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**Business Combinations under
International Financial Reporting Standards
IFRS [2008]**

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This International Actuarial Note (IAN) is promulgated under the authority of the International Actuarial Association. It is an educational document on an actuarial subject that has been adopted by the IAA in order to advance the understanding of the subject by readers of the IAN, including actuaries and others, who use or rely upon the work of actuaries. It is not an International Standard of Actuarial Practice (“ISAP”) and is not intended to convey in any manner that it is authoritative guidance.



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1. Scope

The purpose of this INTERNATIONAL ACTUARIAL NOTE (IAN) is to give advisory, non-binding guidance that ACTUARIES may wish to take into account when providing ACTUARIAL SERVICES in accordance with INTERNATIONAL FINANCIAL REPORTING STANDARDS (IFRSs) concerning accounting values relating to INSURANCE CONTRACTS, INVESTMENT CONTRACTS, or SERVICE CONTRACTS issued by REPORTING ENTITIES in-force at the time of a business combination. This IAN applies where the REPORTING ENTITY is an INSURER, a CEDANT, a REINSURER, an ISSUER, or a provider of services.

Reliance on information in this IAN is not a substitute for meeting the requirements of the relevant IFRSs. PRACTITIONERS are therefore directed to the relevant IFRSs (see Appendix B) for authoritative requirements. The IAN refers to IFRSs that are effective as of February 1, 2008, as well as amended IFRSs not yet effective as of February 1, 2008 but for which earlier application is made. If IFRSs are amended after that date, actuaries should refer to the most recent version of the IFRS.

2. Publication Date

This IAN was published on 14 June 2008, the date approved by the Council of the INTERNATIONAL ACTUARIAL ASSOCIATION (IAA) and updated 28 March 2014.

3. Background

Mergers and acquisitions are a regular occurrence in all business sectors, including insurance and other financial services. The accounting requirements for such business combinations differ from the requirements for ongoing business activity, because the acquisition method, including the use of FAIR VALUES at the acquisition date, is required. A separate accounting standard (INTERNATIONAL FINANCIAL REPORTING STANDARD (IFRS) 3 *Business Combinations*) has been developed to address the specific situations of a business combination. Further guidance useful in accounting for insurance contracts involved in a business combination can be found in other IFRSs listed in Appendix B. In this IAN, reference to the current accounting standard on business combinations, which is a revised version of a predecessor standard, is referred to as IFRS 3. The previous version, which is relevant to business combinations occurring before the effective date of IFRS 3, is referred to as IFRS 3(P).

The IAN sets forth the considerations a practitioner may wish to consider when asked to provide services related to the accounting for business combinations.

In performing these services, the practitioner would usually consult several IFRSs including, but not limited to, the following:

1. IFRS 3(Revised) *Business Combinations* – provides guidance for determining a business combination and how to apply the acquisition method including the treatment of goodwill. It also provides guidance regarding disclosure requirements. Adopted in January 2008, it is referred to in this IAN as IFRS 3.
2. IFRS 3 *Business Combinations* – is the predecessor to IFRS 3(Revised). Adopted in 2004, it superseded IAS 22 *Business Combinations*. It is referred to in this IAN as IFRS 3(P).
3. IFRS 4 *Insurance Contracts* – provides guidance for accounting for insurance contracts in a business combination.
4. INTERNATIONAL ACCOUNTING STANDARD (IAS) 38 *Intangible Assets* – provides guidance for determining whether to recognise, how to measure, and what to disclose for intangible assets that are not specifically dealt with in other accounting standards.
5. IAS 18 *Revenue* - provides FINANCIAL REPORTING requirements for revenue from rendering services.
6. IAS 36 *Impairment of Assets* – provides guidance on testing for recoverability of, among other things, intangible assets acquired in a business combination and of goodwill.
7. IAS 39 *Financial Instruments: Recognitions and Measurement*, provides, among other things, guidance on the measurement of FINANCIAL INSTRUMENTS at fair value

4. International Actuarial Note

4.1 Accounting for business combinations – general process

IFRS 3 provides accounting guidance for business combinations. The process involves:

- Determining the nature of the transaction; i.e., determining whether it is a business combination or a different type of transaction,
- Applying the purchase method of accounting to transactions that are business combinations
 - Recognising and measuring the identifiable assets acquired and liabilities assumed
 - Recognising and measuring goodwill or a gain from a bargain purchase.

The following sections expand on these topics and provide additional guidance on related matters.

IFRS 3(P) was first effective for business combinations with agreement dates on or after March 31, 2004. It was revised in 2008 with the revised guidance effective for

business combinations with acquisition dates on or after July 1, 2009. Transition guidance is discussed in Sections 4.4 and 4.5.

4.2 Determining the nature of the transaction

IFRS 3 defines a business combination as “A transaction or other event in which an acquirer obtains control of one or more businesses.” It goes on to state that transactions referred to as “true mergers” or “mergers of equals” are also business combinations. A “business” is an integrated set of activities and assets that is capable of being conducted and managed for the purpose of providing a return in the form of dividends, lower costs or other economic benefits directly to investors or their owners, members or participants. The “acquirer” is the entity that obtains control of the acquired. “Control” is the power to govern the financial and operating policies of an entity so as to obtain benefits from its activities. (IFRS 3 Appendix A)

Note that for accounting purposes in a business combination, the “acquirer” is not always the entity which legally acquires the other entity. Under a “reverse acquisition”, the entity whose stock is being legally acquired is the “acquirer” for accounting purposes, while the entity which is legally the acquirer becomes the “acquired” for accounting purposes. This can occur where a larger entity arranges to have itself bought by a smaller entity, perhaps due to a preference to utilise the common stock characteristics of the smaller entity. The ACTUARY may want to rely on their PRINCIPAL’s accounting experts to determine who the acquirer and acquired entities are for accounting purposes.

It should be noted that IFRS 3, as revised in January 2008, does not exclude the merger of mutual entities from its scope, as IFRS 3 had previously. Hence the merger of mutual insurers that occurs after the effective date of the revised IFRS 3 follows the purchase method of accounting, but the accounting for such a merger that occurred before this date do not use this approach, although some adjustments may be necessary (see Section 4.6).

IFRS 3 states that if an entity acquires a

group of assets that does not constitute a business.
... The cost of the group shall be allocated to the individual identifiable assets and liabilities on the basis of their relative fair values at the date of purchase. (IFRS 3.2(b)).

Goodwill cannot arise from a transaction that is not a business combination. As transactions involving insurance contracts are not specifically addressed in IFRS 3, the

practitioner must consider if an acquisition of a portfolio of CONTRACTS is a business combination.

One can conclude from IFRS 3 that the necessary conditions for defining a transaction involving insurance contracts as business combinations are:

1. the portfolio or group of contracts must constitute a business; and
2. control over the portfolio must be obtained as a result of the transaction.

The addition of individual or multiple contracts to an entity's book of business in a single transaction may not be sufficient to qualify as a business combination. The act of issuing contracts would likely not be considered an acquisition or a business combination. For example, the issuance of several individual contracts to a single owner (e.g., as in the case of corporate-owned life insurance) or purchases of individual contracts in a secondary market (e.g., viatical settlements) would not be considered a business combination. A business combination involves the transfer of contracts that have already been issued. This may also include the right to issue future contracts using the same distribution system associated with the purchased block. However, any values directly associated with such rights to issue contracts are not reflected in the liabilities or other values of acquired contracts but may be recognised as intangibles associated with the business combination, as discussed further below in Section 4.3.3. Even without the transfer of the right to issue future contracts, the potential of the net cash flows associated with a portfolio of insurance contracts to generate profits may be sufficient for it to be deemed a business.

The transfer of a block of business from one entity to another may be considered a business combination if the acquirer obtains control of the associated contracts. An acquisition is distinct from a reinsurance transaction, other than novation or assumption reinsurance, since an acquisition transfers control over all aspects of contracts, whereas a reinsurer has at most limited control over the contracts reinsured. For example, an insurer may buy an individual line of business of a multi-line entity by buying certain assets, taking on its obligations through assumption reinsurance and taking control of the sellers' distribution system. The insurer in this example does not buy the shares of the seller, but nonetheless has acquired a business and would account for the transaction as a business combination.

Some types of transactions are specifically excluded from the scope of IFRS 3 (IFRS 3.2). These are:

- **Joint ventures**
IAS 31 defines a joint venture as "a contractual arrangement whereby two or more parties undertake an economic activity that is subject to joint control."

Thus, if control is gained by two or more entities, the transaction falls outside the scope of IFRS 3.

- **The acquisition of an asset or a group of assets that does not constitute a business**

The acquisition of an asset or a group of assets that does not constitute a business combination is discussed above.

- **Combinations of businesses under common control**

A business combination involving entities or businesses under common control is a business combination in which all of the combining entities or businesses are ultimately controlled by the same party or parties both before and after the business combination, and that control is not transitory. (IFRS 3.B1)

A group of individuals shall be regarded as controlling an entity when, as a result of contractual arrangements, they collectively have the power to govern its financial and operating policies so as to obtain benefits from its activities. Therefore, a business combination is outside the scope of this IFRS when the same group of individuals has, as a result of contractual arrangements, ultimate collective power to govern the financial and operating policies of each of the combining entities so as to obtain benefits from their activities, and that ultimate collective power is not transitory. (IFRS 3.B2)

In other words, a business combination where each combining entity is controlled by the same individual or group of individuals is not considered to be a business combination for the consolidated group and therefore would not be within the scope of IFRS 3.

4.3 Applying the acquisition method of accounting to transactions that are business combinations in the scope of IFRS 3

IFRS 3.4 requires the acquisition method of accounting to be applied to business combinations within its scope. The acquisition method views a business combination from the perspective of the acquirer. The acquirer purchases the assets and assumes the obligations of the seller. The measurement of the acquirer's assets and liabilities that existed before the acquisition is not affected by the transaction.

IFRS 3.5 describes the acquisition method as comprising four steps:

1. Identifying the acquirer
2. Determining the acquisition date
3. Recognising and measuring the identifiable assets acquired and the liabilities assumed
4. Recognising and measuring goodwill or a gain from a bargain purchase

Identifying the acquirer and determining the acquisition date are sometimes complex matters that do not require actuarial expertise. These issues are not in the scope of this IAN. Guidance can be found in IFRS 3.7, which in turn refers to IAS 27 *Consolidated and Separate Financial Statements*, and in IFRS 3, B11-B14.

4.3.1 Recognising and measuring identifiable assets acquired and liabilities assumed

IFRS 3 requires the identifiable assets acquired and liabilities assumed in a business combination to be measured at fair value at the acquisition date.(IFRS3.10 and 3.18) There is an emphasis on recognising all identifiable assets acquired and liabilities assumed, reflecting the Board's desire for entities to fully consider the difference between identifiable intangible assets and goodwill, as the treatment of goodwill (Section 4.3.6) is different from the treatment of intangible assets with definite lives and the allocation of the purchase price among these items affects the emergence of future profits.

To qualify for recognition, identifiable assets and liabilities acquired

- must meet the definition of assets or liabilities (IFRS3.11); and
- must be part of what the acquirer and the acquiree exchanged in the business combination rather than the result of a separate transaction (IFRS 3.12).
Examples of separate transactions that do not constitute part of the business combination include settlement of pre-existing relationship between the acquirer and acquiree and remuneration to employees or former owners of the acquiree for future services.

Applying the recognition principles may result in recognition of assets or liabilities that the acquiree had not recognised in its FINANCIAL STATEMENTS.

At acquisition, any deferred ACQUISITION COST (DAC) or deferred original COST asset and any unearned revenue liability derived from front-end loads should be released. DAC and unearned premiums represent the acquiree's basis in the acquired assets and assumed liabilities. Consideration is then given to what amounts, if any, replace these values. It can be said that the present value of in-force (PVIF) (see Section 4.3.4) is

the acquiree's basis in the acquired contracts, replacing DAC. The acquirer also measures the pre-claims obligation of in-force short-duration contracts at fair value that may have a value different from the unearned premiums.

Similar consideration is given to whether liabilities should be established for accrued loyalty bonuses or endowment features. Presumably they would have a fair value greater than zero, but it may not be the same as the amount accrued by the acquiree at the date of the acquisition.

The application of the recognition and measurement concepts in IFRS 3 for intangible assets and acquired liabilities is discussed in the following sections. The recognition and measurement of tangible assets, which, other than assets arising from ceded reinsurance, are mainly invested assets, is not in the scope of this IAN. It is worth noting that there are some exceptions to the use of fair value measurement; for example, liabilities from retirement benefit plans are measured according to IFRS guidance for pension liabilities.

4.3.2 Fair value of an insurer's liabilities

Insurance contracts and investment contracts with DISCRETIONARY PARTICIPATION FEATURES (DPFs)

IFRS 4 does not give insurance liabilities an exemption from the requirements of IFRS 3, and therefore requires that these liabilities are to be measured at fair value on the acquisition date.

Consistent with the general thrust of IFRS 4 to allow insurers to continue to use current accounting policies, IFRS 4.31 allows an "expanded presentation".

To comply with IFRS 3, an insurer shall, at the acquisition date, measure at fair value the insurance liabilities assumed and insurance assets acquired in a business combination. However, an insurer is permitted, but not required, to use an expanded presentation that splits the fair value of acquired insurance contracts into two components:

- (a) a liability measured in accordance with the insurer's accounting policies for insurance contracts that it issues; and
- (b) an intangible asset, representing the difference between (i) the fair value of the contractual insurance rights acquired and insurance obligations assumed and (ii) the amount

described in (a). The subsequent measurement of this asset shall be consistent with the measurement of the related insurance liability.

The difference between the liabilities measured by the acquiring entity's current accounting policies and the fair value of liabilities represents an intangible asset, which is recognised and amortised into income in relation to the settlement of liabilities.

The intangible asset and approaches to a direct calculation of the asset is discussed in Section 4.3.4.

IFRS 4 does not currently prescribe a technique for the determination of the fair value of insurance liabilities. In the absence of specific guidance, entities follow general guidance and common practices. The INTERNATIONAL ACCOUNTING STANDARDS BOARD (IASB) definition of fair value is "the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction."

Guidance found in IAS 39 may be useful, although insurance contracts are not in the scope of IAS 39. It states that the fair value of financial instruments, when they are not traded in observable markets, is based on pricing techniques commonly used by market participants. It also calls for the greatest possible use of market inputs.

Having just completed a transaction, the acquiring entity is likely to have analysed the cash flows and capital requirements of the existing insurance liabilities and book of business and to have made a determination of their value. Hence there may be information available from analyses performed while the transaction was negotiated which may provide the basis for a fair value.

Analyses performed during the acquisition process may take the form of actuarial appraisals or embedded value calculations in which a value of in-force is determined. A possible fair value measurement of long duration contract liabilities would be the value of liabilities underlying the calculation of the value of in-force contracts reduced by that value, as discussed further in Section 4.3.4.

In recent years, an approach to measuring long duration insurance contract liabilities that uses techniques found in the pricing of financial instruments in observable markets has been gaining acceptance. This market-consistent approach is a candidate for a long duration contract fair value measurement, at least until more specific guidance is adopted by the IASB.

Investment contracts that do not contain DPFs

Investment contracts that do not contain DPFs are accounted for under IAS 39. They are measured at fair value at the acquisition date. If the contracts had been measured by the seller at fair value based on observable inputs, then presumably the value does not change as a result of the acquisition. The approach to fair value under IAS 39 may differ in some respects from measurements that are sometimes provided in information supplemental to financial statements. The IAS 39 calculation, for example, does not consider future deposits. Moreover, the measurement of the liabilities for IFRS purposes may treat explicit fees as being related to a separable service contract rather than to the investment contract.

4.3.3 Identifying intangible assets

Several potential intangible assets could arise from a business combination involving contracts issued by insurers. These include, but are not limited to:

- value of in-force contracts
- the difference between fair value and IFRS 4 value of a portfolio of claims
- the difference between fair value and IFRS 4 value for assets arising from ceded reinsurance
- the difference between the fair value and IFRS 4 value for liability guarantees
- renewal periods for short-duration contracts
- distribution systems or relationships
- customer relationships
- service agreements
- brand names, trademarks, and copyrights
- proprietary software or technology
- licenses to transact insurance business
- product approvals and registrations

The value of in-force contracts, the difference between fair value and IFRS 4 value of claims liabilities and the similar difference between fair value and IFRS 4 value for assets arising from ceded reinsurance result from the expanded presentation permitted by IFRS 4, which is discussed further below, and hence can be said to be *de facto* recognisable. The other items in the list are items that can be considered for recognition. For each of them, recognition must be justified based on the considerations in IFRS 3.

4.3.4 Intangible assets arising from the expanded presentation permitted by IFRS 4

Value of in-force for long duration contracts

Often the most significant intangible asset for long duration insurance business is the right to the future net cash flows arising from the acquired in-force book of policies. Before adoption of IFRS 4, it was common to report this asset separately. The asset

has been given many names, including the PVIF, the present value of future profits (PVFP), the value of business acquired (VOBA), or the value of business in-force (VBI). This IAN refers to the intangible asset as PVIF.

The two-component, expanded presentation permitted by IFRS 4 is not only intuitive but also consistent with the conclusion reached by Koltisko. Koltisko [5] has demonstrated that the intangible asset is the difference between the fair value of liabilities and the recorded amount. In other words, if insurance liabilities are measured at fair value, then $PVIF = 0$.

While the asset is defined in IFRS 4 as the difference between the liabilities measured under existing accounting policies and the fair value measurement of those same liabilities, insurers may wish to measure the PVIF directly. A directly calculated value of in-force can be used for the intangible asset if the net liability, the gross liabilities less the value of in-force, can be seen to be fair value.

IFRS 4 does not provide guidance for the fair value measurement of insurance liabilities or a directly calculated PVIF. As noted, common practices that reflect the methods and assumptions used by market participants may be appropriately used to estimate fair value.

The actuarial appraisal method, which is a common approach used in conjunction with US GAAP, is presented in Appendix A.

Calculations of appraisal values and of embedded values may involve practices that may not be permitted in the measurement of insurance liabilities after the IASB concludes Phase II of its Insurance Project and adopts a uniform approach to accounting for insurance contracts. Examples include anticipation of spreads in earnings rates on invested assets over risk-free rates, consideration of future dividends or other indeterminate benefits that are not unavoidable obligations of the insurer, and consideration of future premiums when they are not required to maintain guaranteed insurability. Until the IASB adopts a new standard, there is no prohibition against using practices commonly found in the analysis of value related to transactions involving insurance contracts.

The difference between the net liabilities for IFRS and the net liability for income taxes may represent a timing difference for which a deferred tax asset or a liability must be recognised (see IAS 12).

IFRS 4.33 excludes the intangible asset allowed under the expanded presentation from the scope of IAS 36 *Impairment of Assets*, and IAS 38 *Intangible Assets*. The exclusion from IAS 38 was prompted by the amortisation methods currently being used for this asset. Some insurers use an interest method of amortisation that would

not be allowable under IAS 38. The IASB decided to allow continuation of methods currently in use in IFRS 4 and remove this intangible from the scope of IAS 36 and 38.

The recoverability of the PVIF is not taken for granted, however. IFRS 4.17 states that the minimum LIABILITY ADEQUACY TEST is to be based on the carrying amount of the relevant insurance liabilities less the unamortised balance of any deferred acquisition costs and any related intangible assets acquired in a business combination or portfolio transfer. To the extent that the carrying amount is less than the minimum required liability, the deferred acquisition cost asset or intangible asset would be reduced accordingly.

IFRS 4 provides limited guidance on measuring the intangible after the acquisition date. IFRS 4.31(b) states that “The subsequent measurement of this asset shall be consistent with the measurement of the related insurance liability.” No further guidance is given. The statement seems to encompass a wide range of practices for PVIF amortisation. It would seem to include amortisation that is consistent with existing practices for DAC. Consideration should be given to what is intended by the term “related insurance liability” and whether that applies, for example, to liabilities for DPFs that may extend beyond the termination of the acquired contracts.

IFRS 4 does not address the possibility that the expanded presentation may result in a liability for the difference between the fair value of the liabilities and the measurement of the liabilities under current accounting policies. One possibility is to infer that IFRS 3 and IFRS 4 taken in combination require that the net liability as of the date of acquisition of the acquired business must be the fair value and hence a liability is recognised if the measurement of liabilities under current accounting policies is less than the fair value. Another interpretation is that the reference to an intangible asset in IFRS 4 implies that the expanded presentation is not used when the difference is a credit. A third possibility is that the standard did not explicitly contemplate the difference being a liability, but did not preclude recording a net liability for the intangible value in such a situation.

Value related to claims liabilities

Similar to the value of in-force, there may be an asset that should be recognised for the value of a portfolio of claims that generally would be the difference between the value of claims liabilities as measured under existing accounting policies and the fair value of those liabilities. For claims liabilities this value may result from, for example, the fact that a fair value is the expected present value of future cash flows, whereas under existing accounting policies the reported claims liabilities may not be discounted. Note that it is possible for this to be a net liability in such situations (i.e., an increase in the liability), such as where the risk margin adjustment under fair value exceeds any time value of money component.

Value related to reinsurance assets

Similar to the value related to claims liabilities, there may be an asset (or liability) that should be recognised for the value of reinsurance assets as measured under existing accounting policies and under fair value.

A reinsurance asset may have a different value under existing accounting from its fair value if, for example, the fair value reflects ultimate collectibility risk to the extent not already reflected under current accounting policies. If the entity chooses to measure the asset using its existing accounting policies, it may need to recognise an intangible liability for the difference in the two measures.

Value of Liability Guarantees

Business combinations sometimes include guarantees regarding the claims liability run out, such as a guarantee to reimburse the acquirer for losses above a certain amount. The actuary should consider whether such a guarantee is an identifiable asset that should be recognised at its fair value. The actuary may wish to treat the guarantee as a reinsurance asset and to measure the guarantee using its current accounting policies for reinsurance, in which case the difference between the recorded asset and the fair value of the guarantee is an intangible asset or liability. Such treatment is consistent with the accounting for indemnification assets, as given in IFRS 3.28 and 3.57.

4.3.5 Other intangible assets

As noted, there are a number of other possible intangible assets. Unlike those arising from the expanded presentation allowed in IFRS 4, these assets are in the scope of IAS 36 and 38. The following paragraphs provide descriptions of some of the more common intangible assets identified in combinations of insurance entities and some related considerations. Full development of common valuation and amortisation methods is beyond the scope of this IAN. While specific possible amortisation approaches are described for these assets, it should be kept in mind that IAS 38 provides that the amortisation period used should reflect the pattern in which an asset's future economic benefits are expected to be consumed by the entity. If that pattern cannot be determined reliably, the straight-line method should be used. There is also the possibility that some intangible assets have indefinite lives, and hence the intangible asset would not be amortised, but rather tested for recoverability. The actuary may wish to consult with accountants and other professionals, such as valuation experts, for assistance in determining which other potential intangible assets should be recognised, and how they should be measured and amortised.

Value of renewal periods for short-duration contracts (sometimes also referred to as "customer lists" for short-duration contracts)

A common situation in non-life insurance is the establishment of an intangible asset related to the value of potential renewals of short-duration contracts. The fair value may be based on market pricing benchmarks if such transactions and related benchmarks are reasonably well established for the market in which the acquired business resides. Such benchmarks in at least some markets are based on a percentage of the premiums in-force or a percentage of annual premium writings. Absent such benchmarks, the fair value may be based on the expected future distributable earnings from renewal contracts, usually net of the cost of capital, discounted at a market discount rate commensurate with the risk of the cash flows. Two methods for amortisation that have been used are:

- 1) in relation to expected distributable earnings used to derive the fair value estimate; and
- 2) based on expected premiums from future renewals.

Value of distribution systems/relationships

The value associated with a distribution system may be significant, especially for distribution arrangements involving contingent commissions, business processing or purchases of third-party intermediaries. Fair values of such systems can be derived from cash flow models and from valuation specialists. Amortisation methods used for future business include those 1) in relation to expected distributable earnings, and 2) proportional to new business premiums.

Customer relationships and customer list – long duration contracts

Selling unrelated contracts to existing customers are usually not included in a PVIF. Rather, they are usually measured separately or are included in goodwill. Care should be taken not to double count the value the asset related to a customer relationship and the value of a distribution system, if the considerations relate to the same future contracts and cash flows.

Service agreements

When an acquiree has entered into third-party contracts for certain services like claims administration, the acquirer must consider whether an intangible asset might exist. There may be an intangible asset for the service COMPONENT of investment contracts when this component is separated for recognition and measurement.

The value of the intangible relates to the value of the fee stream. Guidance is found in IAS 39 AG 82(h), which states:

Servicing costs for a financial asset or a financial liability. Costs of servicing can be estimated using comparisons with current fees charged by other market participants. If the costs of servicing a financial asset or financial liability are significant

and other market participants would face comparable costs, the issuer would consider them in determining the fair value of that financial asset or financial liability. It is likely that the fair value at inception of a contractual right to future fees equals the origination costs paid for them, unless future fees and related costs are out of line with market comparables.

Due consideration is given to whether the terms of such agreements are at, below or above current market rates. The intangible asset, if any, relates to the amount in fees that represent an above-market margin.

Amortisation methods used for such intangibles include

1. in relation to the net revenue (fees charged less costs to provide the service) earned for providing the service; and
2. on a straight line basis over the contract period.

Brand names, trademarks, copyrights

The entity being acquired may have a legal right to certain items such as identifying names, slogans and logos that would qualify for separate recognition as intangible assets. Identifying the additional cash flows associated with such items may prove difficult. Amortisation would likely be based on the projected cash flows used to estimate the fair value. However, some legal rights may be renewable indefinitely leading to the conclusion that the intangible should not be amortised.

Proprietary software or technology

Some insurers have developed expert systems that can be separately recognised as having value. Such systems can include underwriting, distribution/cross selling, and investment management. Amortisation of such systems-related intangible assets is likely to be straight line over an assumed lifetime of the system.

Licenses to transact insurance business

IAS 38.88 requires entities to assess whether intangible assets have either a finite useful life or indefinite useful life. Licenses typically are considered to have an indefinite useful life, such that their value is not amortised down over time (although it may be subject to an impairment test.). Their value is typically derived from market transactions for shell entities or from brokers in that market.

Product approvals or registrations

Product forms that have been approved for issue in certain jurisdictions can be determined to be intangible assets. The value could be viewed as the alternative cost to develop the same product and go through the approval process. Alternatively the value could be viewed as something more if the product is in a niche market with

limited access. Amortisation of the value could be based on the anticipated revenues expected from the sales of the new product.

4.3.6 Recognition and measurement of goodwill or of a gain from a bargain purchase

IFRS 3 requires recognition of goodwill as of the acquisition date, measured as the excess of the consideration transferred over the net of the identifiable assets and liabilities acquired. Identifiable assets here include those intangible assets which have been recognised in connection with the acquisition. Goodwill implicitly includes intangible assets that do not satisfy the criteria for recognition. (IFRS 3.32)

Because consideration may include not only cash, but equities, future consideration or other types of compensation, the determination of the value of consideration can become complex. IFRS 3 provides some guidance on determining the value of consideration transferred. Of particular note is the fact that in IFRS 3, unlike in IFRS 3(P), transaction costs, such as legal, advisory or accounting fees associated with the transaction are not part of the consideration.

Goodwill represents a payment made by the acquirer in anticipation of future economic benefits from assets that are not capable of being individually identified, recognised or reliably measured individually. The value of goodwill need not be justified, but is subject to tests of impairment. Goodwill is not amortised. Goodwill is to be measured subsequently at the amount recognised at the acquisition date less any accumulated impairment losses. The goodwill carrying amount must be tested for impairment in accordance with the requirements of IAS 36, *Impairment of Assets* (IFRS 3.B63).

If the excess is negative, a reassessment of the fair value of acquired assets and liabilities is made to be sure that all acquired assets and assumed liabilities have been identified, recognised and measured properly. If, after making adjustments for the reassessment, the excess remains negative, a bargain purchase is said to have occurred. There is no goodwill. The gain on the business combination is recognised in the acquirer's profit and loss in the period in which the acquisition takes place (IFRS 3.33 – 3.36).

4.3.7 Deferred taxes

Any prior deferred tax liability/asset is eliminated and replaced by a similar liability/asset for the tax effect of the deferred tax consequences of temporary differences between the income tax basis of the insurance entity's assets and liabilities and the IFRS reporting basis. The primary temporary differences relate to asset valuation, policy and claims liabilities, and the difference between the intangible asset for PVIF and the tax basis of the value of business acquired (IFRS 3.24, 3.25). An

issue associated with deferred taxes is whether the measurement of intangible assets is done on a net-of-tax basis. Because assets and liabilities are measured in IFRS without tax affect, there may need to be a step-up adjustment to intangible assets calculated after taxes. This topic is discussed further for the PVIF in Appendix A.

4.3.8 Shadow accounting

IFRS 4.30 permits the use of what is commonly referred to as shadow accounting.

In some accounting models, realised gains or losses on an insurer's assets have a direct effect on the measurement of some or all of (a) its insurance liabilities, (b) related deferred acquisition costs and (c) related intangible assets, such as those described in paragraphs 31 and 32. An insurer is permitted, but not required, to change its accounting policies so that a recognised but unrealised gain or loss on an asset affects those measurements in the same way that a realised gain or loss does. The related adjustment to the insurance liability (or deferred acquisition costs or intangible assets) shall be recognised in other comprehensive income if, and only if, the unrealised gains or losses are recognised in other comprehensive income. This practice is sometimes described as 'shadow accounting'.

If the value of the intangible asset depends in part on the value of other assets or liabilities, shadow accounting may be applicable, although it does not come into play until after the acquisition date, as all acquired assets and assumed liabilities are at fair value on that date and hence there would be no difference between record amounts and fair values that would give rise to shadow adjustments. The acquirer is likely to have an established ACCOUNTING POLICY with regard to shadow adjustments, and it should apply that policy to acquired blocks in a consistent manner.

4.3.9 Contingent liabilities

Contingent liabilities must be recognised in a business combination if they are present obligations arising from past events and their fair value can be measured reliably (IFRS 3.23). This guidance differs from IFRS 37 that requires that the payment or settlement of a contingent liability must be probable for it to be recognised. This could include the fair valuing of various guarantees that are the source of some contingent liabilities. Some of these guarantees can have actuarially determined components.

4.4 Accounting for business combinations that occurred before the adoption of IFRS 3(P)

Entities that had reported under IFRS before the adoption of IFRS 3(P) would have applied IAS 22 *Business Combinations*, to acquisitions with agreement dates before 31 March 2004 (previous combinations), the date set in IFRS 3(P) after which it must be applied. With the advent of IFRS 3(P), these entities had two possibilities.

The first possibility was to apply IFRS 3(P) to previous combinations. This alternative was to be elected if the valuation and other information needed to apply IFRS 3(P) were obtained at the time that the business combination was initially accounted for and if the entity applies IAS 36 and IAS 38 prospectively from that date. This guidance was found in the IFRS 3(P).85 under “limited retrospective application”.

If an entity did not make limited retrospective application of IFRS 3(P), it must nonetheless have made some specific changes to accounting for previous combinations. These related to goodwill and to intangible assets.

Goodwill that related to previous combinations is no longer amortised. Instead, the value on the adoption of IFRS(P) 3 is retained and tested for impairment under the same guidance as goodwill from business combinations occurring after the adoption of IFRS 3(P). Previously recognised negative goodwill is eliminated by adjusting the opening balance of retained earnings (IFRS 3(P).79 and 3(P).81).

Previously recognised intangible assets that did not qualify for recognition under IFRS 3(P) were reclassified as goodwill at the beginning of the first annual period beginning on or after 31 March 2004 (IFRS 3(P).82 (pre-2008)).

Limited application of IFRS 3(P) to previous combinations did not exempt the contracts acquired from application of IAS 39 to financial instruments or application of IFRS 4 to insurance contracts and to financial liabilities with discretionary participation features.

The current version (January 2008) of IFRS 3 is effective for business combinations for which the acquisition date is on or after July 1, 2009. Earlier application is permitted, but only for financial statements for which the annual reporting period begins on or after June 30, 2007. The revised version of IFRS does not allow adjustment to assets and liabilities arising from previous business combinations (IFRS 3.65).

4.5 Accounting for business combinations that occurred before the adoption of IFRS

Entities adopting IFRSs for the first time must address the accounting for previous business combinations. Guidance is found in Appendix B of IFRS 1, *First-time Adoption of International Financial Reporting Standards*. IFRS 1 allows an entity to apply IFRS 3 to previous combinations. If an entity applies IFRS 3 to a previous combination, it must apply IFRS 3 to all later combinations. Business combinations that took place before the business combination for which IFRS 3 is applied can be left on the existing basis, even though this basis may be different from what is acceptable under IFRS 3.

When the entity does not apply IFRS 3, it can retain its existing approaches (for example, pooling of interests). The entity must nonetheless measure assets and liabilities according to applicable IFRSs that may require an adjustment from existing practices. Any such adjustment in the measure of the asset or liability is a difference in retained earnings in the opening balance sheet on first-time adoption. For example, financial instruments must follow the measurement principles of IAS 39 and insurance contracts must follow IFRS 4.

Assets or liabilities that are recognised under existing practices, but would not be recognised under IFRSs, are excluded from the opening balance sheet on first-time adoption. The elimination of assets and liabilities from the opening balance sheet is made by an adjustment to retained earnings (IFRS 1, B2(c)(ii)), except that previously recognised intangible assets that are not recognised under IAS 38 are eliminated by an adjustment to goodwill (IFRS 1.B2(c)(i)).

IFRS 1 allows entities to use the measurement of assets and liabilities at the acquisition date as the deemed cost of the asset or liability. The deemed cost need not conform to fair value measurement techniques under IAS 39 or to measurement approaches permitted under IAS 22. So, for example, if when adopting IFRS the entity uses the amortised cost method for a financial liability that had been acquired in a previous combination, then the effective rate of interest would be determined at the conversion date based on the estimated future cash flows from that date and using the deemed cost as the initial value. An unresolved issue is whether the deemed cost of the liability is the gross liability or the liability net of any intangible asset related to the financial liability.

It should be noted that the intent of IFRS is that measurement of assets and liabilities should conform to IFRS after the adoption of IFRS. Allowing the use of previous accounting methods and of a deemed cost approach as of the acquisition date does not have the effect of permitting entities to continue to use nonconforming measurement methods. For example, a financial liability must, as required by IAS 39, be measured at amortised cost or at fair value after adoption of IFRS.

4.6 Applying IFRS 3 to a business combination involving mutual entities

The revised version of IFRS 3 that was adopted in January of 2008 eliminates the exclusion of mutual entities from the requirement to apply the purchase method of accounting for business combinations. This new requirement is applied prospectively; i.e., mutual entities are not required to modify their accounting for business combinations before the effective date of the revised IFRS 3 except for a possible adjustment to goodwill (IFRS 3, B68, B69). As of the beginning of the first annual period in which IFRS 3 is applied,

- the carrying amount of goodwill is the amount of goodwill as of the date of the acquisition; amortisation to date and the resulting decrease in goodwill is eliminated
- goodwill is not amortised, but it is tested for impairment in accordance with IAS 36
- any goodwill that has been recognised as a deduction from equity is not recognised and it is not part of the basis of the business for determining the profit or loss on a disposition of some or part of the business to which it relates
- any deferred credit related to recognising negative goodwill is eliminated with an adjustment to retained earnings.

4.7 Intangible asset for the value of service rights related to financial instruments acquired in a business combination that occurred before the initial effective date of IFRS 3

A previous combination may have included financial instruments for which the service component has been separated for compliance with IFRSs, and there may have been an intangible purchase asset for the value of the contracts. As the service component is separate, the intangible purchase asset for a service component at the acquisition date will likely be considered the deemed cost of the service contract. In this case, the value of the service component at the conversion date is the remaining unamortised amount of the initial asset, where cumulative amortisation is determined by the entity's accounting policy for amortisation of intangible assets associated with service components of financial liabilities, whether related to acquired contracts or not. The amortisation approach may differ from the amortisation that had been applied, and hence the value of the asset at the time of conversion to IFRS may be different from its value under existing accounting policies.

Similar considerations might apply to a separate service contract.

4.8 Other matters

Accounting for a business combination can be made more complex when there are non-controlling interests, where there is contingent consideration, and when the measurement of assets and liabilities as of the measurement date must be adjusted based on subsequent information.

4.8.1 Non-controlling interests

When the acquirer does not acquire complete ownership of the business, there may be a non-controlling interest. Rather than recognising only a proportionate part of the asset acquired and the liabilities assumed, the acquirer recognises the non-controlling interest either at its fair value or at the proportionate part of the net asset value of the acquired assets and assumed liabilities. The consideration transferred used in determining goodwill also takes into account the value of non-controlling interest. (IFRS 3.19, 3.32)

4.8.2 Contingent consideration

Usually, an obligation of the acquirer to transfer additional assets or equity interests to the former owners of an acquiree as part of the exchange for control of the acquiree if specified future events occur or conditions are met. However, contingent consideration also may give the acquirer the right to the return of previously transferred consideration if specified conditions are met. (IFRS 3 Appendix A)

Contingent consideration is part of the consideration transferred and is recognised on the balance at the acquisition date at fair value. Any contingent obligations must be classified as liability or as equity according to its characteristics; i.e., it is not appropriate to assume that any contingent obligations are liabilities. (IFRS 3.39, 3.40)

4.8.3 Measurement period

The accounting process may be incomplete at the time the acquirer must prepare financial statements. In this situation, the acquiree records provisional amounts for assets and liabilities about which the determination of value is incomplete and adjusts values retrospectively at a subsequent reporting period when the accounting becomes complete. There may also be information that results in recognising assets and liabilities that had not yet been recognized that also results in retrospective changes. The time period for making adjustments ends at the earlier of the obtaining information needed to complete the accounting or one year from the acquisition date. (IFRS 3.45 – 3.50)

4.9 Subsequent measurement

IFRS 3 generally states that measurement of assets and liabilities after the acquisition date follows principles appropriate to the specific asset or liability, as found in the relevant IFRS. Some exceptions, not related to insurance contracts, are noted.

Where the assumptions underlying the original amortisation pattern have changed significantly for an identified intangible asset since the original valuation, the amortisation pattern may have to be adjusted. For example, the intangible asset set up (and subject to amortisation) for the difference between the fair value of claim liabilities and IFRS 4 value may be impacted by subsequent claim settlements that would necessitate revising the amortisation pattern. Similarly the amortisation assumptions developed for the intangible related to ceded reinsurance assets may have to be revised in light of significant commutation activity.

4.10 Disclosures

Disclosure guidance is found in IFRS 3, B64-B67. The disclosures include both qualitative and quantitative notes that “enable users of [the entity’s] financial statements to evaluate the nature and financial effects of the business combination”. The disclosures do not supplant disclosures required by IFRS 4 or IFRS 7, and may make it necessary to make some of the disclosures for the acquired business separately.

Appendix A – The Actuarial Appraisal Method for Determining Present Value of In-Force (PVIF)

There is little published information about common approaches to determining fair value of insurance liabilities or PVIF when accounting for business combinations. What does exist comes principally from the United States. This appendix provides a summary description of the actuarial appraisal method and discusses how this approach can be generalised and applied in the context of accounting regimes other than US GAAP.

A series of articles in the *The Financial Reporter* by Milholland [4] and Koltisko [5], [6] demonstrate an approach for US GAAP that can be generalised to other accounting regimes. The articles show how to derive the PVIF from the pricing of a block of business, taking into consideration differences in accounting between GAAP and the pricing basis, for example, that may be based on regulatory reporting principles.

The approach in Milholland and Koltisko has been summarised in a text book published by the Society of Actuaries (US) entitled *US GAAP for Life Insurers* [7]. *PVIF* is derived from the analysis of value in an appraisal of future distributable earnings that takes into consideration cash flows of the contracts and of income on assets backing the liabilities. With this approach

$$PVIF = PVAT - COC + GBR - SR + SA - FVA + DFIT$$

where

PVAT is the present value of future after-tax distributable earnings, calculated on the basis by which distributable earnings are determined (generally the insurance regulatory basis of accounting), discounted at the risk rate or hurdle rate of the acquiring insurer

COC is the cost of required capital

GBR is the liability for insurance contracts under current accounting policies

SR is the liability for insurance contracts under the basis used in determining distributable earnings

SA is the value of assets backing liabilities and required surplus under the basis used in determining distributable earnings

FVA is the fair value of those assets at the acquisition date

DFIT is the deferred tax liability.

Expressing DFIT as the product of the statutory tax rate TR and the sum of the differences between the acquisition values and the tax basis of the subject assets and liabilities, results in simultaneous equations that can be solved for PVIF and DFIT.

It is worth noting that when the measurement of invested assets and of liabilities is the same for regulatory, tax and current basis of accounting, and when there is no tax-basis asset corresponding to PVIF, then

$$DFIT = TR*(PVIF)$$

where

TR is the statutory income tax rate applied in the deferred tax calculation.

As a result,

$$PVIF = (PVAT - COC)/(1-TR).$$

When there is a single basis of accounting for assets and liabilities, PVIF under this approach is the value of future distributable earnings less the cost of holding capital over the remaining life of the contracts. This observation leads to a cautionary statement that the PVIF calculated as the discounted margins in liabilities may overstate the value if it is not reduced for the cost of capital and “stepped up” for the effect of taxes. From this perspective, it can be seen that the DFIT in effect provides for the taxes considered in the PVAT, albeit without discounting, and hence the PVIF must not be an after-tax value.

An alternative view is that the equation for PVIF should include the tax benefit, if any, which occurs at the time of the acquisition. If this benefit is the tax rate times the difference between the fair value and the recorded amount of the liabilities, there is no need for a step up in basis of PVIF. The final determination regarding the appropriateness of a step-up depends on facts and circumstances, including considerations of the way in which PVIF is calculated, the current accounting for liabilities, the tax basis for liabilities and the taxation that occurs on the transaction.

The actuarial appraisal method has become popular because it links the measurement of PVIF to common approaches to determining the value of portfolios of insurance contracts. Other approaches to determining PVIF can be found in the appendix to Herget [7]. Although expressed in terms of US GAAP, the actuarial appraisal method generalises to other regimes. The key is to take into account how market participants determine the amount to transfer in a transaction as the fair value of assets transferred. This amount is the value of the invested assets associated with insurance contracts. The PVIF plus the fair value of assets must balance to the liabilities as measured under IFRS plus the deferred tax liability. It also may be appropriate to consider the tax consequences of the transaction. A value of PVIF would be expected to result in no gain or loss before taxes and generally the amount of tax expense – combining both current and deferred taxes – that would occur if a transaction were to take place, would also be nil.

Appendix B – Relevant IFRSs

The most relevant International Financial Reporting Standards and International Accounting Standards are listed below.

- IAS 1 (2007 September) Presentation of Financial Statements
- IAS 18 (2004 March) Revenue
- IAS 27 (2008) Consolidated and Separate Financial Statements
- IAS 31 (2004 March) Financial Reporting of Interests in Joint Ventures
- IAS 32 (2008 February) Financial Instruments: Disclosure and Presentation
- IAS 36 (2004 March) Impairment of Assets
- IAS 38 (2004 March) Intangible Assets
- IAS 39 (2005 August) Financial Instruments: Recognition and Measurement
- IFRS 1 (2006 November) First-time Adoption of International Financial Reporting Standards
- IFRS 3 (2008 January) Business Combinations
- IFRS 3(P) (2004 March) Business Combinations
- IFRS 4 (2006 November) Insurance Contracts

In addition, the IASB *Conceptual Framework* is relevant.

Other sources of relevant information include the following:

1. Luke Girard, “Fair Value of Liabilities – are the AAM and OPM Really Different?” *Risks & Rewards* No. 25, March 1996.
2. Luke Girard, “Market Value of Insurance Liabilities: Reconciling the Actuarial Appraisal and Option Pricing Methods,” *NAAJ* vol. 4, no.1, January 2000.
3. Luke Girard, “Market Value of Insurance Liabilities and the Assumption of Perfect Markets in Valuation,” *The Fair Value of Insurance Business*, Kluwer Academic Publishers: 7-113, August 2000.
4. James Milholland, “Determining the Value of Business Acquired, with Some Fair Value of Liabilities Considerations,” *Financial Reporter* No. 44, Dec 2000.
5. Joe Koltisko, “On the Fair Value of Business Acquired (Part 1 of 2),” *Financial Reporter* No. 47, September 2001
6. Joe Koltisko, “On the Fair Value of Business Acquired (Part 2 of 2),” *Financial Reporter* No. 49, April 2002
7. *U.S. GAAP for Life Insurers*, T. Herget et al., Society of Actuaries, 2006.

Appendix C – Terms defined in the List of Definitions for IANs 3-12

The defined terms used in this IAN include the following, definitions for which are included in the List of Definitions for IANs 3-12.

Accounting policy
Acquisition cost
Actuarial services
Actuary
Cedant
Component
Contract
Cost
Discretionary participation feature (DPF)
Fair value
Financial instrument
Financial reporting
Financial statements
IAA
Insurance contract
Insurer
International Accounting Standard (IAS)
International Accounting Standards Board (IASB)
International Financial Reporting Standard (IFRS)
International Financial Reporting Standards (IFRSs)
Investment contract
Issuer
Liability adequacy test
Practitioner
Principal
Reinsurer
Reporting entity
Service contract