisions shown in the annual accounts.
- Three other countries require the contribution of actuaries in certain classes of non-life insurance (see footnote 45).
- In the other countries, there are no general regulations requiring appointed actuaries or the use of actuaries in non life-insurance⁴⁷.

Table N. 6 shows the contribution of the actuary in the different States in relation to the auditing (with or without the issue of a specific certificate of sufficiency) of technical provisions shown in the annual accounts. In this table the first column concerns the general auditing of the insurance balance sheet including the item "technical provisions", the second one indicates the person that has made it, the third one points out whether a specific certificate or report dealing with technical provisions is issued, while the fourth states whether the contribution of an actuary is compulsory for the auditing.

It must be made clear that the table concerns subjects (auditing companies, actuaries) external to the undertaking and therefore to whom information and companies' accounts are

-

⁴⁵ B, FIN, N, P

⁴⁶ I, S (since 2000); D, GR, NL the actuary is envisaged only for those provisions that are calculated according to actuarial methods which are similar to those used in life insurance, for example for annuities paid in the event of bodily injury and for the ageing reserve in health insurance.

One particular case must be mentioned: in **UK**, an actuarial opinion is required for the Lloyd's syndicates and for the companies that are registered with the "Register of Friendly Societies". UK also welcomes the use of actuaries with non-life experience in the process of establishing provisions for non-life insurance companies. However UK does recognize that other skilled and experienced insurance personnel can also carry out these functions.

made available only for auditing purposes before annual accounts are approved. Our intention was therefore to distinguish them from internal subjects, such as appointed or responsible actuaries who perform monitoring tasks within the undertaking on a permanent basis, including the verification of the adequacy of technical provisions shown in the accounts. To this end we have marked with one asterisk those countries where the appointed actuary is envisaged for all non-life classes and whose tasks include the drawing up of a report stating his opinion on technical provisions which in some cases is sent or anyhow made available to the supervisor. The table shows that in these countries the external actuary does not contribute to the drawing up of the report since the assessment on the sufficiency of technical provisions is demanded to the appointed actuary. Only in one of these last countries the external auditors can avail themselves of the contribution of an actuary when auditing technical provisions.

In three countries the actuary is compulsory only for non-life insurance classes 1 and 2 and/or for claims outstanding for motor vehicle liability where bodily injury is paid as annuity. Here, in two cases, it is envisaged that the work of the external auditor should be supported by the contribution of an actuary who must draw up a report or certificate for the said insurance classes.

Generally speaking, the auditing of the technical provisions shown in the accounts is always included in the more general auditing of the annual accounts by an external auditor who, in two countries, must necessarily avail himself of the professional contribution of the actuary. In several cases it is required that an ad-hoc certificate be issued.

As to the proposal for harmonization, at European level, of the different procedures through the introduction of the appointed actuary (or a similar professional) for non-life insurance, the Group has split into half: half⁴⁸ of the delegations did not support this proposal while the other half⁴⁹ were in favour or, at least, open to such a solution.

13. SUPERVISION OVER TECHNICAL PROVISIONS

13.1 General Remarks

Article 15 of the directive 73/239/EEC, as modified by the directive 92/49/EEC, obliges the member State to require companies to establish sufficient technical provisions in respect of its entire business. As a result of the principle of the home country control, the authority of the home country has the responsibility for ensuring control over the sufficiency of technical provisions of all the companies having their head office on its territory and operating in the European Union. In this case the law foresees the possibility that the home country supervisor may request the cooperation of the host country supervisor. The Working Group has therefore dedicated a brief session of its works to supervisory procedures adopted for technical provisions in order to verify their similarities. In the following paragraph a supervisory model is briefly set out. Without going into the detail, the differences are indicated between the model described and other models that tend to delegate control over technical provisions to independent professionals.

13.2 Results of the Works.

The supervision of technical provisions is conducted in most of the countries both on the basis of documentary evidence and of on-site inspections or visits. The so-called documentary verification conducted by the supervisory authorities is based upon the annual accounts and periodic statistical reports issued by the companies whose frequency varies from country to country. As concerns claims outstanding, in most European countries companies

_

⁴⁸ **A, D, DK, E, F, L, NL, UK, LIE** (DK and UK have however underlined that their position is not definitive).

⁴⁹ B, FIN, I, N, P, S, IRL, GR, Is.

submit standardised documentation indicating the trend of claim settlements broken down by class, year of occurrence and stipulation of the policies, the settlement costs and other details. In some countries specific documentation on the provision for unearned premiums in its two components is also required. The annual accounts and the statistical documentation undergo IT processing in order to derive the ratios to indicate the management situation of the various companies and the technical provisions. As concerns technical provisions many countries use statistical methods whose findings reveal the adequacy or not of such item. Moreover, the documents used by independent auditors to audit the annual accounts, including technical provisions, as well as the reports (in those countries where it is prescribed) by appointed actuaries or consultants of auditing companies are available to the supervisory authorities. If the data from this latter type of analysis indicate significant shortcomings in technical provisions, more detailed examinations can be performed that may range from requests for elucidations to the convocation of the responsible management or, where necessary, inspections on the company's premises.

Inspections on technical provisions or visits to companies are conducted by teams of officers from the supervisory authorities with multi-disciplinary expertise (legal, information technology, actuarial) which in some cases may also make use of external professionals (in general auditors and actuaries)⁵⁰. In the case of the provision for claims outstanding the objectives of the verification refer in general to:

- procedures for receiving reported losses and the existence of criteria for evaluating the numerical size of the dossiers (the comprehensiveness of the universe of the dossiers);
- the contents of the accountancy system as regards losses and their correspondence to the information supplied to the supervisory authority;
- the preliminary examination of any arrangements used by the company for calculating provisions and their possible variation over time;
- the case-by-case scrutiny of the evaluation by means of a sample of claim dossiers whose size will partly depend upon the results of the verification of the internal control system. The examination of the dossiers usually makes it possible to:
 - o evaluate the quality of the inventory procedure;
 - o discover systematic underestimates of provisions that may have various origins;
 - o legitimate or refocus the application of statistical methods.

At the conclusion of the inspection a report is always drawn up that sets out all the anomalies discovered during the inspection including an estimate of the insufficiency of the provision for claims outstanding. The report is accompanied by a counter report by the company which can make its own observations or accept and take due account of the shortcoming noted by the authority in its own accounting systems. Moreover, it should be observed that if due to the shortcomings found in the technical provisions the company is no longer found to have sufficient assets to cover these provisions or even the required solvency margin, the authority will turn its attention to the overall state of solvency of the company and apply, if necessary, the measures foreseen by law, such as, for example, the presentation of a restoration plan.

With regard to technical provisions, the supervisory model, as briefly described, fits more or less accurately the situation actually followed by authorities in various countries⁵¹. Another group of authorities⁵² while admitting on-site inspections, entrusts the control of technical provisions to independent auditors who issue a report and can make their audit on the basis of criteria agreed upon with the authority. The auditors are responsible and are subject to severe penalties if they fail to notify the authorities of any irregularities. In two cases the supervision of technical provisions is principally conducted on the basis of documents and whenever such documents indicate a situation of insufficient coverage, a joint examination is conducted by the appointed actuary, working in the company, and the authority.

⁵⁰ **A, B, D, DK, Irl, NL, UK** and **S** (information from the proceedings of Seminar 1 of the 106th Madrid Conference - May 1996).

⁵¹ **F**, **GR**, **I**, **D**, **P**, **E**, **A** and **L**.

⁵² **Fin, Irl, N, NL, UK** and **DK**

14. THE RIGHT TERM: "reserves" or "provisions"?

A number of delegations requested that the term "technical reserves" be revised by replacing the term *reserve* with *provision* (in English and French) and *rückstellung* (in German) as the latter is more in keeping with accounting terminology of insurance companies.⁵³ The expression reserve indicates the setting aside of profits, while as is well known, technical provisions are liabilities that the company must deal with in the course of its operations.

The problem of the right term has been solved by the directive itself which mainly uses the term "provisions". It is clear that this is in particular an Italian problem. Therefore an adequate term must be found, such as for example "accantonamento" which in accounting terms generally refers to a liability (i.e. "accantonamento per sinistri non ancora pagati alla fine dell'esercizio" and "accantonamento per premi").

⁵³ At the end of the works the Group deemed it appropriate to replace the term reserve (which was formerly used in the report) with provision.

15. SUMMARY AND FINDINGS

PROVISION FOR CLAIMS OUTSTANDING

Provisions at the ultimate cost

All countries were substantially in agreement about the principle of "ultimate cost" valuation of the provision for claims outstanding as defined in the directive 91/674. It corresponds to the requisites of completeness (in the valuation of the reported loss all the elements known when the balance sheet is drawn up must be considered) and the sufficiency (in addition to known elements, account must also be taken of all incremental cost factors that can exercise an influence as early as the first registration of the claim to the provision, taking into due consideration the different characteristics of insurance classes, the final amount to be paid to the beneficiary). Therefore the principle of ultimate cost valuation implies that the provision for claims outstanding must be set up so as to make the incidence of cases of a posteriori insufficiency as infrequent as reasonably possible.

For all insurance classes and all countries the basic methodology for the valuation of the provision for claims outstanding is the dossier by dossier method also defined as the inventory method. Observance of ultimate cost valuation therefore depends upon quality of the inventory procedure. The procedures followed in practice by the claim settlement departments are quite similar from country to country although no regulatory rules exist. The adjuster may or may not include in his estimate (on a subjective basis or following the indications of the company) future inflation or other incremental cost factors. Therefore, the valuation is conducted on empirical grounds and has a subjective character unlike, for example, mathematical provisions for life insurance which are linked to concepts and formulas of actuarial mathematics.

The use of statistical methods for valuation purposes, as foreseen by the directive, is widespread in all the countries (especially average cost) and it is generally linked to the nature of the risks or objectively limited. In particular, it emerged that precisely for short-tail classes or easily assessed damage, where the case-by-case method affords a good ultimate cost estimate, the valuation of losses is frequently conducted on the basis of statistical evidence.

In some countries, statistical actuarial methodologies or methods that are akin to them are used to complete the inventory method. In particular, the need that such methods, all of which complying with the requisites of prudence, be designed to control the estimates made by adjusters emerged, especially as regards classes with long adjustment periods. Given the subjective nature of inventory estimates the application (where possible) of methodologies that take account of the future development of various cost factors (such as, for example, claim inflation characteristic of a given class) can become an instrument to safeguard the principle of ultimate cost as it can reveal if the inventory estimates have implicitly taken account of such factors. Were such a need to arise the company should supplement its inventory estimates. The use of such methods for this purpose is not contained in the directive but it is regulated and recommended in some markets.

Among the critical factors that make the valuation of provisions for claims outstanding particularly variable, the Working Group identified:

- damage to the psychophysical integrity of persons. The principle problem is linked to the criteria for indemnifying and quantifying the losses, which in the absence of reference rules drawn up by statute law (only for some countries do reference tables exist) are left to the discretion of the courts and give rise to sometimes highly significant disparities in the evaluation of the same type of damage;
- losses incurred but whose effects have not yet become manifest. Among these the Working Group made a distinction between those losses whose causes are contemplated by policies and those whose causes were not known at the moment of

issuing the cover. For the latter defined as latent claims a company may be liable as a result of scientific progress, political decisions, decisions of the courts or consumer group pressures. Given their absolute level of indeterminacy, it is practically impossible to set up an adequate provision for claims outstanding on the basis of the usual methodologies. This can undermine the solvency of companies whose portfolios contain a significant proportion of such risks.

With reference to latent claims, the Working Group identified a series of questions that call for solutions based upon a general approach:

- there are no calculation rules in the various countries;
- there are objective difficulties in identifying a list of latent claims as it would vary over time:
- there is the need to provide shareholders, third-parties and supervisory authorities with appropriate information in the annual accounts;
- as regards the estimate made by statistical methodologies to arrive at the provisions for such risks, a different approach by the tax authorities is necessary which would consider the admissibility of the deduction of such provisions from taxable income;
- the supervisory body should assess such risks for every company in order to ascertain the need for additional provisions before distributing profits to shareholders.

IBNR

The calculation methodology is the same in all countries. In some cases of estimates of IBNR an allocation for re-opened claims is included. The Group was against the proposal for additional rules at European level for the estimate of IBNR, given that the present system is considered, on account of its flexibility, effective in all countries. The Working Group also highlighted the problems in IBNR calculation for long-tail classes and where there is a high proportion of losses not reported whose effects will only become manifest many years after the loss event. In these cases the insurer has insufficient data at year-end to be able to make an estimate of the frequencies and average costs, while earlier experience may be no longer reliable for a forecast.

Provision for claim settlement costs

In all countries provisions are made for settlement costs which are usually divided into direct and indirect costs.

It is customary to make a lump sum calculation of such costs, especially as regards indirect costs, whereas in general no rules are laid down for the methods to be followed, which are therefore left to each company to choose at will.

Provision for claims outstanding net of recoveries

In most countries the provision for claims outstanding can be entered into the accounts net of recoveries, but there is also the option of showing them among assets.

However, two countries refused either solutions foreseen by the directive as companies were not allowed to take account, under any form, of estimated recoveries for losses still included in the provision.

Discounted provision

The working Group identified in the prohibition on making deductions or implicit discounts of any form, as established by article 60, letter g), the compulsory nature of the principle of ultimate cost as a general technical rule for the calculation of the provision for claims outstanding.

The principle, therefore, must always be respected also when national statute law enables discounted provisions for claims outstanding to be posted to the balance sheet. The latter option is admitted in fifty percent of countries but rarely used by undertakings mainly on account of the restrictions applying to the rate of return that may be chosen. Some interpretative difficulties seem to emerge, however, as regards the reference to some of the requisites called for by article 60, paragraph 1, letter g), as for example the calculation of the "expected average date" or the discount period which will perhaps require a detailed examination. Common positions within the Working Group emerged with respect to the following aspects:

- the calculation of the discount must always be carried out on the basis of the provision determined according to ultimate cost;
- the discount is always admitted for indemnities provided in the form of annuities. In this case the sums to be allocated must be calculated on the basis of recognised actuarial methods:
- the obligation to provide detailed information in the notes on the accounts on the discounting method used and the value of the financial benefit deriving from the discounting procedure;
- the need to deduct the same value allocated to the provision for claims outstanding from the solvency margin available.

The Working Group is well aware of the developments of the ongoing debate on fair value and in particular on the modernisation of the accounting directives. The Group underlines the reliability of the calculation method based on the ultimate cost, which cannot in any case be left out of consideration.

EQUALIZATION AND CATASTROPHE PROVISIONS

If the credit class is excluded equalization provisions by definition constitute a poorly harmonized sector. Thus, there are notable differences both as regards the law on prudential accounting and the tax arrangements in different countries. At present, these provisions are not taken into account in the calculation of the minimum solvency margin although they do influence the margin held by levelling operating results and the company's net worth.

As concerns catastrophe provisions, these provisions can be linked (with reference to losses deriving from natural disasters) to specific rules that regulate relations between the State and the insurance market for the coverage of such risks. In this regard there are different situations on the various European markets whereby coverage may be more or less compulsory, and where it is obligatory, systems are foreseen that generally depend upon insurance pools or national funds set up for this purpose.

PREMIUM PROVISION

Provision for unearned premiums

The work revealed a situation of substantial uniformity. The principal method used in all countries is the analytic *pro rata temporis* method. The basis of the calculation is constituted by gross premiums written but for which there is a differentiation as regards the various possibilities of cost deductibility.

Provision for unexpired risks

Only a minority of countries have instituted a detailed regulation, or even a reference standard, for the estimate of the probable amount of losses in order to calculate the provision for unexpired risks. In some cases, particularly precise calculation arrangements or parameters are indicated. However, most supervisory authorities do not provide any indications of rules to be used for the valuation of such risks and therefore the estimate of future losses is left to

companies. In the absence of rules the control exercised by supervisory authorities plays a fundamental role.

AGEING PROVISION

Most countries foresee and regulate an ageing provision and the method of calculation used is similar to the techniques used in life insurance. In countries in which health insurance is not provided for such insurance comes under the rubric of life insurance in conformity to the directive 91/674.

LOSS AND PREMIUM PROVISIONS REFERRING TO REINSURANCE

In all countries loss and premium provisions arising from reinsurance acceptances are posted to the annual accounts on the basis of the communications of ceding companies. In this regard, the entire Working Group agreed that technical provisions thus constituted must be necessarily supplemented when they are regarded – on the basis of the experience of the ceding company or the professional reinsurer – as potentially insufficient. However, from an accounting point of view, the options pursuant to article 61 of the directive 91/674 have been implemented in very different ways from country to country (until further coordination) are not envisaged.

THE ROLE OF THE ACTUARY IN THE NON-LIFE INSURANCE SECTOR

Considerable differences of opinion about the role and figure of the actuary in non-life insurance were found within the Working Group. In many countries the actuary is considered fundamental and statute laws are also envisaged whereby appointed actuaries will become responsible for the safeguarding of the solvency and financial soundness of companies. Many countries recognise the importance of the actuary but do not foresee the appointed actuary in non-life insurance. Some delegations also emphasised that the use of statistical methodology (in particular for the verification of technical provisions or IBNR estimates) does not necessarily have to be entrusted to an actuary rather than to a person with expertise in the subject matter.

As to the proposal for harmonization, at European level, of the different procedures through the introduction of the appointed actuary (or a similar professional) for non-life insurance, half of the delegations did not support this proposal (although some positions were not definitive) while the other half were in favour or, at least, open to such a solution.

SUPERVISION OVER TECHNICAL PROVISIONS

Supervision on the sufficiency of technical provisions is an essential activity for all authorities. From a summary examination of the supervisory procedures it emerged that all countries adopt the practice of submitting standard statistical data on technical provisions - in addition to their annual accounts – although at different frequencies. Such documents deal with the development of various parameters on the loss cycle and in some cases also the premium cycle (trend in claims settlements broken down by class and year of occurrence or stipulation of the policy, settlement costs, the setting up of the provision for unexpired risks, etc.). The supervision takes place in the offices of the authority, on the basis of the foregoing documentary evidence, or on the premises of the companies. Two models of supervision emerged in this connection. The first "model" comprises an activity wholly carried out by specialized personnel employed by the authority and sometimes supplemented by on-site inspections by external professionals. All the inspections are concluded with a report setting out all the anomalies discovered during the inspection, including an estimate of the insufficiency of the technical provisions. The report also contains a counter statement by the company containing its own observations or its acceptance of the insufficiencies discovered by the authority and the consequent adjustment to its accounts. A second "model", while foreseeing on-site inspections (in some countries called "visits"), entails that the authorities in practice delegate the control of the technical provisions to

independent auditors and professional figures who will issue a report and can carry out their auditing also on the basis of criteria established by supervisory authorities. The auditors are responsible and liable to severe sanctions if they fail to notify the authorities of any irregularities. There is also the case in which the supervision of technical provisions is carried out wholly on the basis of documentary evidence. And if insufficiencies are discovered then a joint inspection is conducted between an appointed actuary, working within the company, and the supervisory authority.

ANNEXES