



Institute of Actuaries of Australia

Actuaries Assisting Auditors: A State of Play

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Abstract

In Australia, a general insurance company or branch registered with APRA, will require an audit under the Corporations Act 2001 and/or the Insurance Act 1973. The audit is an important element of the financial reporting and regulatory regime.

Issuing an audit report on a general insurer will involve work being undertaken on its insurance liabilities. Generally, the insurance liabilities are one of the largest components of the insurer's Balance Sheet and have been set with significant input from an actuarial process. Increasingly actuaries are engaged directly by auditors to provide expert input as part of the audit work undertaken on insurance liabilities.

This paper aims to explore and introduce:

- the interaction between auditors and audit assist actuaries
- when and why might an audit assist actuary be used
- the extent of the audit assist role
- some practical experiences and observations of the current state of play.

The paper is deliberately practical in nature and we hope that nothing will stand out as particularly extraordinary or anything other than apparent common sense.

For a summary of the background to the legislative and regulatory environment under which the Australian General Insurance audit operate, we refer the reader to "A Background to General Insurance Audit in Australia" ("background paper") also presented at the IAAust XVth General Insurance Seminar October 2005 seminar.

The working group has had the benefit of input from both the Actuarial and Accounting professions.

Keywords: actuary; auditor; audit; accounting standards; audit assist actuary; insurance; Institute of Actuaries; APRA; accountant.

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1 Introduction

1.1 Purpose

The aim of this paper is to explore the role of the actuary in supporting the audit of a General Insurer in Australia. In our view, this role is becoming increasingly important with the wider involvement of the actuary in the general insurer through input to financial statement entries and disclosures, the introduction of the statutory Approved Actuary role and management input such as product development, valuation, capital management and strategy.

We discuss the development of the actuarial audit assist role, what drives the scope of the work involved and the type of support currently provided. We present a number of practical observations which may be of help to actuaries assisting the auditor and perhaps those meeting with the actuary carrying out the audit assist role. We also touch briefly on upcoming developments including the External Peer Review and Financial Condition Report.

We hope this paper will aid in the continuing development and understanding of the services that actuaries provide.

1.2 Notes to readers

This paper has been written by Jefferson Gibbs and Samantha Hu of KPMG Actuaries and John Barker of Suncorp GIO.

The paper is put forward as a 'state of play'. It is not intended to act as a guide to actuaries supporting Auditors. We have made our best efforts to cover key aspects of this supporting role. The aspects covered are illustrative only and are not intended to be exhaustive. Nor should it be implied from this paper that an audit of an insurance entity is in any way incomplete or inadequate if it does not include the input of an assisting actuary or does not include the components of scope outlined in the paper.

Within the paper we use the term 'valuation actuary' to include the Approved Actuary and those actuaries that may submit a valuation report to the Approved Actuary as part of the setting of the overall reserves. We also use the term 'insurance entity' to cover the subject of the audit or auditor's review, including licensed insurers, registered branches, offshore insurers, captives, discretionary mutual funds, self insurers, schemes and Government self insurance funds and entities.

In preparing the paper we met with a number of auditors and other actuaries involved in audit as assisting or valuation actuaries. We would like to thank the many accountants, auditors and actuaries that have provided time and input.

We would also like to thank Michael Dermody of KPMG Actuaries who completed the peer review of the paper.

2 Defining the Scope of the Assisting Actuary

2.1 Background

It is common for auditors to engage experts or specialists to assist them with the audit of items in the financial statements that involve the application of specialist knowledge and judgement which are beyond the auditor's core area of competence. The use of actuaries is one such instance in the audit of an insurance entity.

For an insurer, the insurance liabilities are typically set with significant input from an actuarial process. The insurance liabilities are often the largest component of the insurer's Balance Sheet. Movements in these in turn impact the Profit and Loss statement.

A number of the auditors we met with observed that before the use of actuaries in setting general insurance provisions, it was also uncommon to have actuarial involvement in the audit. It is natural that as the actuarial role has developed within the general insurance industry so too has the role of the "assisting actuary" in a mirrored, if slightly lagged, fashion.

The role of the actuary assisting the auditor in Australia in this regard is not mandated by regulation or guidance. However, as noted in the background paper, in his review of the Actuarial Profession in the UK, Sir Derek Morris recommended that the auditor be required to engage a Review Actuary to assist with the audit of insurance companies. Similarly the HIH commission recommended an external peer review of the valuation actuary's liability results.

There is no 'standard scope' for the assisting actuary. The extent of involvement ranges from little or no involvement to fairly extensive involvement.

We discuss below a number of key drivers of the work of the assisting actuary. We group these according to the auditor's perspective, the nature of the business, management of the business and finally the actuarial reserving process.

2.2 The auditor's perspective

It is natural that the auditor's perspective is key in defining the scope of the assisting actuary's role. This is because the auditor is the one who engages the actuary to aid him or her in forming the audit or review opinion. Our observations on the impact of the auditor's perspective on the assisting actuary role are as follows:

- *Scope of work:* The precise scope of the auditor's work is fundamental. For example a year end audit has a formal wording, whereas other reviews may not and the scope will adjust to this. We refer you to the background paper which covers the various statutory and regulatory roles.
- *Audit plan:* The auditor sets out a framework or audit plan based on details of the insurance entity, the materiality definitions, the opinion that is being prepared and his or her experience. The actuary should note that the auditor is concerned primarily with risks which may affect the financial statements or return and errors which may be material. In other words, the auditor and the auditor's team are not obliged to, nor expected to read or check every piece of documentation, process or ledger entry available to them.

- *Clients and stakeholders:* The auditor is the assisting actuary's client. The assisting actuary will complete the work requested by the auditor. There are many stakeholders to the audit and to the assisting actuary's advice, including the Board and management of the insurance entity being audited and the valuation actuary. These stakeholders may well be the recipient of the auditor's advice, including conclusions of the assisting actuary. However, the assisting actuary is responsible to the auditor to whom the actuarial audit assist report is addressed.
- *Auditor's experience:* The auditor will call upon their own experience in audit, insurance and the insurance entity being audited when setting the assisting actuary's scope.
- *Materiality:* The background paper discuss the very important issue of 'audit materiality'. The auditor will define a materiality level for the audit. Small differences across many portfolios may amount to a figure that exceeds the auditor's overall definition of materiality. Given this, the auditor may ask the actuary to complete his or her review to a lower dollar value materiality. From a practical perspective it is often best when discussing a particular actuarial calculation to define materiality relative to the result of that calculation. Final conclusions would typically be made relative to the overall definition of materiality.
- *Independence:* The auditor must maintain independence from the audited insurance entity. Given this, the assisting actuary will not ordinarily provide any independent recommendation of provisions nor provide a point estimate on the provisions. Doing so may create a 'self review' risk if the insurance entity in turn directly adopts the assisting actuary's figures.
- *Auditing is a business:* It is part of the auditor's broader role to balance statutory, regulatory and professional obligations and the client's needs for value. These obligations take first place but cost is also a factor in the scope of the work completed.

2.3 The nature of the business

A regular theme in our discussion with auditors is that it is important to have a clear and detailed understanding of the insurance entity's business and how the business is managed in setting and completing the audit scope. We cover a number of the key components of that understanding below and provide examples where we can. (These, however, only touch the surface of the matters considered):

- *Insurance entity size:* This is obviously important and has a direct impact on the definition of materiality. This may also affect the risk margin level relevant to the insurance entity.
- *The complexity of the operations:* For example, the audit of small insurer with one or two lines of business will be very different to that of a large insurance group which has within it many lines of business and multiple licensed insurers. As a further example, where business is underwritten under specific legislated regimes, such as CTP, this may lead to the benchmarking of results with scheme information and other underwriters.
- *Trading circumstances:* Whether the insurance entity is a going concern or in run-off, the solvency position and the point in the cycle of the insurance entity's key markets, the growth of the insurance entity, recent acquisitions and entry into areas of new business are key determinants in the scope and emphasis areas of the audit.
- *The business underwritten:* The reserving uncertainty and issues associated with long tail business will differ from short tail. Issues will impact insurers and reinsurers differently. A related aspect, discussed further below, is that the classes being valued will have a direct impact on the actuarial methods applied.

- *Business mix and size:* The auditor will also be mindful of the size of a particular class of business and its liabilities, relative to the assets of the overall insurance entity or group.
- *Reinsurance (and retrocession):* The level and complexity of the reinsurance and the state of the reinsurance documentation will impact on the extent of the audit or review. For example, larger insurance entities typically have higher retentions with less impact on net results, implying less review, but on the other hand may have intra-group reinsurance contracts which the assisting actuary may be asked to consider.
- *Distribution channels:* In particular this will influence the nature and availability of data. For example, direct business may be linked directly with underwriting information, aiding more detailed analysis, whereas agency business may be based on bordereaux information.

2.4 Management of the business

Two insurance entities writing the same insurance business, with the same relative capital levels and size could be managed entirely differently. Given this we have treated 'management' as a distinctly different set of drivers. This would have an impact on the audit and naturally on the assisting actuary's role as follows:

- *Data and valuation systems:* Different insurance entities operate different data systems and different actuarial modelling software. These will have a direct impact on the extent of audit in these areas. For example, where systems limit the data available for review, the level of actuarial judgement needed may be increased. This may in turn lead to greater involvement of the assisting actuary in reviewing any additional assumptions used.
- *Process documentation and internal controls:* Part of the auditor's testing process is controls testing. The auditor may take into account an insurance entity's documentation of data and actuarial control processes and the extent that documentation supports that these have been followed. Similarly, where internal audit have examined and documented relevant areas the auditor may take the conclusions into account.
- *Valuation structure and resources:* There exists within Australia at present almost every permutation of internal/external make-up of valuation actuaries and Approved Actuaries. This can add to the complexity of the valuation and reporting process. Examples of resource differences include:
 - the experience of the Approved Actuary and valuation actuaries
 - the degree of the Approved Actuary and valuation actuaries' familiarity with the insurance entity
 - the extent and visibility of internal or external review.
- *Management requests:* Perhaps less obvious to those outside the audit process, is that the management, Board or Audit Committee of the insurance entity may highlight or request areas of special focus for the audit, such as underwriting performance or data systems. Such requests will often follow operational or management changes, the results of an internal audit or as follow-up to a request by the regulator or the Board. The auditor will respond to these and this may alter the scope of the assisting actuary's work.

2.5 The actuarial reserving process

Our comments are as follows:

- *Ongoing judgement and assumption changes:* Although the basic reserving framework may remain unaltered between valuations, the selection of assumptions will vary from valuation to valuation. The valuation actuary must apply his or her judgment at each valuation. Auditors recognise this and it implies an ongoing involvement of the assisting actuary.
- *Model complexity:* The auditor will also consider the complexity of the models used and the use of new or non-standard methods. A good example is the use of stochastic reserving techniques. In our experience the complexity of the approach is often a driver of the time required of the assisting actuary but not always a driver of whether to involve an actuary in assisting the audit. The introduction of risk margins within the Australian accounting framework is a good example of the link between actuarial input to the financial statements and actuarial involvement in the audit.
- *Past accuracy:* The auditor will also examine the accuracy of past estimates and the explanations behind any significant departure from expected results. For example, the assisting actuary may be involved in examining the reasons for the departure or reviewing management's explanation. This in turn might generate further tasks such as testing the sensitivity of the valuation results to different interpretations of the data or experience, such as extrapolating a recent deterioration or improvement as an ongoing trend.

3 Actuarial Involvement – Current State of Play

This section covers the actual work that may be completed by the assisting actuary, highlighting those items that are commonplace in an insurance audit; those that are less common and covered only as and when a specific need arises; and those which are an emerging area of actuarial involvement in audit.

As discussed in the introduction and notes to readers, the detail below should not give the impression that any particular area is ‘standard’ nor that an assisting actuary may or should complete all or any of these activities within a particular audit.

The reader will see that the list of activities is very broad. The activities should also illustrate that the assisting actuary is involved in discussing the high-level issues that may impact on the insurance entity rather than just the ‘ticking of the boxes’ that some may expect.

3.1 Common areas of actuarial involvement

3.1.1 Review of reports

A very natural place to start is to review the Approved Actuary and valuation actuary reports. This is a very common area of actuarial involvement. The discussion below sets out the key areas that the assisting actuary may be looking to understand or complete through the review of reports (generally supplemented by the activities discussed further in the sections 3.2 and 3.3):

- Summarising the key financial impacts and drivers, for example, details of large claims, legislative changes and impacts
- Summarising the conclusions of the valuation actuary and highlighting any areas of note raised in the report
- Summarising methods and whether these are standard or non-standard practice. Where possible, concluding that the methods are not unreasonable in the circumstances. It is also common to highlight changes in methodology and its impact and robustness compared with previous methodologies especially where this brings into use new data or data from new sources
- Commenting on the appropriateness of the segmentation of the valuation, for example, between classes and claim types or size
- Examining the non-economic assumptions for reasonableness
- Examining the economic assumptions for reasonableness (it is very common to benchmark these aspects), for example, inflation, superimposed inflation, discount rate, policy and claims handling expenses etc.
- Tracking the consistency of results from year to year and by class of business through the analysis of change exhibit. Where development is not in line with expectations, examining the actuary’s explanation of the difference.
- Highlighting any exclusions, caveats and omissions in the actuary’s scope and where relevant, the potential impact of these on the results. For example, where a specific potential liability is noted but has not been examined
- Highlighting any constraints or limitations that have been placed on the valuation actuary and the implications of these

- Highlighting any major changes in valuation approach and covering the impact and whether these are reasonable
- Identifying any data issues flagged, allowing further audit work to be undertaken or the auditor and assisting actuary to discuss the implications
- Identifying any changes to data used. For example, where extraction processes change or data outside of the standard financial reporting framework is used, this may generate additional data or IT auditing.
- Considering any key assertions made by the actuary, for example the stability of the strength of case estimates, payment patterns, large claim emergence, exposures and underwriting changes.
- Examining the consistency of results and approaches between portfolios
- Reviewing the approach for consistency with market practices and ‘market best practice’
- Commenting on the quality and clarity of reporting including the completeness of documentation and supporting evidence on key assertions, compliance with standards and accuracy of key exhibits, for example, by cross checking to appendices
- Assisting the auditor in considering the competence and experience of the valuation actuary
- Following up and commenting on the progress of matters raised at prior audits or reviews.

3.1.2 Meetings

It is increasingly common for the assisting actuary to meet with the valuation actuary. Where the valuation actuaries are external consultants or contractors to the insurance entity audited, it is also common to meet with an internal actuary or manager responsible for completion of the actuarial reserving process.

It is also useful for the assisting actuary to meet with other managers in the organisation to give a context for the valuation actuary’s advice. Typically these might include:

- Underwriters
- Claims managers
- Business managers
- Financial controllers/ Chief Financial Officer
- IT managers
- Reinsurance managers.

These meetings will give the assisting actuary first-hand opportunity to discuss matters that might be an important part of the valuation actuary’s assumptions in the valuation process. Most actuaries will be familiar with these so we touch on only a few key examples:

- Underwriting conditions including basic rate changes, discounts or loadings to technical rates, rating structure changes, shifts in the market, the underwriter’s view on the competitiveness of rates, changes to the marketing emphasis/ or strategy, sector emphasis changes and new products
- Changes on underwriting policies and management, for example, benefits, claim types and limits, policy terms, exclusions, underwriting authority levels and changes in practices around the nature of these authorities

- Portfolio growth and market competition/ market cycle changes
- Unusual policies, for example, inner deductibles / new business areas
- Changes in reinsurance policies and programs
- Operational issues and changes such as claims handling centres, IT systems, staffing levels, in-sourcing or outsourcing of legal input and large claim management strategies. The assisting actuary will focus on those things that might impact on the valuation, for example:
 - claim notification patterns, such as telephone notification processes,
 - speed of settlement, such as settlement authority levels
 - on the size of settlement, such as preferred provider schemes
- Case estimate processes. Any changes to these may have an impact on case estimates relative to the prior valuation
- Legal and Legislative developments including legislative reform, such as the recent civil liability reforms, insurance or reinsurance disputes and/or bad debt issues
- Details on large claims and catastrophe claims, for example, weather events
- Management's view on the valuation process
- Any known data issues/changes to IT, processing backlogs or errors
- Update on post balance sheet events or development on issues being monitored, such as weather event claims, large claims and legal developments.

These meetings provide the opportunity to discuss specific issues already noted, for example, from comments by the valuation actuary or identified in prior reviews. The assisting actuary may attend these meetings with members of the audit team and the valuation actuary may also attend.

3.1.3 Analysis

The extent of analysis within the assisting actuary's scope will vary significantly from audit to audit. The more frequent aspects are as follows:

- *Range testing and re-projection:* The auditor usually asks the assisting actuary for his or her view on the adequacy of the central estimate. However for the independence reasons discussed previously, the assisting actuary will typically avoid calibrating an alternative central estimate. Practically, the assisting actuary may either examine the central estimate explicitly but not release specific results or may examine a "range of reasonable best estimates" through explicit variation of the valuation actuary's method and assumptions.
- *Benchmarking:* The auditor will often request a comparison of the methods, assumptions and results with market practice and statistics. Typically for current year provisions, this will include benchmarking the reasonableness of the implied underwriting result relative to peers in the market and the assertions of management – especially for more standard markets such as CTP, personal lines and SME commercial insurance. Other components of the valuation which may also be benchmarked include the degree of discounting or discounted mean term. Risk margin benchmarking, i.e. probability of adequacy, coefficient of variance and diversification allowance may also be benchmarked against other data such as industry research papers, APRA statistics and market peers.

- *Examination of Accident Year/Underwriting Year results:* The assisting actuary may request details on expected ultimate loss ratios and be more focused on the results split by accident or underwriting period than the valuation actuary may expect. The assisting actuary may request, or calculate where not provided, ultimate projected claims and premiums (in absolute values), undiscounted reserves split between case estimates and IBNR and other statistics such as ultimate average costs per claim, claim frequencies, non-premium exposure measures and reinsurance recovery details. Such results, split by accident or underwriting year, allow the examination of trends in the expected underwriting result, benchmarking and the application of basic metrics such as IBNR to case estimate ratios. The ultimate projected claim figure would not vary if the actuarial model had 'perfect foresight'. Comparing the change in these metrics, that would not otherwise change from one valuation to the next, is a simple way of identifying major valuation movements.
- *Separating results:* The assisting actuary may present the valuation actuary's results split into greater detail. This can be as simple as providing a notional split between Incurred But Not Enough Reported (IBNER) and Incurred But Not Reported (IBNR) components, or may go further, for example, the split between large and small claims.
- *Sensitivity testing:* The assisting actuary may examine and communicate the sensitivity of the results to a specific assumption or interpretation. For example, where an assumption of 2% for superimposed inflation is being used in the valuation but the valuation actuary has raised the risk that it may be trending higher. For this reason, it is very helpful to the auditor if the valuation actuary completes sensitivity testing on key variables, particularly where they have made comments about additional uncertainty. We note that new disclosures under IFRS will develop this area for many insurance entities and the assisting actuary's role may well change from 'calculation and comment' to 'review and comment'.
- *Scenario analysis:* In some cases the assisting actuary may 'translate' the provisions back to a specific scenario. This is generally used in comparing the scenario at a central estimate level and higher probabilities of adequacy (POA), e.g. 75% (before diversification credit) to illustrate the additional claims or adverse deterioration the higher POA allows for. This is particularly helpful for classes of liability such as asbestos and business prone to volatility from large claims. Using asbestos liabilities as an example, this analysis would express the margin as a scenario of additional claim numbers, a higher starting average cost per claim, higher super-imposed inflation or some mixture of these assumptions.
- *Checking mechanical accuracy:* This exercise is occasionally completed by the audit team who may 'step through' the valuation calculation spreadsheets or other valuation software. The assisting actuary is often involved when this process is included in the audit scope. This process is common where an error has emerged in the past and for new systems.

3.1.4 Data

Data is a key component of the actuarial process. As noted in Section 22 of PS300 (Actuarial Reports and Advice on General Insurance technical Liabilities):

"It is the actuary's responsibility to ensure that the data utilised are appropriate and sufficient for the valuation. The actuary should, where possible, take reasonable steps to verify the overall consistency of the valuation data with the insurer's financial records."

The assisting actuary will, from time to time, examine the valuation actuary's or insurance entity's reconciliations of data which verify that data from the insurance entity's IT system is correct and has been correctly interpreted for use in the actuarial valuation. Where further work is required, the audit skill set is well placed to examine or complete reconciliations of data and also, through the use of IT specialists, audit the systems that store and extract standard actuarial data. Given this, the role of the actuary assisting the audit is less focused on reconciling data than one might expect.

The assisting actuary may play a part in the broader audit of the insurer's IT systems and processes, which is usually undertaken by IT specialists engaged by the auditor, by alerting the audit team to which fields in the data are important to the actuarial valuation. This may include exposure information as well as claim or premium information. It is also common for the auditor to examine a number of claim files and confirm that source data is being processed onto systems correctly. Thus it is not uncommon for the assisting actuary to brief the audit team on the reserving methods which might apply to a given class of business and help 'translate' this into a scope for that aspect of the underwriting or claim file reviews.

The assisting actuary may also be involved when an error in data or systems is identified. They may be asked to provide a view on the materiality of the issue and the potential impact on the actuarial results.

3.1.5 Administration and reporting

There are a number of other fairly routine aspects to the role which we cover below:

- *Administration:* On larger audits the assisting actuary may be involved in administrative responsibilities within the audit on the actuarial side. Effectively the assisting actuary may become the manager of actuarial aspects of the audit. Responsibilities might include liaison with the client, coordinating meetings and gathering and distributing the actuarial documents as they are provided. On smaller audits this is less likely to be the case.
- *Compliance:* The auditor may ask for confirmation that the valuation reports are compliant with the various APRA and Actuarial standards, such as GPS 210 (Liability Valuation for General Insurers) and PS 300.
- *Auditor's report:* The assisting actuary will typically provide input to the auditor's report to the Audit Committee or Board. In some cases the assisting actuary may present to the Audit Committee or Board with the auditor.
- *Management letter input:* The assisting actuary will typically provide input to the Auditor's letter to management. That letter would set out key observations from the audit including comment on the actuarial process or results such as areas of potential process/controls improvement.
- *Market knowledge input:* The assisting actuary will have the opportunity to discuss or comment on emerging market trends or issues. Examples might include potential new types of claim, legislative or legal developments, evolution in market practice for reserving and the benchmarking discussed above. The specifics of this might be better described as Needs Specific covered in Section 3. However, the general principle of addressing market and emerging issues is a constant from audit to audit.

3.2 Needs specific matters

There are a number of activities completed less frequently that are driven by specific circumstances. A number of examples are given below:

- *Reinsurance and risk transfer:* Where the insurance entity enters into unusual or complex reinsurance contracts or structures, the actuary may be involved to review the nature or outcome of the reinsurance. Where the contracts have an Alternative Risk Transfer structure, for example, an experience account or other finite risk component, the assisting actuary may be involved in discussions on whether a sufficient level of risk transfer exists for the contract to be classified as insurance.
- *Specific reviews:* The assisting actuary may complete specific analysis or review on a particular issue or matter as directed by the auditor. Recent examples include Film Slate/ Finance exposures, the impacts of legislative reforms and asbestos.
- *Provisions differ from Approved Actuary recommendations:* Where the Insurance entity's Board selects a provision that differs from the Approved Actuary's recommendation, the auditor will typically ask the assisting actuary for further comment. This may include indication of the relative probability of adequacy implied by the provision put forward and discussing the actuarial rationale for such an adjustment.
- *Contingent liabilities:* It may be unclear to the auditor or insurance entity whether a potential cost warrants a provision or is a contingent liability. The assisting actuary may be involved in these discussions. These issues more often arise when assisting the audit of self-insurers but may also emerge for the audit of an insurer.

3.3 Emerging areas

A number of emerging areas are as follows:

- *Other reports and documentation:* The assisting actuary may be asked to review other documents prepared by the insurance entity, including the Reinsurance Management Strategy, Risk Management Strategy, premium filing submissions and less frequent analyses such as claim expense assumptions.
- *Claim file reviews:* The assisting actuary may be asked to assist in the review of specific claim files. This is more common for insurers in run-off for which the provisions on a small number of large claims can be material to the financial results. This area extends to examining legal opinions on new or potential claims and claim types – not from a legal perspective – but to comment on the potential impact to actuarial results.
- *Operational comments:* The actuary may be asked to comment on the operational aspects of the actuarial processes and structure, including the quality of analysis and any potential enhancements, succession planning, the balance of internal and external skills, reporting lines and the timeliness of reporting.
- *Debriefs:* The assisting actuary may be asked to attend the client's debrief to provide formal or informal comment on areas of potential process improvement. This gives the assisting actuary the opportunity to discuss items that would not be significant enough for inclusion in the Auditor's management letter.

- *Timetable:* As the last in the chain of report receipt, the timeframe available to auditor and the audit assisting actuary to examine final reports, provide comment and reach conclusions is often very compressed. There is only a short time for the auditor between report production and the sign off of accounts. The risk of over-running the timetable is very real, with significant the time pressure during the year end process.

As a recipient of the actuarial reports, it is natural for the assisting actuary to monitor the production of these reports against the year end timetable. The assisting actuary will let the auditor know if this may impact the preparation of the accounts and or the audit timetable. This role may also include providing feedback to the insurance entity on the 'time management' aspects of the process.

- *Quality of earnings:* For some insurance entities the auditor may comment on the extent of the profit which might be thought of as regular, having removed the impact of unusual items, for example, where a trading insurance entity commutes a sizeable component of the reinsurance at a profit or loss to prior provisions or where a substantial change in the actuarial results generates a material profit or loss on the run off of prior years. The actuary might be involved to provide input to this evaluation of the 'quality of earnings' where there has been an irregular event on the actuarial side.
- *Control frameworks:* Auditing Standard AUS 210 (The Auditor's Responsibility to Consider Fraud in an Audit of a Financial Report (June 2004)), sets out the auditor's responsibility within the audit to consider the potential for fraud. The actuary may be asked to comment on control processes in the actuarial work due to the material impact misstatement of the actuarial figures could have. This might include liaising with the valuation or managing actuary to receive an overview of control frameworks and to receive management assertions around the application of these.

As one expects, the emerging areas of involvement have been to date more widespread on the audit of larger insurers. However, these items may indicate the potential developments of this role.

4 Observations from Practical Experience

The section below offers a number of observations which may be of use to an actuary assisting an auditor and the valuation actuary in understanding the focus of the assisting actuary. The observations are provided in no particular order and with no particular emphasis. We hope the observations may lead to an improvement in actuarial assistance to the audit process and are not intended as criticisms of existing practices.

We hope that it will further extend the background paper in clarifying the audit role and the breadth and variety of the assisting actuary's work.

4.1 Process observations

Our key observations are as follows:

- *Valuation actuary meetings:* In our view, it is very important that the assisting actuary is able to meet with the valuation actuary to discuss the valuation results. Whilst a written report should be complete and self contained, there is no replacement for the opportunity to clarify understanding and confirm interpretation face to face or over the phone.
- *Review and step through of management presentations:* In medium to large insurers, the valuation actuary will generally summarise their results and provide a presentation to management. This document and the presentation add further explanation to the technical decisions. Typically they address a number of key audit questions, for example covering unexpected claim development or unusual claims. Typically, management prefer that the initial management presentation remains 'in-house', without the attendance of the assisting actuary. In that case, the valuation actuary will represent to the assisting actuary at a later time. The review and step through of management presentations, where available, should be very high on the priority list for the assisting actuary.
- *Write up of meeting material:* Information provided verbally in meetings by the valuation actuary or management should be put into writing; ideally, by the valuation actuary or management. Alternatively, the assisting actuary can summarise the meeting in a file-note or an email and have the details formally confirmed.
- *Written description of scope and materiality:* Agreeing the scope and definition of materiality with the auditor before commencing the assist work is very important. The auditor may agree on separate definitions of materiality for Balance Sheet items and Profit and Loss items. It is worth noting that the applied definition of materiality may be lower than the overall audit definition. There are two reasons for this. Firstly, where there are many lines of business, a trend or bias towards under or over-reserving may accumulate to exceed a specified threshold. Secondly, from the perspective of having a meaningful discussion and providing input to process development, materiality needs to be relevant to the class of business being reviewed.
- *Data responsibilities:* As a specific aspect of scope definition, it is worthwhile clarifying responsibilities for data reconciliation work with the auditor and ensuring that there is a clear hand-over when this is completed.

- *Profit and loss impact:* The Approved Actuary quantifies balance sheet entries for the insurer. However, an auditor's opinion will often include some assurance on the consistency of the profit and loss statement. To the extent that a change in valuation approach creates a change in balance sheet strength then the assisting actuary may need to consider whether the profit and loss statement is consistent with prior years. The valuation actuary should recognise that this is a valid and required aspect of the audit and a necessary aspect of discussion. The application of a balance sheet materiality will serve little purpose in these discussions and can trivialise the issue rather than help the parties discuss any issues and reach conclusions.
- *Timeliness of Reports:* The audit timetable is often extremely tight. A two day delay in the preparation of a report against a 45 day preparation period may appear not unreasonable. However, against a four day turnaround for the assisting actuary to final comments to the auditor, the two day delay can be quite a problem. The assisting actuary should communicate their timetable when they can and the valuation actuary flag potential delays in advance. It is ideal when the assisting actuary is able to give input to the insurance entity's valuation timetable discussions.

4.2 Reporting observations

As discussed above, a key aspect of the scope is to help the auditor gain an understanding of what has changed from the previous audit. The run-off experience on the prior years is a major audit focus. A second major focus is in assessing the reasonableness of the results relative to benchmarks and high level indicators of performance. With these aims in mind, the valuation actuary can aid the process with a number of very straightforward exhibits. These exhibits and areas are as follows:

- *Projected ultimate loss ratios:* by accident year (or underwriting year for a reinsurer) based on ultimate premium and claims. Undiscounted results are preferred as these are not distorted by changes in the yield curve or payment pattern assumptions. A comparison of this to previous valuation results is a simple way of summarising the impact of valuation and data changes. It provides a degree of granularity that an overarching examination of change may not. This also allows basic benchmarking and the translation of the actuarial results into a language that is used by the underwriters and managers that the auditor will meet. We note that IFRS disclosures will help in this regard.
- *Case estimates and IBNR:* In assessing the overall reasonableness of the result, the assisting actuary will often be asked to describe the allowance made in addition to the case estimates. In many accounting systems this 'IBNR' is booked as an accounting transaction so this becomes a figure with which the auditor and management will be familiar. Some actuarial reports do not set out the IBNR and case estimates separately, if at all, by accident or underwriting year. We note this could be due to an unavailability of case estimate data or because the actuary has not adopted a case estimate based method. However, we have found it useful as a part of a high level reasonableness check on the logical progression of IBNR for such a comparison to be made and we would encourage valuation actuaries to provide this tabulation where possible. It is a useful summary of the results of any model blending, allows a mechanism of comparison to other benchmarks and prior valuations in a way which is more straightforward than a review of each underlying assumption. Undiscounted results are preferred as these are not distorted by changes in the yield curve or payment pattern assumptions.

- *Discounted mean terms and basic profiles:* Again to allow the assisting actuary to quickly assimilate any changes, it is useful to confirm the discounted mean term implied by the discounting profile. For a trading insurance entity it is also helpful to confirm the cash-flow profile expected on the liabilities of the latest accident year and to confirm whether this underlying profile has changed. A simple mechanism for this is to express the discounted mean term calibrated on a default rate of interest, such as 6.0%, to separate out the impact of yield curve changes.
- *Accounting period consistency:* The audit will typically relate to a specific accounting period. An analysis of change relative to the prior accounting date (and not just the prior valuation) should be included in the valuation report to cover the accounting period where possible. Furthermore, it may be useful to cover briefly any material issues resolved within the accounting period which may not otherwise be written up in the report pertinent to the accounting period end date.
- *Extra commentary:* Passing on the observations of non-actuarial recipients of reports, there is a tendency to “overdo” the numerical information presented and “underdo” the discussion of the overall business framework, risks and issues and actuarial judgements. APRA made similar observations in 2004 regarding the selection of risk margin factors and risk margin approach and the extent of documentation of this by Approved Actuaries. It is a frequent observation that the key points a valuation actuary may cover in their management presentation are not discussed or are covered only briefly in the valuation report.

4.3 Other observations

Our other observations are discussed below:

- *Not all areas and aspects are reviewed:* This should be clear from the discussion above but we again reinforce that the auditor and the assisting actuary do not review all aspects of the valuation or all classes of business.
- *Care around the use of actuarial terms:* We stress the need for care in the use of actuarial terms, for example IBNR and IBNER and the difference between assessing liabilities on a ‘claims occurring’ or ‘claims made’ basis. Extra attention to this is worthwhile in the preparation of reports for self-insurers including captives operated by non-insurers and those self insurers that engage actuaries to assist in calibrating balance sheet provisions. In this context, both the client and the auditor may have less insurance expertise than the actuary’s typical audience. A glossary of terms is exceptionally helpful in this case
- *Communicate issues early:* Where the assisting actuary has concerns, it is important to communicate these to the auditor and in turn the insurance entity and valuation actuary as early as possible. This is not always practical within the timetable.
- *Follow up with valuation actuaries:* It can be of mutual benefit for the assisting actuary and valuation actuary to meet again at the end of the process to discuss the audit findings. This provides the opportunity to follow up on any comments made in the presentation to the Board or Audit Committee or the auditor’s management letter. It also provides opportunity for informal feedback, for example on areas that did not warrant reporting to the Board or inclusion in the auditor’s management letter. This is not always possible within the audit timetable, however, and the assisting actuary will need to hold these discussions within the protocols of the audit. It is worthwhile planning this in advance where possible and communicating to the valuation actuary that there will be the opportunity for this discussion.

5 Areas of Development

5.1 External Peer Review

Just prior to the completion of this paper the Institute of Actuaries of Australia published the draft Professional Standard entitled External Peer Review – General Insurance and Life Insurance. The annual External Peer Review (“EPR”) of APRA licensed General Insurance Approved Actuary reports, following the above professional standard is expected to become a regulatory requirement starting from reporting periods ending 30 June 2006. It is likely that the EPR will impact the assisting actuary role however, the extent of this is unclear at this stage.

One observation is that this Professional Standard provides a useful reference point for the assisting actuary. It steps through areas that a reviewing actuary might cover and also includes a sample wording for the reviewing actuary to use on completion of his or her review.

It is our understanding that it will be acceptable to APRA for the auditor’s assisting actuary to complete the EPR. In that case, the assisting actuary’s role would expand to complete explicitly each of the requirements of the Professional Standard.

Where the EPR is not completed by the auditor’s assisting actuary then the EPR report becomes a further input for the auditor in refining the scope of the review and may become a material document within the audit. Auditors have indicated that in these circumstances the assisting actuary will probably be asked to examine the EPR. Any analysis completed and documented by the EPR actuary will obviously reduce the need for the assisting actuary to perform these. However, the assisting actuary may be asked to review and comment on the EPR actuary’s analysis or perform further analysis as the auditor instructs.

5.2 Financial Condition Reports

In the late stages of preparing this paper the Institute of Actuaries of Australia released for comment Financial Condition Reports for General Insurance: Professional Standard 305 – Exposure Draft. Based on the draft, we have provided some comment on the potential impact this may have on the role of the assisting actuary.

PS305 states that unless required otherwise by APRA, an FCR must be prepared annually in time for the Insurer to submit it to APRA with its other statutory returns.

It is worth noting that the auditor is not required to audit the FCR. From our discussion with auditors to date, this report will however become a key element of audit evidence as it will provide a single reference point for a great deal of information and background to the Insurer.

At this stage, auditors have suggested that they will review and follow up on the FCR for any material issues and confirm its consistency with the Approved Actuary report. We think it very likely that there will be actuarial involvement in assisting with that review, however, the practical extent of this will be clear until the first FCRs are produced.

Our introduction noted that the extent of actuarial involvement in the audit often mirrors the extent of actuarial involvement in the preparation of the financial statements, reports or returns that are the subject of the auditor's work. We expect that the FCR, as a further extension of actuarial involvement, is more likely than not to increase the scope of the involvement of actuaries in the audit of insurers.

5.3 International Financial Reporting Standards

The insurance industry is currently grappling with the introduction of new accounting requirements, standards and disclosures driven by the International Accounting Standards Board (IASB). The international requirements have already been incorporated in the revised Australian Accounting Standard AASB1023 for reporting periods beginning 1 January 2006.

The new requirement for a Liability Adequacy Test, which we do not cover in this document, may generate further review activity for the assisting actuary.

The revised AASB1023 also requires further disclosures of an actuarial nature. The standard states that "an insurer shall disclose information that helps users to understand the amount, timing and uncertainty of future cash flows from insurance contracts." It specifies disclosures for:

- the sensitivity of profit or loss and equity to changes in variables that have a material effect on them;
- concentrations of insurance risk;
- actual claims compared with previous estimates (i.e. claims development), and
- interest rate risk and credit risk.

The first and third of these may greatly aid the auditor and may reduce the need for an assisting actuary to analyse or put together such material. On the other hand the assisting actuary may well be asked to review these disclosures and comment on consistency with reports, accuracy etc. This request for review and comment may also be the case for the liability adequacy test and the new disclosures.

6 Conclusions

The role of the actuary assisting the auditor is informal, in that it is not mandated by regulation or guidance. However, where once the involvement of an actuary engaged directly to assist the auditor was unusual, it is now becoming increasingly standard practice. As the actuarial role has developed within the general insurance industry, so too has the role of the “assisting actuary” in a mirrored, if slightly lagged, fashion.

The scope of the assisting actuary’s role is very broad and differs materially from one audit to another. There is no ‘standard scope’ for the assisting actuary. The extent of involvement ranges from little or no involvement to fairly extensive involvement. The assisting actuary will focus on high-level issues and the role is far from a ‘tick box’ exercise. As part of a broader control cycle, the assisting actuary role has the opportunity to add value to the auditor, the audit client and raise awareness of the work that actuaries can deliver.

The upcoming External Peer Review, Financial Condition Report and new disclosures of an actuarial nature under IFRS will also have an impact on the audit assist role. The practical impact of these is not yet clear. However, there will certainly be more material of an actuarial nature to review within the financial statements and these other documents.

We expect that the practice of including an actuary in the audit will continue to increase and the scope of the assisting actuary’s involvement will continue to expand.

7 References

7.1 Background paper

Gibbs J, Hu S et al., 2005, A Background to General Insurance Audit in Australia

7.2 Relevant Regulatory Bodies

Institute of Actuaries of Australia	www.actuaries.asn.au
Institute of Chartered Accountants in Australia	www.icaa.org.au
CPA Australia	www.cpaaustralia.com.au
Australian Accounting Research Foundation (AARF)	www.aarf.asn.au
Australian Accounting Standards Board (AASB)	www.aasb.com.au
Auditing & Assurance Standards Board (AUASB)	www.auasb.gov.au
Australian Prudential Regulatory Authority (APRA)	www.apra.gov.au
Private Health Insurance Administration Council (PHIAC)	www.phiac.gov.au
Australian Stock Exchange (ASX)	www.asx.com.au
Australian Security Investment Commission (ASIC)	www.asic.gov.au
US Security Exchange Commission (SEC)	www.sec.gov
The Public Company Accounting Oversight Board United States (PCAOB)	www.pcaobus.org

7.3 Legislation

Corporations Act 2001 – Commonwealth Government

<http://www.comlaw.gov.au/ComLaw/Legislation/ActCompilation1.nsf/0/102FBDB57A77E136CA257046001276CA?OpenDocument>

Financial Sector (Collection of Data) Act 2001

<http://www.comlaw.gov.au/ComLaw/Legislation/ActCompilation1.nsf/0/4E89948046511349CA256F7100559A02?OpenDocument>

Insurance Act 1973 (as amended 13 July 2005) – Commonwealth Government

[http://www.comlaw.gov.au/ComLaw/Legislation/ActCompilation1.nsf/0/24FF7450772E0466CA25703E0022C47E/\\$file/Insurance1973_WD02.pdf](http://www.comlaw.gov.au/ComLaw/Legislation/ActCompilation1.nsf/0/24FF7450772E0466CA25703E0022C47E/$file/Insurance1973_WD02.pdf)

Sarbanes-Oxley Act 2002 (United States)

http://www.pcaobus.org/About_the_PCAOB/Sarbanes_Oxley_Act_of_2002.pdf

7.4 Government Commissions

HIH Royal Commission

<http://www.hihroyalcom.gov.au/>

Morris Review of the Actuarial Profession (UK)

http://www.hm-treasury.gov.uk/media/CA0/9C/morris_final.pdf

7.5 APRA

General Insurance Prudential Standards and Guidance Notes

<http://www.apra.gov.au/General/General-Insurance-Prudential-Standards-and-Guidance-Notes.cfm> including:

- GPS 220 Risk Management for General Insurers July 2002
- GGN 220.1 Governance July

Draft Prudential Standards as set out in the Discussion Paper, dated 3 May 2005: Prudential Supervision of General Insurance – Stage 2 Reforms Risk and Financial management including:

- GPS 310 Audit and Actuarial Reporting and Valuation

7.6 ASIC

ASIC Policy Statements

<http://www.asic.gov.au/ps> including:

- PS 180 Auditor registration
- PS 154 Certificate by qualified accountant
- PN 34 Auditors obligations

7.7 AASB Standards

http://www.aasb.com.au/pronouncements/aasb_standards_2005.htm including:

- AASB 1023 General Insurance Contracts
- AASB 119 Employee Benefits
- AASB 137 Provisions, Contingent Liabilities and Contingent Assets
- AASB 1031 Materiality

For further reference:

<http://www.aasb.com.au/>

7.8 Institute of Actuaries of Australia

Institute of Actuaries of Australia Professional Standards and Guidance Notes

http://www.actuaries.asn.au/PublicSite/publications/publications2005/prof_standards_guidance.htm including:

- PS 300 - Actuarial Reports and Advice on General Insurance Technical Liabilities
- GN 551- The Auditor's use of the work of the Actuary and the Actuary's use of the work of the Auditor in connection with the preparation and audit of a Financial Report

Draft and pending Professional Standards including:

- PS 505 – Draft – External Peer Review – General Insurance and Life Insurance
- PS 305 – Exposure Draft – Financial Condition Reports for General Insurance

7.9 ASX Rules

<http://www.asx.com.au/supervision/rules/index.htm>

7.10 Audit and Assurance Standards Board

Australian Government Auditing and Assurance Standards Board Standards and Guidance
<http://www.auasb.gov.au/standards.htm> including:

- AUS 104 Glossary of Terms (July 2002)
- AUS 106 Explanatory Framework for Standards on Audit and Audit Related Services (November 2001)
- AUS 108 Framework for Assurance Engagements (June 2004)
- AUS 202 Objective and General Principles Governing an Audit of a Financial Report (February 2004)
- AUS 206 Quality Control for Audits of Historical Financial Information (June 2004)
- AUS 208 Documentation (July 2002)
- AUS 210 The Auditor's Responsibility to Consider Fraud in an Audit of a Financial Report (June 2004)
- AUS 212 Other Information in Documents Containing Audited Financial Reports (October 1995)
- AUS 306 Materiality and Audit Adjustments (June 2001)
- AUS 502 Audit Evidence (February 2004)
- AUS 524 The Auditor's Use of the Work of the Actuary and the Actuary's Use of the Work of the Auditor in Connection with the Preparation and Audit of a Financial Report (July 2002)
- AUS 606 Using the Work of an Expert (July 2002)
- AUS 702 The Audit Report on a General Purpose Financial Report (March 2002)
- AUS 904 Engagements to Perform Agreed-upon Procedures (July 2002)

7.11 ICAA and CPA

Professional Statement F1 – ICAA and CPA

http://www.icaa.org.au/upload/download/DecBoardFinal_clean.pdf