Conversion of European Reporting Systems to U.S. Generally Accepted Accounting Principles—A Claims Reserve Perspective

by Chandu C. Patel, FCAS, MAAA, and
Leslie R. Marlo, FCAS, MAAA

Chandu C. Patel, FCAS, MAAA

Mr. Patel is a Senior Manager in the Actuarial Services Division of KPMG LLP. During the past 3 years he has assisted several large European clients with US GAAP conversions. Mr. Patel has broad experience in reserving, pricing and other financial reporting issues for property/casualty insurance companies. Prior to joining KPMG, Mr. Patel worked in the actuarial department of Continental Insurance Company.

Mr. Patel has served on the CAS Examination Committee and is currently a member of the Syllabus Committee

Leslie R. Marlo, FCAS, MAAA

Ms. Marlo is a Senior Manager in the Actuarial Services Division of KPMG LLP. She has worked extensively on US GAAP conversions She has also assisted a number of insurance company and self-insured clients in assessing appropriate reserve levels, determining profitability of various business segments, and other financial reporting issues. Prior to joining KPMG, Ms. Marlo worked for Reliance Insurance Company in the actuarial and controller's departments

Ms Marlo has served on the CAS Examination Committee and currently serves on the External Education Committee

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Background

With rapid advances in technology and communications, globalization is impacting every sector of the economy, and insurance is no exception While technology has made globalization easier, there is a significant amount of effort remaining in terms of uniform financial reporting structures across the various countries and regions in the world

Recently, there has been significant momentum to formulate and adopt International Accounting Standards (IAS). The basic IAS framework is in place with the exception of the standards for insurance. It will be a few more years before these standards are fully agreed upon and effective. In the absence of comprehensive international standards, US GAAP (Generally Accepted Accounting Principles) has become the de facto global standard, particularly for property/casualty insurance The importance of US GAAP has also been emphasized by the fact that large foreign insurers and reinsurers are seeking capital in order to expand globally and in the US Listing on the New York Stock Exchange (NYSE) is an important means of gaining access to US capital markets; however, being listed on the NYSE requires financial reporting in US GAAP

The disparities in financial reporting standards also pose significant management challenges in terms of measurement of financial performance and accountability. For this purpose it is desirable have a uniform accounting system for all the markets in which a global company may operate, and US GAAP provides a convenient yardstick

A number of aspects of European non-life financial statements are impacted by US GAAP The list below outlines aspects that require significant actuarial involvement

- Direct loss and loss adjustment expense reserves including catastrophic and equalization reserves,
- Ceded loss and loss adjustment expense reserves,
- Unearned premium reserves, including unearned premium reserves for policies with duration longer than one year;
- Deferred acquisition costs,
- Premium deficiency testing,
- Reinsurance risk transfer testing,
- Projection of salvage and subrogation recoveries,
- Discounting of tabular and non-tabular reserves,
- Booking of quarterly results

In addition, there are operational and cultural impacts of the conversion process Some of these are·

- IT systems requirements to generate and store new types of information,
- Required additions to actuarial and accounting staff,

- Changes in communication and decision making,
- Developing a good understanding of US GAAP,
- Speed at which information is required,
- Additional documentation

Prior to embarking on a US GAAP conversion, it is essential to make a broad level assessment of the impact of all these on the current operations This paper examines, from a property/casualty or non-life perspective, the issues involved in converting foreign local GAAP or statutory financials to a US GAAP accounting basis with a focus on major European countries There are many accounting issues involved in such a conversion, however, the primary focus of the paper is to discuss the issues encountered in determining appropriate claims reserves

European Regulations and Practice

Insurance regulation, and more importantly, financial reporting practices varies widely across the major European countries. For example, the German statutory practice is to record non-life claims reserves on a conservative basis with minimal actuarial input On the other hand, in the United Kingdom, actuarial practice is well established and there is strong emphasis on best estimates After the formation of the European Union, directives were issued to member companies that serve as guidelines for adopting uniform accounting standards for insurance The European Council, however, acts in a manner similar to the NAIC Member companies can exercise many options in terms of adopting the various aspects of the directives for their particular jurisdiction Hence, in spite of the European Union directives, there are no uniform reporting standards across member countries

As a reference point, we have compiled relevant articles from the insurance directive issued by the European Union in 1991 The articles we have compiled include directives for premium reserves as well as loss reserves These articles are included as Appendix A

As can be gleaned from Appendix A, a fairly comprehensive set of regulations exist for premium as well as claims reserves Although the intent of the regulations is similar to the intent of the US practices, for example to record claims reserves at ultimate cost, the actual practice in Europe is significantly different from the practice in the US

Generally we have observed that in Europe, with the exception of UK, non-life claims reserves are established on an individual claim by claim basis using a conservative approach When case reserves are established, claims personnel typically assume worst case scenarios and also assume that their company is fully liable Pure IBNR is established separately and it is not a significant part of the overall reserve, except in general liability and motor liability In some jurisdictions, for example Italy, the computation of pure IBNR is prescribed by statute Given this practice, the general view is that little actuarial involvement is required in setting and testing non-life reserves In fact, setting non-life claims reserves including IBNR is often considered the domain of the claims staff with some involvement of the finance department. In conjunction with

this, we have observed that communication between pricing actuaries and the reserving or finance departments is often not well established Although pricing actuaries tend to use the average severity implied by statutory reserves for pricing purposes, they are not involved in setting the financial reserves In addition, in most countries, there are no general statutory requirements for the financial reserves to be "signed off" by an actuary.

In summary, the role of actuaries in setting non-life reserves is novel to most companies In addition, there is a lack of non-life actuaries with specific skills in reserving required to play a meaningful role in setting non-life reserves

US GAAP Adjustments

In general, our approach to converting local statutory financial statements to a US GAAP basis begins with the current local claims reserves and adds or subtracts adjustments for differences in the two reporting systems, ending with claims reserves on a US GAAP basis.

On the surface, the differences between US GAAP and various other financial reporting guidelines as they pertain to loss and loss adjustment expense reserves do not appear to be significant For example, there are two specific rules in US GAAP that are easily considered and for which adjustments, if any, are easily calculated.

- Under US GAAP, reserves cannot be discounted except in the case of claims with fixed and reliably determinable payments made at known time intervals or when approved by the state regulators Similarly, in most countries in Europe, discounting generally applies only to annuities, which are most commonly related to workers' compensation claims as well as the occasional motor liability or general liability long-term case Therefore, the practice in Europe tends to follow guidance which is either consistent with, or stricter than, US GAAP guidance

- Under US GAAP, liability can only be established only for events which have already occurred as of the financial statement date and for which the amount of liability can reasonably be estimated. In contrast to this, in Europe it is common that local statutory accounting principles allow or require additional contingency-type reserves (Article 30, Appendix A) The most common are

    i. Catastrophe reserves, which are meant to cover catastrophic events which have not yet occurred
    ii Equalization reserves, which are designed as a safety net for time periods during which experience is worse than expected Practically, these reserves can vary over time such that earnings are kept relatively smooth over multiple time periods

  Both of these types of reserves are clearly designed to provide extra risk margins in case of poor experience As an example, when the catastrophic storms Lothar and Martin occurred in late December 1999, several insurers disclosed significant

losses from the storms without showing an impact on overall earnings. Despite positive investment gains, it is unlikely that overall earnings would be unaffected by these catastrophes without the existence of contingency reserves For US GAAP purposes, both these reserves must be eliminated from the balance sheet

The true difficulty in converting local statutory reserves to US GAAP lies in the more basic definition of a non-life claims reserve Under US GAAP, the claims reserve carried in the financial statements is management's best estimate of liabilities relating to insured claims that have occurred through the financial statement date The estimated liabilities reflect the full and final costs to settle these claims less any payments already made. US GAAP has rules regarding the elements to be included in a claims reserve, but recognizes that the reserve is an estimate of future payments, and permits various options for calculating and booking the reserve.

In most European countries, the definition of a claims reserve is not as formalized. From an audit perspective, the emphasis is on sufficiency of the claims reserves with respect to the solvency of the company Claims reserves are considered reasonable as long as there is evidence, either qualitative or quantitative, that reserves are not too low. Given the existence of catastrophe and equalization reserves, it is rarely the case that reserves would be considered insufficient As a result, non-life business in Europe historically has attracted little actuarial attention and resources in comparison with life business. In addition, the rates for important non-life segments were regulated until recently, and the social framework had been stable Recent rate deregulation and the increasingly litigious nature of society is forcing European insurers to focus more on non-life issues However, implementing standard actuarial methodologies and developing an effective actuarial staff is a slow process and it may take many years to build up resources that are commensurate with the life segment or the US non-life segment

Therefore, some of the most significant challenges in determining whether or not the carried reserve is appropriate for US GAAP purposes involve obtaining appropriate data, and developing a good understanding of the underlying business, the regulatory framework of the country, and the statistical methodologies, if any, used to support the carried reserves

Benchmarking & Communication

In the US we are accustomed to statutory reporting requirements and CAS principles as starting points for reviewing claims reserves. However, European reporting standards are different and information that is readily available in the US may not available in Europe without a great deal of difficulty In addition, the nature of the coverage provided will likely be very different For example, in Switzerland, compulsory accident insurance is referred to as workers' compensation, but there are important differences versus the US counterpart. accidents are covered at any time of the day and there are certain risk classifications, such as housewives, that you might not expect Until there is a good understanding of the underlying business and the methodologies supporting the reserves, it is not possible to determine whether or not they are compliant with US GAAP In

addition, there may be many grey areas, since US practices have evolved over time in relation to US coverage, and the application to non-US coverage has to be worked out.

Hence, prior to starting any conversion exercise, it is essential to establish a good understanding of local practices. In order to assess the non-life reserving process, it is important to benchmark the methods and procedures on a qualitative basis and for this purpose we have developed a survey which is included as Appendix B.

It is important to note that many of the company personnel encountered during the benchmarking process are not actuaries and may not speak English fluently. In this regard, patience and empathy are essential. Language differences may cause barriers to communication, both in terms of the language in general, and with respect to insurance terminology. For example, we have found that retrospective premiums in Europe often refer to late reported premiums, such as audit premiums, rather than premium adjustments stemming from what we think of as retrospectively rated contracts Also, written premium often refers to booked installment premium rather than the annual premium for the entire exposure period.

During the assessment process, it is important not to convey the impression that US GAAP is the only "right" way to do things Also, when gathering information regarding the business operations and actuarial methodologies, we ask the same question several times in different ways in order to ensure that it is well understood We continue to probe issues until we clearly understand the response

Common Themes in European Practice

Based on our experience we have observed that the types of analyses used to evaluate non-life claims reserves vary greatly between companies and countries, but there are common themes seen in practice This section discusses the following themes in detail:

1 Common statistical approaches;
2. Pure IBNR vs development on known claims,
3 Lack of industry data;
4 Gross versus net analyses,
5 Emphasis on point estimate.

Common Statistical Approaches

We have found that most non-life actuaries in Europe are familiar with the loss development ("chain-ladder") methodology as well as the Bornhuetter-Ferguson techniques, and the use of paid chain-ladder methodology is very common In addition, a frequency/severity approach is often used

European actuaries generally have a an extensive mathematical background and have a penchant for being more theoretically rigorous In contrast to our own preference for using more practical and less complex models, we have found that relatively theoretical

models that involve statistical modeling are appealing to many European actuaries, although the use of such models to set claims reserves is not very common yet. We have found that while such statistical methods can be very valuable, it is important to ensure that the models capture all the underlying trends realistically and that the output conforms to actual experience within reasonable bounds We would recommend that US actuaries should become familiar with strengths and weaknesses of methods commonly used in Europe in order to have greater credibility with their European counterparts.

Pure IBNR versus Development on Known Claims

It is common for the analyses performed in Europe to concentrate on the estimation of late reported claims, sometimes to the exclusion of consideration of development on known claims The analysis generally takes on the form of a frequency / severity approach

Estimates of late reported claims are generally considered to occur in the one to three year time period following the accident year This seems to be fairly reasonable given the reporting patterns for most lines of business, although we suspect this will change as the legal environment changes We noted that the resulting pure IBNR is sometimes allocated by accident year, but is sometimes booked entirely to the current accident year If the IBNR is booked entirely to the current accident year, the run-off of this accident year will likely look better than it should, while experience for prior years will deteriorate over time

In many cases, the philosophy of claims adjusters in Europe is rather conservative such that it is common to see downward development on known cases in the reported loss triangles Some analyses that we have seen take this into account in their estimated total reserve while some analyses ignore historical overstatements of case reserves, for example, by selecting incurred development factors of 1 000 when the historical patterns shows factors less than 1 000 As noted above, some companies evaluate only late reported claims and thus implicitly assume no future development, up or down, on known claims

Lack of Industry Data

A common problem in estimating claims reserves in Europe is the lack of industry data to be used for guidance. For many lines of business in many companies, the stability of historical development ensures that this is not a significant problem However, it is significant to certain classes of business, such as assumed reinsurance As might be expected, we have found that the historical development patterns of assumed reinsurance books of business are even more volatile than those of US reinsurers, generally due to a more global focus and the associated reporting and recording lag issues Despite the caveats associated with using Reinsurance Association of America historical data in US analyses, the existence of an equivalent body of data in Europe would be very useful Likewise, analyses of relatively new companies or lines of business for an established company are hampered by this lack of data

Offsetting this somewhat is the existence in some countries of government research bodies which do study aggregated data for various purposes. For example, in Switzerland, government analyses provide information on such issues as the size of pollution liability in Switzerland and the impact of offering lump sum settlements to certain types of accident victims. In Italy, the regulatory authorities publish annual statistics relating to claims for all companies in the Italian non-life sector. These annual statistics are a compilation of statutory information provided by all Italian companies to the regulatory authorities. During review process, it is important to ask for and seek out such information

Emphasis on Point Estimate

Although there is not current agreement among US actuaries regarding the best practices for determining a range of reasonable reserve estimates, it is clear that a point estimate is only one result from a set of possible outcomes for estimated claims reserves. While most European non-life actuaries would agree that multiple outcomes are possible, the emphasis of most of their analyses is usually to determine a point estimate without the calculation of a range.

This becomes an issue in particular when the methodology being used is fairly theoretical or has the appearance of a "black box" While we may conclude the estimates resulting from the modeling are reasonable, we encourage the use of the chain-ladder and Bornhuetter-Ferguson methods to produce additional results. In our opinion it is important to test whether the traditional methodologies corroborate the results form the modeling In the case they do not, further investigation into the company's operations and the inherent strengths or weaknesses of various methods for a given company may be warranted

Gross versus Net Analyses

It is very common in Europe for reserve analyses to be completed on a gross of reinsurance basis only. Assumed reinsurance is also analyzed, sometimes using actuarial methodologies, sometimes on a contract by contract basis. It is very rare to see a reserve analysis performed on net of reinsurance basis.

To obtain the net reserves, computations of cessions for proportional treaties is straightforward as the ceding percentage is applied to estimated direct results However, non-proportional cessions are booked based on ceded losses for reported claims only. The lack of non-proportional ceded IBNR is generally considered a good practice as it leads to conservative net reserves While this may be the case, analysis documenting the size of the non-proportional IBNR is necessary to fully comply with US GAAP's "best estimate" philosophy

Assumed Reinsurance

In Europe, reinsurance is generally recorded on an underwriting year basis as opposed to an accident year basis. For US GAAP, the carried reserves must reflect only the reserves for accidents which have already occurred, and therefore, it is common to make an adjustment to underwriting year reserves to reflect only the portion already "earned". On the other hand, in European statutory accounting, the practice is often to record this business on a one-year lag. For example, for the balance sheet as of 12/31/00, only the reserves for underwriting years 1999 and prior would be included; thus underwriting year 1999 would be essentially complete (with the exception of multi-year policies) while underwriting year 2000, for which there would be little if any data available, would not be included and would be held in a suspense amount.

The one-year lag must be removed for compliance with US GAAP. The general process is similar to that used for US companies, i e the estimation of the ultimate losses for each underwriting year and the application of earned percentages to approximate ultimate losses on an accident year basis. Although the concept is relatively simple, in reality, it is quite complicated to produce these estimates as well as a picture of the income statement impact for historical accounting periods. Such a discussion is beyond the scope of this paper

Exchange Rates

Many companies write business only within their own country. However, where business is written in multiple countries (and this is very common for large multi-national European companies), accounting for foreign exchange rates is a significant challenge It is necessary that the historical data reflect claims converted to the local reporting currency at the current exchange rate so that when performing loss development calculations, the calculations are not distorted by past currency fluctuations.

Although using the current currency rates for historical data would adjust for fluctuations from the past, if there is exposure in foreign countries where the currency is highly unstable, future projections of losses would also be subject to significant variance Business may be written with the expectation that a loss would occur, but that settlement would be far enough into the future that the exchange rate could very different from what it is today

Examples of Unique Exposures in Europe

We describe next exposures and issues in several European countries that have presented unique challenges in terms of understanding and analysis.

Italian Motor Liability

During our experiences in Europe, analysis of Italian motor liability has presented unique challenges During the past decade there have been significant changes in the legal and social framework under which bodily injury claimants are compensated in Italy and there has been a trend of liberalization of benefits When changes in compensation have occurred, they have been applied to all current and outstanding claims. In addition, Italian law allows each judge to form an opinion on a case without referring to any prior outcomes. In other words, there is no application of case law. As a result, trial outcomes tend to be highly unpredictable, although the same injury would be compensated for at a significantly higher amount in northern Italy versus southern Italy. Due to these difficulties, case reserve estimation has been and continues to be difficult and the case by case reserving approach has run into difficulties The evolution of this trend is explained in more detail below

Prior to 1985, the motor liability coverage compensated for the following: Property Damage, Personal Injury (wage replacement if there was permanent disability), Expenses (medical & other), and Moral Damage due to pain and suffering

Subsequent to 1985, the coverage was expanded to include what became known as Biological Damage Biological Damage compensated for bodily injury, damage to personal relationships, sex life, etc The amount of damage was determined by formula and was equal to percentage disability (based on a medical assessment) x an age based ratio x compensation per point of disability (up to 1995 this amount was standard across Italy, but the amount was not mandated by law) In addition, Moral Damages were determined to be some fraction of the Biological Damage (usually one half to one third)

Subsequent to 1996, for Biological Damage, some courts started to use their own compensation levels per point of disability These levels were much higher than the uniform levels used before The practice started with the Milan court systems and spread to other courts. In addition, eligibility was expanded to include passengers All these trends led to significant increases and uncertainty in case reserves

In light of these changes, the traditional case reserving based methods have failed In addition, in order to reduce inventory of old claims and hence reduce exposure to increases in compensation, insurers have attempted to close claims faster This led to changes in payment patterns and posed significant challenges in projecting ultimates using paid loss development methods

Swiss Compulsory Accident Insurance

Compulsory accident insurance in Switzerland is similar to workers' compensation in the US Annuities are often awarded to claimants because of their accidents and, in certain cases, cost of living (inflation) adjustments may be part of the annuity These inflation adjustments are based on the prevailing economic conditions and are announced by a

Swiss regulatory authority when they determine an adjustment is necessary. The local statutory reserve for annuities is equal to the sum of

1 the "basis" reserve,,which is the original amount of the awarded annuity discounted at 3 25% (no past or future cost of living adjustments are included);
2 the "Pool" reserve

The "Pool" is the mechanism set up by law to fund the cost of inflation for all insurers' annuities Membership in the pool is compulsory for all insurers writing compulsory accident insurance A pool balance is maintained as a liability and charges to the income statement are made to reflect experience, although in general cash does not actually change hands among insurers The pool balance grows each year by the amount of the interest earned on the basis reserve in excess of 3 25% and amount of total interest earned on the pool reserve The pool is depleted by paying annuitants the annual amount in excess of the basis reserve The pool administrator reviews the status of the pool across all companies on an annual basis and determines if the pool balance will remain positive If the balance is expected to go negative, then a surcharge is declared on all current compulsory accident policyholders in Switzerland to make up for the shortfall

Despite the fact that the entire system for maintaining these reserves is mandated by law, the accounting treatment is not, on the surface, US GAAP compliant US GAAP requires the inclusion of the full value of future payments, which if discounted, cannot be discounted at higher than a risk-free rate. Without consideration of the pool reserve, basis reserves are clearly not compliant as both past and expected future inflation is ignored, and the size of the inflation may be greater than the differential between a risk-free rate and 3 25%

Inclusion of the pool reserve does provide a more realistic reserve picture We have seen proofs which show that currently the basis reserve plus the pool reserve is approximately equal to the present value at a risk-free rate of the reserve including inflation less expected recoveries due to surcharges We consider this to be a reasonable approach which reflects economic reality while still complying with US GAAP

One alternative is to estimate the fully inflated, undiscounted reserve and subsequently discount it at a maximum of the risk-free rate The comparison of this with the sum of the basis reserve and the pool reserve would yield any adjustment for US GAAP However, this is somewhat less reflective of economic reality as future surcharges are not considered

Asbestos Liability in The Netherlands

Asbestos claims in The Netherlands arise from the deaths of injured workers due to exposure to asbestos, no medical expenses are covered This is an example of exposure where an oversight organization, the "Statistical Center for Insurers", produces a study on behalf of the insurers in The Netherlands estimating the expected number of deaths over a certain time horizon as well as the expected claim severity for the market as a whole.

Individual insurers can then produce an estimate of their liability based on a market share analysis

One complicating component of coverage is an agreement throughout the market that all liability insurers of a company from the date of accident to the date of report will have an equal share of the total amount of the claim.

French Construction

In France there are two unique coverages related to construction that pose significant challenges in terms of estimating non-life reserves.

The "Dommages Ouvrages" coverage is a first party coverage for repairs to construction due to defective construction, design or materials. The coverage is in effect for a period of ten years from the time the building is constructed. The coverage provides immediate payment to the insured without assessing fault The premium for the coverage is collected at the beginning of the coverage period. The insurance company can recover amounts paid to its insured from parties that might be responsible for the damage Based on this, computation of appropriate unearned premium reserves and estimation of potential recoveries are very important and challenging An alternative to treating the policies as long duration contracts and computing the appropriate unearned premium reserve is to treat the year in which the construction is built as an accident year and consider the date of loss as the year when the building is constructed Using the latter approach, the ultimate liability, including all IBNR for the future exposure period, needs to be estimated.

Related to this coverage, as a protection from the exposure and as professional liability coverage, "Civile Decennale" is the liability policy purchased by the parties involved in the construction.

The Dommages Ouvrages and Civile Decennale products by their nature require several years before their true costs are known Until the last claim is settled, the estimation of loss reserves plays an integral part in determining the profitability of the product and introduces significant variability in the loss estimation process.

Documentation and Disclosure

Actuarial Workpapers

As is customary in the US, we would expect to see the following for full documentation of a reserve review.

- Executive Summary – showing overall and by line of business indications and reserve position
- Actuarial Methodology –

- Description of types of business and segmentation;
- Description of types of data used, source of data and reconciliation to general ledger,
- Description of methodologies used;
- General description of assumptions, with specific comments on significant segments of business, changes in operations or the external environment, or unusual exposures.

This should be accompanied by the exhibits documenting the various methods used and final selections

Little guidance exists for European actuaries regarding the amount of documentation needed to support a reserve estimate. Similar to the US a few years ago, practice varies regarding the amount of spreadsheets which are printed and organized so that another actuary could review them. In general, we have not found many companies where the actuaries have produced a formal write-up of their methodologies and conclusions. The actuaries we have interviewed were quite capable of explaining their assumptions and selections, but this is a resource intensive, time consuming process.

A common reaction by the European actuaries has been surprise that such a formalized report is requested; however, it seems that as more occasions arise for other parties to want such information, that this level of documentation will become as common as it is in the US.

Management Discussion and Analysis

Typically the ultimate goal of the US GAAP conversion process is to be listed on the NYSE This requires the preparation of an extensive filing for the SEC. The filing includes a write-up of the company's operations, known as the Management Discussion and Analysis (MD&A) This is a fairly high-level review of the company's operations, recent results, and any significant changes in experience due, for example, to catastrophes or mass tort claims The types of information which are included are often more extensive than the content of a company's Annual Report. The organization of the discussion may revolve around segments or lines of business, and it is important that actuarial management work closely with senior management to provide the most recent indications of the performance of the business

Appendix A

Council Directive 91/674/EEC of 19 December 1991 on the annual accounts and consolidated accounts of insurance undertakings

Article25

Liabilities: item C (1)
Provision for unearned premiums
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, pursuant to Article 26, item C (1) also includes the amount of the provision for unexpired risks, the description of the item shall be "Provision for unearned premiums and unexpired risks" Where the amount for unexpired risks is material, it shall be disclosed separately either in the balance sheet or in the notes on the accounts

Article 26

Liabilities: item C (6)
Other technical provisions
This item 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)
Where the amount of unexpired risks is significant, it shall be disclosed separately either in the balance sheet or in the notes on the accounts
Where the option provided for in the second paragraph of Article 3 is not exercised, this item shall also include the ageing reserves

Article 28

Liabilities. item C (3)
Claims outstanding
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 occured up to the end of the financial year, whether reported or not, less amounts already paid in respect of such claims

Article 30

Liabilities item C (5)
Equalization provision
1 The equalization provision shall comprise any amounts set aside in compliance with legal or administrative requirements to equalize fluctuations in loss ratios in future years or to provide for special risks
2 Where, in the absence of any such legislative or administrative requirements, reserves within the meaning of Article 20 have been constituted for the same purpose, this shall be disclosed in the notes on the accounts

Article 57

Provision for unearned premiums
1 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.
2 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

Article 58

Provision for unexpired risks
The provision for unexpired risks referred to in Article 26 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

Article 60

Provisions for claims outstanding
1. Non-life insurance

(a) A provision shall in principle be computed separately for each case on the basis of the costs still expected to arise Statistical methods may be used if they result in an adequate provision having regard to the nature of the risks, Member States may, however, make the application of such methods subject to prior approval

(b) This 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

(c) Claims settlement costs shall be included in the calculation of the provision irrespective of their origin

(d) 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; they shall be estimated on a prudent basis. Where such amounts are material, they shall be disclosed in the notes on the accounts.

(e) By way of derogation from subparagraph (d), Member States may require or permit the disclosure of recoverable amounts as assets.

(f) Where benefits resulting from a claim must be paid in the form of annuity, the amounts to be set aside for that purpose shall be calculated by recognized actuarial methods.

(g) Implicit discounting or deductions, whether resulting from the placing of a present value on a provision for an outstanding claim which is expected to be settled later at a higher figure or otherwise effected, shall be prohibited.
Member States may permit explicit discounting or deductions to take account of investment income No such discounting or deductions shall be permissible unless·

(i) the expected average date for the settlement of claims is at least four years after the accounting date;

(ii) the discounting or deduction is effected on a recognized 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, it must not exceed either of the following.
- the investment income from such assets over the preceding five years,
- the investment income from such assets during the year preceding the balance-sheet date.
When discounting or effecting deductions, an undertaking shall, in the

notes on its accounts, disclose the total amount of provisions before discounting or deduction, the categories of claims which are discounted or from which deductions have been made and, for each category of claims, the methods used, in particular the rates used for the estimates referred to in the preceding subparagraph, points (iii) and (v), and the criteria adopted for estimating the period that will elapse before the claims are settled.

Appendix B: Benchmarking Survey

Background

Obtain information on the current and historical structure of the Company and the types of business written. Obtain information on the roles and responsibilities of the people being interviewed. Consider the role of the actuaries at the Company, especially in terms of financial reporting.

Statistical Information

Determine the types of loss, loss adjustment expense, and premium data elements that are available, as well as the reporting basis for each (accident year, policy year, calendar year). Determine if supplemental data such as claim counts or exposure information are available.

Consider additional data elements, such as

- Foreign exchange rate issues, if any,
- Salvage and subrogation;
- Discounting;
- Deductible reimbursements,
- Ceded reinsurance,
- Catastrophe or equalization reserves

Actuarial Information

Determine who is responsible for performing the reserve analyses as well as the decision making for carried reserves

Determine frequency of full reserve analyses and whether results are monitored at interim time periods

Determine if there is clear and complete documentation of the reserve analysis

Determine the process for parameter selection (e.g historical experience, industry information, trends), point estimate selection, and generation of a range of results, if any.

Consider the following issues related to analysis

- Level of data segmentation and appropriateness for the business reviewed;
- Methods (how many and which ones) for projection of ultimate losses, ALAE, ULAE;
- Existence and treatment of any special categories of reserves (i e mass tort, catastrophe, and coinsurance),
- Source of expected losses or expected loss ratios, if applicable,

- Use of diagnostic tests to check reasonableness of the data and results (e.g. ultimate loss ratios, average severities, settlement rates, frequency);
- Development on known claims vs. late reported claims;
- Calculation of reserves net versus gross of reinsurance;
- Changes in external environment or internal company operations which may affect reserve levels, and how these have been handled in the analysis

Discuss how current estimates compare with prior estimates, and the reasons for any significant differences

Once the answers are gathered, consider whether the methods and underlying assumptions are appropriate for the business being reviewed and whether they reflect the circumstances in the countries being reviewed.

Financial/Accounting Information

Request documentation showing the reconciliation of carried reserves (gross and ceded), paid losses and premiums to the financial statements, including consideration of reviewed versus non-reviewed segments. Determine overall reserve position, if management's best estimate differs materially from the actuarial best estimate, investigate the reasons for this

Discuss coding and data processing procedures Determine if there have been changes that would affect the consistency of payment and/or reserve data over time, for example, closing files at the end of various accounting periods

Reinsurance Information

Obtain a description of the reinsurance programs (internal as well as external) and changes in structure over time

For ceded reinsurance, assess collectibility and the procedures for recording uncollectible reinsurance.

Consider whether ceded IBNR is calculated, and if so, how.

Claims Information

Obtain a description of the general structure of the claims department i e. home office versus local offices, authority levels for adjusters.

Consider procedural issues such as.

- Frequency of individual case reserve reviews;
- Existence of case ALAE reserves;
- Use of formula reserving or fast track procedures;

- Use of supplemental/bulk reserves in addition to case reserves.

Discuss any changes in claim department operations that might distort the data or affect reserve levels or settlement patterns. If any, determine availability of data to measure the effects of the changes.

Underwriting Information

Obtain a description of the major business segments and distribution channels.

Discuss any changes in the type and/or mix of business being written as well as changes in policy limits, deductible levels, rating structure or prices. If any, determine availability of data to measure the effects of the changes.

Discuss the historical and current competitive market.

Determine how the results of the reserve analysis are incorporated into the pricing of business.