IFRS

FASB

# IASB/FASB Meeting
# Week beginning 14 February 2011

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Staff Paper

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| Project | **Insurance contracts** |
| Topic | **Cash flows** |

## What is this paper about?

1. Paragraphs 17 and 22 of the IASB's exposure draft (ED) *Insurance Contracts* and paragraphs 43 and 50 of the FASB's discussion paper (DP) *Preliminary Views on Insurance Contracts* propose that an insurer should measure an insurance contract using an explicit, unbiased and probability-weighted estimate (ie expected value) of the future cash outflows, less future cash inflows that will arise as the insurer fulfils the insurance contract.

2. This paper addresses:

   (a) the estimate of future cash flows;

   (b) the treatment of specific cash flow items such as general overhead costs; and

   (c) the level of detail of guidance proposed in the ED/DP.

3. This paper does not address acquisition costs (which were discussed by the boards on 2 February), the cash flows arising from tax and participation features, or cedants' cash flows from reinsurance contracts (which will be the subjects of future papers).



This paper has been prepared by the technical staff of the IFRS Foundation and the FASB for discussion at a public meeting of the FASB or the IASB.

The views expressed in this paper are those of the staff preparing the paper. They do not purport to represent the views of any individual members of the FASB or the IASB.

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The tentative decisions made by the FASB or the IASB at public meetings are reported in FASB *Action Alert* or in IASB *Update*. Official pronouncements of the FASB or the IASB are published only after each board has completed its full due process, including appropriate public consultation and formal voting procedures.

## Staff recommendation

4. The staff recommend that the boards should:

    (a) clarify that the measurement objective of expected value refers to the mean, considering all relevant information.

    (b) clarify that, in meeting the measurement objective, practical implementation would depend on circumstances and that there is no need for *all* possible scenarios to be identified and quantified, provided that the insurer is satisfied that the estimate is consistent with the measurement objective of determining expected value.

    (c) confirm that the costs included in the cash flows used in measuring a portfolio of insurance contracts should be all the costs that the insurer will incur in fulfilling the contracts, including:

        (i) costs that relate directly to the fulfilment of the contracts in the portfolio, such as payments to policyholders, claims handling, etc (described in paragraph B61 of the ED);

        (ii) costs (including fixed and variable overheads) that are attributable to contract activity as part of fulfilling that portfolio of contracts and that can be allocated to those portfolios; and

        (iii) such other costs as are specifically chargeable to the policyholder under the terms of the contract.

    (d) confirm that costs that do not relate directly to the insurance contracts or contract activities should be recognised as expenses in the period in which they are incurred; and

    (e) eliminate the term ‘incremental’ in the context of fulfilment cash flows.

## Estimate of future cash flows

***Relevant questions in the invitations to comment***

5. Question 2(a) of the IASB's ED asked respondents:

> Do you agree that the measurement of an insurance contract should include the expected present value of the future cash outflows less future cash inflows that will arise as the insurer fulfils the insurance contract? Why or why not? If not, what do you recommend and why?

6. Question 7 of the FASB's DP asked respondents:

> Do you agree with the use of the probability-weighted estimate of net cash flows to measure insurance contracts? Does that approach faithfully represent the economics of insurance contracts? Is it an improvement over existing U.S. GAAP?

7. Question 11 of the FASB's DP asked respondents:

> Do you agree with the description of cash flows that should be included in the measurement of an insurance contract? Is the proposed guidance operational?

8. There are two issues that arise: how to determine expected value, and which cash flows should be included in the measurement of the insurance contract.

***Expected value***

9. The measurement objective in the ED/DP is the expected present value of future fulfilment cash flows and the ED/DP state that the starting point for this estimate of cash flows is a range of scenarios that reflects the full range of possible outcomes. To capture the uncertainty of timing, all current and available information must be taken into account when determining the fulfilment cash flows.

10. This measurement objective was widely supported both in the responses to the IASB's 2007 DP and by respondents commenting on the ED/DP. Accordingly, in agenda paper 3A on project assumptions, we asked the boards to confirm that we will use the expected value of future cash flows rather than a single, most likely outcome.

11. However, in the responses to both the IASB's 2007 DP and the ED/DP, some respondents expressed concerns about the practicalities of using expected value. These concerns are described in paragraphs 13 and 14 below.

12. This section considers how we can address some of the concerns about application.

***Comments from respondents***

13. Most respondents support in principle the use of probability-weighted expected cash flows. However, insurers and actuaries are concerned about the amount of detail required to determine the probability-weighted average in practice. Although these concerns were sometimes expressed in terms of disagreement with the principle, the root of many of the concerns seemed to be about the practicality of applying this principle. In particular, insurers and actuaries are concerned that:

    (a) significant time and costs would be required to implement a full probability-weighted methodology with little to no difference or benefit compared to considering only a limited number of scenarios. Some believe that, if confirmed, the proposals in the ED/DP would require the construction of a stochastic model and that this is not always feasible or practical, particularly when data is limited. Some respondents indicated that the use of 'all possible' scenarios is inherently impossible as there might be an infinite number of such possible outcomes. Some suggest that the standard should explicitly state that a full stochastic approach or consideration of every remotely possible scenario is not always

required and that other methodologies to estimate the mean may be used.

(b) there may be difficulties in calculating probability-weighted cash flows when the insured event is of low frequency and of potentially high severity, such as is the case for many non-life contracts. Probability distributions for cash flows may in such instances not be available in all cases, either because of the nature of the risk or because of insufficient experience.

(c) In countries where industry experience studies are not published, some suggest that smaller entities may have insufficient data to make it practical to estimate cash flows. Some suggest providing an alternative approach for such entities.

14. Many sought clarification that the measurement objective is to calculate an expected value, and that the objective is not to implement a full probability-weighted methodology. Many also suggest that the boards should permit flexibility in determining the actuarial techniques for meeting the measurement objective of estimating the mean. Some also suggest these techniques should be governed by the actuarial profession and by actuarial standards.

15. Some respondents question whether the estimate of expected cash flows is unbiased because currently insurers use their actual historical data, updated to reflect current assumptions. These assumptions include both market assumptions such as inflation, as well as company-specific assumptions such as quicker claim payments, amount of surrenders based on current market conditions, etc. They therefore believe bias is explicitly included in the expected cash flows determined by management.

***Staff analysis and recommendation***

16. The ED refers to 'an explicit, unbiased and probability-weighted estimate' but it is clear in paragraph BC47(c) that the boards intended that the estimate of cash flows should be the expected value, ie the mean.

17. In developing the ED, the boards placed the emphasis on a probability-weighted estimate in an attempt to clarify that 'expected value' refers to the mean. The boards wanted to avoid the risk that expected value would be interpreted as a vague notion similar to 'most likely', rather than as a mathematical term with a defined meaning. The boards also intended to emphasise that the expected value would not necessarily be the same as the actual outcome, which would be one of a range of scenarios. Furthermore, the term 'unbiased' was included to emphasise that the estimates of cash flows do not include any form of adjustment for risk or prudence.

18. In agenda paper 3A (*Project assumptions*) we asked the boards to confirm that we will use the expected value of future cash flows rather than a single, most likely outcome. In addition, as discussed in paper 2A (on measuring uncertain future cash flows):

    (a) the expected value is the arithmetic mean of a distribution of cash flows, ie the probability-weighted sum of the distribution of possible outcomes.

    (b) all available relevant and reliable information should be used to determine the expected value, because the omission of any possible outcomes could result in a biased estimate.

19. Paragraph 18(b) above is of particular relevance for high severity, low frequency types of claims such as environmental and catastrophe damage, because such claims may have a material effect on expected value. This is true even if the probability of the claim occurring is low and it is therefore difficult to estimate because of their low frequency. However, it is worth noting that many claims of this type arise mainly in contracts that would be eligible for the approach for

short-duration contracts. Thus, during the coverage period insurers would likely not need to estimate the probability of such events (except to apply the liability adequacy test).

20. There is a variety of well-accepted methods in use at present to estimate mean values, including methods that do not involve explicit identification of, and assignment of probabilities to, every scenario. These include actuarial methods commonly used by property and casualty insurers who, for instance, do not necessarily include *all* possible scenarios explicitly in their estimates of cash flows. However, those methods do incorporate all scenarios that can be identified and quantified.

21. Paragraphs B38 and B39 of the ED allow future cash flows to be projected using simpler approaches when any increased precision that would be added by using more complex approaches would not produce a more faithful representation. In other words, paragraphs B38 and B39 explicitly permit entities to reduce the possible outcomes to a manageable number by identifying a sample that the insurer believes to be representative of the complete distribution.

22. The staff believe that the proposals in the ED/DP are already consistent with the view expressed by most respondents that the standard should not restrict the methods to arrive at the measurement objective. However, the staff note that this appears to be insufficiently clear in the ED/DP. The staff accordingly recommend that the boards should clarify that the measurement objective of expected value refers to the mean value considering all relevant information and that the boards should not specify the detail of how to meet the measurement objective. Guidance on the detail will probably emerge from the actuarial profession and actuarial standards, as suggested by some respondents.

23. Furthermore, the staff recommend that the boards should provide guidance to clarify that, although expected value relies on a range of scenarios that reflect the full range of possible outcomes, practical implementation would depend on actual circumstances. Consequently, there should be no requirement to identify and

quantify *all* possible scenarios, provided that the insurer is satisfied that the estimate of expected value is unbiased.

| **Expected value** |
| --- |
| a) Do the boards agree to clarify that the measurement objective of expected value refers to the mean, considering all relevant information? |
| b) Do the boards agree to clarify that, in meeting the measurement objective, practical implementation would depend on circumstances and that there is no need for *all* possible scenarios to be identified and quantified, provided that the insurer is satisfied that the estimate is consistent with the measurement objective of determining expected value? |

***Which cash flows?***

24. The ED/DP proposes that the measurement of an insurance contract should include all cash flows that are necessary for the fulfilment of the contract or contract activities. These cash flows include policy administration and maintenance costs at a portfolio level (see paragraph B61(g) of the ED). However, it excludes 'costs that do not relate directly to the contract or contract activities, such as general overheads' (see paragraph B62(f) of the ED). In other words, the ED assumes that all general overheads are not 'direct'. This section discusses whether that assumption is valid.

25. We will discuss in future papers whether there should be more guidance for the following specific cash flows:

    (a) policy loans. The accounting for policy loans will be discussed as part of the paper on unbundling.

    (b) acquisition costs. The boards were asked to determine the accounting for acquisition costs for insurance contracts at their joint meeting on 2 February 2011. No definite conclusion was reached other than that some acquisition costs at a portfolio level

should be included in the cash flows of insurance contracts. We will ask the boards to discuss acquisition costs again at a future meeting.

(c) discretionary payments to policyholders.

(d) a cedants' cash flows from reinsurance contracts.

(e) taxes that are not based on the taxable profit of the insurer, but that are paid out on returns on invested assets on behalf of policyholders.

26. We will also discuss the proposed contract boundary at a future meeting.

#### Comments from respondents

27. The ED/DP stated that general overheads do not relate directly to the contract or to contract activities. However, some respondents disagree that this statement is true in all circumstances. Some believe that general overheads such as accounting, IT technology and support, building rent or maintenance and utilities could relate directly to contract activities at a portfolio level, and that when they do, they should be included in the fulfilment cash flows. They argue that doing so would be consistent with the principle of fulfilment.

28. Those who hold this view state that insurers include a proportion of these types of costs in the premium charged. Consequently, excluding these costs from the expected future cash flows would be likely to result in a mismatch between the timing of recognition of profits and the timing of expenses. Furthermore, they believe that not including these costs could result in front ending of profits, because the present value of the indirect costs excluded from outflows would, in effect, be included in the residual margin (and would be released as described in paragraph 50 of the ED). This problem is exacerbated by the proposed transition approach, which the staff will discuss at a future meeting.

29. A few respondents state that consistent revenue and expense accounting across standards and across industries is important to improve comparability. Hence,

they agree with the exclusion of costs that do not directly relate to the contract or to contract activities, such as general overheads, as described in paragraph B62(f).

Staff analysis and recommendation

30. In the staff's view the requirements on general overhead costs should be consistent with both IFRSs and US GAAP, which require some direct general overhead costs to be allocated to:

    (a) inventory (IAS 2 *Inventories* and Topic 330 *Inventory* of the FASB's Accounting Standards Codification); and

    (b) contract costs in construction contracts (IAS 11 *Construction contracts* and Subtopic 605-35 *Revenue Recognition Construction-Type and Production-Type Contracts*).

    The relevant extracts from IFRSs are provided in Appendix B and from US GAAP in Appendix C. The current practice followed under US GAAP is described in Appendix D.

31. As discussed in paper 3A (*Project assumptions*) the principle in the ED is that the cash flows that are incorporated in the measurement of the insurance liability are those that will arise as the insurer fulfils the insurance contract. In paper 3A we also ask the boards to confirm the assumption that the final standard will measure insurance contracts at the portfolio level. Therefore, the measurement of an insurance contract should include cost directly related to the contract or the contract activities, determined on a portfolio basis.

32. Some general overheads are directly required to fulfil the insurance contract, when considered at a portfolio level. For example, if a rented office is used entirely to service policyholders in a single portfolio, the rent and associated costs relate directly to the portfolio. Similarly, some IT technology and support costs relate only to claims handling. In the staff's view, the boards should define costs that relate directly to contract activities consistently with IAS 2/Topic 330 and IAS 11/Subtopic 605-35. Such costs would include:

(a) costs that relate directly to the fulfilment of the contracts in the portfolio, such as payments to policyholders, claims handling, etc (described in paragraph B61 of the ED);

(b) costs that are attributable to contract activity in general and that can be allocated to the contracts in the portfolio; and

(c) such other costs as are specifically chargeable to the policyholder under the terms of the contract.

33. Paragraphs 57 and 58 of *Revenue from Contracts with Customers* propose that costs that relate directly to the fulfilment of a contact are capitalised if they generate or enhance resources to be used in satisfying performance obligations. Therefore, including in the measurement of a portfolio of contracts those costs that relate directly to the fulfilment of that portfolio of contracts would also be consistent with the proposals in the ED *Revenue from Contracts with Customers*.

34. Applying the approach described in IAS 2/Topic 330 and IAS 11/Subtopic 605-35, costs that are attributable to contract activity include the labour and other costs of personnel directly engaged in contract activities, including supervisory personnel, and a systematic allocation of attributable fixed and variable overheads that are incurred in fulfilling a portfolio of insurance contracts. These costs relate to *contract activities* and not necessarily costs directly related to an individual insurance contract. Fixed overheads are those indirect costs of contract activities that remain relatively constant regardless of the volume of contract activity, such as accounting, human resources, IT technology and support, building rent and maintenance. Variable contract activity overheads are those indirect costs that vary directly, or nearly directly, with the volume of contract or contract activities, such as general overhead costs associated with servicing policyholders.

35. Similarly, contract activity costs are allocated to portfolios of insurance contracts using methods that are systematic and rational and that are applied consistently to all costs that have similar characteristics. This allocation is based on the normal capacity of the insurer. Normal capacity is the level of contract activity expected

to be achieved on average over a number of periods under normal circumstances, taking into account the loss of capacity resulting from deliberate changes to the servicing strategy. The actual level of contract activity may be used if it approximates to normal capacity. The amount of fixed overhead allocated to each portfolio level is not increased as a consequence of low contract activities that are due to inefficiencies. Unallocated general overheads are recognised as an expense in the period in which they are incurred. In periods of abnormally high contract activities, the amount of fixed overhead allocated to each portfolio is decreased so that the costs included in the cash flows used to measure portfolios of insurance contracts do not exceed costs incurred. Overhead costs that vary with contract activity are allocated to each portfolio on the basis of the actual cost incurred.

36. Some overhead costs that arise from contract activity may relate to more than one portfolio. This is the case, for example, when one department services claims handling procedures for two or more portfolios. When the costs for each portfolio are not separately identifiable, they are allocated between the portfolios on a rational, systematic and consistent basis.

37. Costs that cannot be attributed to a portfolio of insurance contracts are excluded in measuring insurance contracts. Examples of costs that are excluded from the cost of insurance contracts and that are recognised as expenses in the period in which they are incurred, are:

    (a) abnormal amounts of contract activity costs;

    (b) any inefficiencies related to contract activities, such as under-absorption of contract activity costs if the work-force is not working at full capacity;

    (c) general administrative overhead costs that do not contribute to fulfilling insurance contracts; and

(d) product development and selling costs (other than those acquisition costs included in the measurement of insurance contracts. We will ask the boards to discuss acquisition costs again at a future meeting).

38. Similar to other industries, insurers price their products to recoup all of their costs and make a profit. The identification and allocation of general overhead costs that should be included in the expected cash flows is inherently subjective. Inconsistencies in treatment will affect the measurement of the insurance contract liabilities; the level of the residual margins (refer to paragraph 47 of this paper for more detail) and comparability in general. Furthermore, the treatment of general overhead costs can allow for potential abuse, particularly if sufficient guidance is not provided.

39. Some suggest that only general overhead costs that relate to specified functions should be considered as direct costs. However, in the staff's view, determining which function should be treated as direct would be arbitrary. It is unclear why costs included in one function would be considered as direct when the same costs included in a different function would not be considered direct. Furthermore, it should be consistent with the principle that cash flows incorporated in the measurement of the insurance contract are those that will arise as the insurer fulfils the insurance contract or contract activities.

40. In the staff's view, the boards need to strike a balance between meeting the principle that the fulfilment cash flows include all those required to fulfil the contract, and the potential for reduced comparability that might arise. In addition, there is a risk that including additional costs in the cash flows could make the expected cash flow meaningless to users when analysing the actual underwriting and expense results. However, the staff note that the discussions of direct cost in existing standard has been successfully implemented in practice for some time.

41. Finally, the ED refers to the costs that are included in the fulfilment cash flows as costs that are 'incremental' to a portfolio of insurance contracts. Paragraph B61

defines (in effect) incremental to include 'direct costs and systematic allocations of costs that relate directly to the insurance contract or contract activities'. We therefore cannot see a difference between the meanings of 'direct' and 'incremental' and we recommend that the boards should eliminate the term 'incremental' in this context.

**Which costs?**

Do the boards:

(a) confirm that the costs included in the cash flows used in measuring a portfolio of insurance contracts should be all the costs that the insurer will incur in fulfilling the contract, including:

(i) costs that relate directly to the fulfilment of the contracts in the portfolio, such as payments to policyholders, claims handling, etc (described in paragraph B61 of the ED);

(ii) costs (including fixed and variable overheads) that are attributable to contract activity as part of fulfilling that portfolio of contracts and that can be allocated to those portfolios; and

(iii) such other costs as are specifically chargeable to the policyholder under the terms of the contract.

(b) confirm that costs that do not relate directly to the insurance contracts or contract activities should be recognised as expenses in the period in which they are incurred; and

(c) eliminate the term 'incremental' in the context of fulfilment cash flows?

## Application guidance

42. Question 2(b) of the ED asked:

> Is the draft application guidance in Appendix B on making estimates of future cash flows at the right level of detail? Do you have any comments on the guidance?

43. Most regard the level of application guidance provided as being at the appropriate level of detail for a principle-based standard, other than the need for guidance on specific cash flows requested, as discussed in paragraph 25 of this paper,

44. Some respondents asked whether the lists in paragraphs B61 and B62 were intended to be exhaustive or whether they represent only guidance. Some suggest specific cash flows that should be included or excluded. Some request clarification on the treatment of future events.

45. The staff think that there is no compelling need to revise the overall level of detail in the draft application guidance in Appendix B of the ED on estimates of future cash flows.

46. The staff intend to address any detailed issues that may arise in future papers. If necessary the staff will bring any specific issues that arise back to the boards. Other less significant issues will be dealt with on an exceptions basis with the staff giving the boards the opportunity to review our proposed resolution of these issues at a future meeting.

## Effect on other areas of the insurance contract project

47. Decisions made on cash flows will affect the discussion on issues related to the residual/composite margin because amounts included within pricing, but excluded from the estimation of future cash flows, will be ‘absorbed’ in the residual/composite margin. Consequently, excluding any of the costs that are necessary for an insurer to fulfil its obligations under its insurance contracts from the fulfillment cash flows would increase the residual/composite margin. This would put more pressure on finding an appropriate run-off driver for that margin and mightt have implications for the allocation or unlocking of the margin. Some respondents (especially from Australia, Canada and South Africa) believe that if all relevant costs (general overhead cost, acquisition cost, etc.) were included in the fulfilment cash flows, the residual margin would in many cases be minimal.

48. If the boards were to retain the summarised margin approach for presentation, information about costs included in the cash flows would not be shown in the statements of comprehensive income. This would have implications for users' analysis of income and expenses. Consequently, decisions made on cash flows will also affect the discussions on presentation.

49. We have identified no specific cash flows items that will specifically affect short-duration contracts or on reinsurance.

## Appendix A – extracts from the Application Guidance in the IASB ED

### Uncertainty and the expected present value approach

B38 The starting point for an estimate of cash flows is a range of scenarios that reflects the full range of possible outcomes. Each scenario specifies the amount and timing of the cash flows for a particular outcome, and the estimated probability of that outcome. The cash flows from each scenario are discounted and weighted by the estimated probability of that outcome in order to derive an expected present value. Thus, the aim is not to develop a single 'best' estimate of future cash flows, but, in principle, to identify all possible scenarios and make unbiased estimates of the probability of each scenario. In some cases, an insurer has access to considerable data and may be able to develop those cash flow scenarios easily. But in other cases, the insurer may not be able to develop more than general statements about the variability of cash flows without incurring considerable cost. In those cases, the insurer shall use those general statements in estimating the future cash flows.

B39 When considering all possible scenarios, the objective is not necessarily to identify every possible scenario but rather to incorporate all relevant information and not simply ignore data or information that is difficult to obtain. In practice, it is not always necessary to develop explicit scenarios. For example, if an insurer estimates that the probability distribution of outcomes is broadly consistent with a probability distribution that can be described completely with a small number of parameters, it will suffice to estimate those parameters. Similarly, in some cases, relatively simple modelling may give an answer within a tolerable range of precision, without the need for a large number of detailed simulations. However, in some cases, the cash flows may be driven by complex underlying factors and respond in a highly non-linear fashion to changes in economic conditions (e.g. if the cash flows reflect a series of interrelated implicit or explicit options). In such cases, more sophisticated stochastic modelling is likely to be needed, including the identification of scenarios that specify the amount and timing of the cash flows for particular outcomes and the estimated probability of those outcomes.

B40 The probability assigned to each scenario shall reflect conditions at the end of the reporting period. For example, there may be a 20 per cent probability at the end of the reporting period that a major storm will strike during the remaining six months of an insurance contract. After the end of the reporting period and before the financial statements are authorised for issue, a storm strikes. The present value of the fulfilment cash flows under that contract shall not reflect the storm that, with hindsight, is known to have occurred. Instead, the cash flows included in the measurement are multiplied by the 20 per cent probability that was apparent

at the end of the reporting period (with appropriate disclosure that a non-adjusting event occurred after the end of the reporting period in accordance with IAS 10 Events after the Reporting Period).

B41 The scenarios developed shall include unbiased estimates of the probability of catastrophic losses under existing contracts. However, the scenarios exclude possible claims under possible future contracts. For example, suppose there is a 5 per cent probability that an earthquake during the remaining coverage period of an existing contract will cause losses with a present value of CU1,000,000. In that case, the expected present value of the cash outflows includes CU50,000 (i.e. CU1,000,000 × 5 per cent) for those catastrophe losses. But the expected value of the cash outflows for that contract does not include the possible catastrophe losses from an earthquake that could happen after the end of the coverage period.

**Which cash flows?**

B61 Estimates of cash flows in a scenario shall include all cash flows within the boundary of an existing contract that are incremental at the level of a portfolio of insurance contracts, and no others. Cash outflows that are incremental to a portfolio of insurance contracts include direct costs and systematic allocations of costs that relate directly to the insurance contracts or contract activities. Accordingly, the relevant cash flows include:

(a) premiums (including premium adjustments and instalment premiums) from policyholders and any additional cash flows that result from those premiums.

(b) payments to (or on behalf of) policyholders, including claims that have already been reported but have not yet been paid (i.e. reported claims), claims that have already been incurred but have not yet been reported (IBNR) and all future claims and other benefits under the existing contract.

(c) claim handling costs (i.e. the costs that the insurer will incur in processing and resolving claims under existing insurance contracts, including legal and adjuster’s fees and internal costs of processing claim payments).

(d) the costs that the insurer will incur in providing contractual benefits that are paid in kind.

(e) cash flows that will result from options and guarantees embedded in the contract, to the extent those options and guarantees are not unbundled (see paragraph 12). When insurance contracts contain embedded options or guarantees, it is particularly important to consider the full range of scenarios.

(f) the incremental costs of selling, underwriting and initiating an insurance contract for those contracts that have been issued and that the insurer has incurred because it has issued that particular contract (i.e. the incremental acquisition costs). Thus, these costs are identified at the level of an individual insurance contract rather than at the level of a portfolio of insurance contracts.

(g) policy administration and maintenance costs, such as costs of premium billing and costs of handling policy changes (e.g. conversions and reinstatements). Such costs also include recurring commissions expected to be paid to intermediaries if a particular policyholder continues to pay the premiums specified in the insurance contract.

(h) transaction-based taxes (such as premium taxes, value added taxes and goods and services taxes) and levies (such as fire service levies and guarantee fund assessments) that arise directly from existing insurance contracts, or can be attributed to them on a reasonable and consistent basis.

(i) potential recoveries (such as salvage and subrogation) on future claims covered by existing insurance contracts and, to the extent they do not qualify for recognition as separate assets, potential recoveries on past claims.

(j) payments to current or future policyholders as a result of a contractual participation feature (including those features implied in the contract by regulatory or legal requirements) that provides policyholders with participation in the performance of a portfolio of insurance contracts or pool of assets.

B62 The following cash flows shall not be considered in estimating the cash flows that will arise as the insurer fulfils an existing insurance contract:

(a) investment returns. The investments are recognised, measured and presented separately. However, the measurement of a participating insurance liability is affected by the cash flows, if any, that depend on the investment returns.

(b) payments to and from reinsurers. Reinsurance assets are recognised, measured and presented separately.

(c) cash flows that may arise from future insurance contracts, i.e. cash flows that are outside the boundary of existing contracts (see paragraphs 26 and 27), or from options, forwards and guarantees that do not relate to the existing insurance contract. Nevertheless, estimates of cash flows from existing contracts are not performed on a run-off basis. In other words, those estimates do not incorporate changes in the cash flows from existing contracts that could take place if the insurer stopped issuing new contracts, unless the insurer actually stops issuing new contracts.

(d) acquisition costs other than incremental acquisition costs.

(e) cash flows arising from abnormal amounts of wasted labour or abnormal amounts of other resources used to fulfil the contract.

(f) costs that do not relate directly to the contract or contract activities, such as general overheads.

(g) income tax payments and receipts. Such payments and receipts are recognised, measured and presented separately in accordance with IAS 12 *Income Taxes*.

(h) cash flows between different components of the reporting entity, such as between policyholder funds and shareholder funds.

(f) cash flows arising from components that are unbundled from the insurance contract (e.g. interest that the insurer expects to credit to policyholder account balances). See paragraphs 8 and 9.

B63 Some costs relate directly to insurance contracts or contract activities but are the result of activities that cover more than one portfolio (e.g. salaries of staff of a claims handling department working on more than one portfolio). An insurer shall allocate those costs, other than acquisition costs (see paragraph B61(f)), on a rational and consistent basis to individual portfolios of insurance contracts. Even though such costs are allocations, they are still incremental at the portfolio level. Costs that are not incremental at the portfolio (or lower) level because they do not relate directly to the insurance contract or contract activities, such as general overheads, are not allocated to portfolios and therefore are not included in the measurement of insurance contracts.

## Appendix B: Relevant extracts from IAS 2 and IAS 11

## IAS 2: Costs of conversion

12 The costs of conversion of inventories include costs directly related to the units of production, such as direct labour. They also include a systematic allocation of fixed and variable production overheads that are incurred in converting materials into finished goods. Fixed production overheads are those indirect costs of production that remain relatively constant regardless of the volume of production, such as depreciation and maintenance of factory buildings and equipment, and the cost of factory management and administration. Variable production overheads are those indirect costs of production that vary directly, or nearly directly, with the volume of production, such as indirect materials and indirect labour.

13 The allocation of fixed production overheads to the costs of conversion is based on the normal capacity of the production facilities. Normal capacity is the production expected to be achieved on average over a number of periods or seasons under normal circumstances, taking into account the loss of capacity resulting from planned maintenance. The actual level of production may be used if it approximates normal capacity. The amount of fixed overhead allocated to each unit of production is not increased as a consequence of low production or idle plant. Unallocated overheads are recognised as an expense in the period in which they are incurred. In periods of abnormally high production, the amount of fixed overhead allocated to each unit of production is decreased so that inventories are not measured above cost. Variable production overheads are allocated to each unit of production on the basis of the actual use of the production facilities.

14 A production process may result in more than one product being produced simultaneously. This is the case, for example, when joint products are produced or when there is a main product and a by-product. When the costs of conversion of each product are not separately identifiable, they are allocated between the products on a rational and consistent basis. The allocation may be based, for example, on the relative sales value of each product either at the stage in the production process when the products become separately identifiable, or at the completion of production. Most by-products, by their nature, are immaterial. When this is the case, they are often measured at net realisable value and this value is deducted from the cost of the main product. As a result, the carrying amount of the main product is not materially different from its cost.

## Other costs

15 Other costs are included in the cost of inventories only to the extent that they are incurred in bringing the inventories to their present location and condition. For example, it may be appropriate to include non-production overheads or the costs of designing products for specific customers in the cost of inventories.

16 Examples of costs excluded from the cost of inventories and recognised as expenses in the period in which they are incurred are:

(a) abnormal amounts of wasted materials, labour or other production costs;

(b) storage costs, unless those costs are necessary in the production process before a further production stage;

(c) administrative overheads that do not contribute to bringing inventories to their present location and condition; and

(d) selling costs.

17 IAS 23 *Borrowing Costs* identifies limited circumstances where borrowing costs are included in the cost of inventories.

18 An entity may purchase inventories on deferred settlement terms. When the arrangement effectively contains a financing element, that element, for example a difference between the purchase price for normal credit terms and the amount paid, is recognised as interest expense over the period of the financing.

## Cost of inventories of a service provider

19 To the extent that service providers have inventories, they measure them at the costs of their production. These costs consist primarily of the labour and other costs of personnel directly engaged in providing the service, including supervisory personnel, and attributable overheads. Labour and other costs relating to sales and general administrative personnel are not included but are recognised as expenses in the period in which they are incurred. The cost of inventories of a service provider does not include profit margins or non-attributable overheads that are often factored into prices charged by service providers.

## IAS 11: Contract costs

**16 Contract costs shall comprise:**

**(a) costs that relate directly to the specific contract;**

**(b) costs that are attributable to contract activity in general and can be allocated to the contract; and**

**(c) such other costs as are specifically chargeable to the customer under the terms of the contract.**

17 Costs that relate directly to a specific contract include:

(a) site labour costs, including site supervision;

(b) costs of materials used in construction;

(c) depreciation of plant and equipment used on the contract;

(d) costs of moving plant, equipment and materials to and from the contract site;

(e) costs of hiring plant and equipment;

(f) costs of design and technical assistance that is directly related to the contract;

(g) the estimated costs of rectification and guarantee work, including expected warranty costs; and

(h) claims from third parties.

These costs may be reduced by any incidental income that is not included in contract revenue, for example income from the sale of surplus materials and the disposal of plant and equipment at the end of the contract.

18 Costs that may be attributable to contract activity in general and can be allocated to specific contracts include:

(a) insurance;

(b) costs of design and technical assistance that are not directly related to a specific contract; and

(c) construction overheads.

Such costs are allocated using methods that are systematic and rational and are applied consistently to all costs having similar characteristics. The allocation is based on the normal level of construction activity. Construction overheads include costs such as the preparation and processing of construction personnel payroll. Costs that may be attributable to contract activity in general and can be allocated to specific contracts also include borrowing costs.

19 Costs that are specifically chargeable to the customer under the terms of the contract may include some general administration costs and development costs for which reimbursement is specified in the terms of the contract.

20 Costs that cannot be attributed to contract activity or cannot be allocated to a contract are excluded from the costs of a construction contract. Such costs include:

(a) general administration costs for which reimbursement is not specified in the contract;

(b) selling costs;

(c) research and development costs for which reimbursement is not specified in the contract; and

(d) depreciation of idle plant and equipment that is not used on a particular contract.

21 Contract costs include the costs attributable to a contract for the period from the date of securing the contract to the final completion of the contract. However, costs that relate directly to a contract and are incurred in securing the contract are also included as part of the contract costs if they can be separately identified and measured reliably and it is probable that the contract will be obtained. When costs incurred in securing a contract are recognised as an expense in the period in which they are incurred, they are not included in contract costs when the contract is obtained in a subsequent period.

## Appendix C: Relevant extracts from Topic 330 and subtopic 605-35

*This appendix provides extracts from Topic 330* Inventory *and Subtopic 605-35* Revenue Recognition Construction-Type and Production-Type Contracts *of the FASB's Accounting Standards Codification.*

## Topic 330-10-30: Cost Basis

1 The primary basis of accounting for inventories is cost, which has been defined generally as the price paid or consideration given to acquire an asset. As applied to inventories, cost means in principle the sum of the applicable expenditures and charges directly or indirectly incurred in bringing an article to its existing condition and location. It is understood to mean acquisition and production cost, and its determination involved many considerations.

2 Although principles for the determination of inventory costs may be easily stated, their application, particularly to such inventory items as work in process and finished good, is difficult because of the variety of considerations in the allocation of costs and charges.

3 For example, variable production overheads are allocated to each unit of production on the basis of the actual use of the production facilities. However, the allocation of fixed production overheads to the costs of conversion is based on the normal capacity of the production facilities. Normal capacity refers to a range of production levels. Normal capacity is the production expected to be achieved over a number of periods or seasons under normal circumstances, taking into account the loss of capacity resulting from planned maintenance. Some variation in production levels from period to period is expected and established the range of normal capacity.

4 the range of normal capacity will vary based on business- and industry-specific factors. Judgment is required to determine when a production level is abnormally low (that is, outside the range of expected variation in production).

5 Examples of factors that might be anticipated to cause an abnormally low production level include significantly reduced demand, labor and materials shortages, and unplanned facility or equipment downtime.

6 The actual level of production may be used if it approximates normal capacity. In periods of abnormally high production, the amount of fixed overhead allocated to each unit of production shall be decreased so that inventories are not measured above cost. The amount of fixed overhead allocated to each unit of production shall not be increased as a consequence of abnormally low production or idle plant.

7 Unallocated overheads shall be recognized as an expense in the period in which they are incurred. Other items such as abnormal freight, handling costs, and

amounts of wasted materials (spoilage) require treatment as current period charges rather than as a portion of the inventory cost.

8 Also, under most circumstances, general and administrative expenses shall be included as period charges, except for the portion of such expenses that may be clearly related to production and thus constitute a part of inventory costs (product charges). Selling expenses constitute no part of inventory costs. The exclusion of all overheads from inventory costs does not constitute an accepted accounting produced. The exercise of judgment in an individual situation involves a consideration of the adequacy of the procedures of the cost accounting system in use, the soundness of the principles thereof, and their consistent application. General and administrative expenses ordinarily shall be charged to expense as incurred but may be accounted for as contract costs under the completed-contract method of accounting or, in some circumstances, as in direct contract coasts by government contractors.

## Topic 605-35-25 Contract costs

34 Contract costs are accumulated in the same manner as inventory costs and are charged to operations as the related revenue from contracts is recognized, Contract costs generally include all direct costs, such as materials, direct labor, and subcontracts, and indirect costs identifiable with or allocable to the contracts. However, practice varies for certain types of indirect costs considered allocable to contracts (for example, support costs such as central preparation and processing of job payrolls, billing and collection costs, and bidding and estimating costs).

35 Costs shall be considered period costs if they cannot be clearly related to production, either directly or by an allocation based on their discernible future benefits.

36 As noted elsewhere in the Subtopic, income is recognized over the term of the contract under the percentage-of-completion method or is recognized as units are delivered under the units-of-delivery modification, and is deferred until performance is substantially complete under the completed-contract method. None of the characteristics peculiar to those methods, however, requires accounting for contract costs to deviate in principle from the basic accounting framework applicable to inventories or business entities in general.

37 A contracting entity shall apply the following general principles in accounting for costs of construction-type and those production-type contracts covered by the Subtopic. The principles are consistent with generally accepted accounting principles (GAAP) for inventory and production costs in other areas, and their application requires the exercise of judgment.

a. All direct costs, such as material, labor, and subcontracting costs, shall be included in contract costs.

b. Indirect costs allocable to contracts include the costs of indirect labor, contract supervision, tools and equipment, supplies, quality control and inspection, insurance, repairs and maintenance, depreciation and amortization, and, in some circumstances, support costs, such as central preparation and processing payrolls. Methods of allocating indirect costs should be systematic and rational. They include, for example, allocations based on direct labor costs, direct labor hours, or a combination of direct labor and material costs. The appropriateness of allocations of indirect costs and of the methods of allocation depend on the circumstances and involve judgement.

c. General and administrative costs ordinarily shall be charged to expense as incurred but may be accounted for as contract costs under the completed-contract method of accounting as discussed in paragraph 605-35-25-99.

d. Selling costs shall be excluded from contract costs and charged to expense as incurred unless they meet the criteria for pre-contract costs in paragraph 605-35-25-41

e. Costs under cost-type contracts shall be charged to contract costs in conformity with GAAP in the same manner as costs under other types of contracts because unrealistic profit margins may result in circumstances in which reimbursable cost accumulations omit substantial contract costs (with a resulting larger fee) or include substantial unallocable general and administrative costs (with a resulting smaller fee).

f. In computing estimates gross profit or providing for losses on contracts, estimates of costs to complete shall reflect all of the types of costs included in contract costs.

g. inventorisable costs shall not be carried at amounts that, when added to the estimated costs to complete, are greater than the estimated realizable value of the related contracts.

## Appendix D: Current practice under US GAAP

*The following outlines costs insurers include in their loss adjustment expense reserves in practice under U.S. GAAP. Practices may vary by insurer.*

### *Property/casualty*

1. Loss Adjustment Expenses (LAE) - Expected payments for costs to be incurred in connection with the adjustment and recording of losses including the adjustment, investigation, defence, recording and payment functions. This would encompass services such as claims attorneys and claims adjusters, whether in-house or external. It would also include the insurer's internal claims department support functions plus an allocation of the insurer's other departments to the extent they directly support the claims function.
2. Companies typically split LAE into defense and cost-containment services that can be directly attributed to an individual claim versus other adjusting costs (that are generally allocated or attributable only to the general portfolio of claims being handled). For some products, defense costs are a major portion of the total service/coverage provided, and may exceed the amount of claim payments.
3. Defense costs can include defense, litigation, and medical cost containment expenses, whether internal or external. Defense costs include, but are not limited to the following items:
   a) Surveillance expenses;
   b) Fixed amounts for medical cost containment expenses;
   c) Litigation management expenses;
   d) Loss adjustment expenses for participating in voluntary and involuntary market pools if reported by accident year;
   e) Fees or salaries for appraisers, private investigators, hearing representatives, reinspectors and fraud investigators, if working in defense of a claim, and fees or salaries for rehabilitation nurses, if such cost is not included in losses;
   f) Attorney fees incurred owing to a duty to defend, even when other coverage does not exist;
   g) The cost of engaging experts;
   h) Court costs;
   i) Structured settlement consultants and similar items.
4. Many ceded reinsurance contracts for liability lines include defense costs in the definition of a covered loss. When this occurs, the ceded company treats the ceded defense costs as ceded LAE, while the assuming company typically codes this amount as a covered loss. Hence the defense costs have changed their classification in going from the ceding company to the assuming company. (The only LAE for the assuming company would therefore be their own LAE costs

from the part of the claim function that they control, not the portion of the ceding company's claim function that they are reimbursing/indemnifying.)

5. To the extent that a company utilizes internal resources for the claim function, the following amounts are included in LAE (in addition to the externally purchased services such as lawyers and independent adjusters):

   a) Salary and Related Items - Salary, overtime and bonus compensation for all claim function employees and the cost of temporary help services utilized; these functions typically include appraisers, private investigators, hearing representatives, re-inspectors and fraud investigators, if working in the capacity of an adjuster..
   b) Employee Relations and Welfare - Expenses incurred for claim function employee benefits such as post-retirement benefits (medical plans for retirees), group health insurance, pension and profit sharing contributions, employee training, group term life insurance, workers' compensation insurance premiums and employee outings.
   c) Insurance - Company insurance expense for fidelity and surety bonds on claim function employees, and insurance on company-owned automobiles used in claim settlements.
   d) Travel and Travel Items - Transportation, meals, lodging and other costs of claims function employees while traveling. Also includes claims function employee moving expenses, entertainment expenses, depreciation and operating expenses of company automobiles and dues to social, civic and professional clubs and associations.
   e) Rent and Rent Items - Home and branch office rental (used in the claims function), utilities in leased premises, amortization of leasehold improvements and office maintenance expenses for leased premises.
   f) Equipment - Depreciation of office furniture and fixtures. Also include rental and repair expenses for all other equipment used in the claims function.
   g) Cost or Depreciation of Electronic Data Processing Equipment and Software - Depreciation and amortization expense for electronic data processing equipment, operating system and application software used in the claims process.
   h) Printing and Stationery - Cost of letterhead, envelopes, policy forms and other office supplies utilized by the claims function.
   i) Postage, Telephone and Telegraph, Exchange and Express - Telephone, postage and freight expenses and bank collection and exchange charges for the claims function.
   j) Legal and Auditing - Legal retainers and fees to outside law firms in connection with loss settlement.

***Life insurance***

The guidance for what is included in maintenance expenses for life insurers is not very detailed as it is typically a small percentage of the premiums charged, depending on the

line of business. Maintenance costs are typically those that are policy related and associated with premium collection, the processing of commissions and policy changes, other direct maintenance costs (such as the costs of dividend calculations and payments, policyholders' service, etc.), and settlement costs (such as the costs of investigating and processing claims, surrenders and maturities including legal and adjusters' fees). If inflation is considered in other assumptions, inflation should generally be recognized in providing for maintenance and settlement costs.

General maintenance expenses are not typically included in the reserve. General maintenance expenses represent activities of a general nature which are not related to a specific business activity but supports the general administration of a product line. These expenses come from both the business unit departments as well as, corporate departments (such as information technology, human resources, actuarial,) and include expenses for salaries, rent, printing, postage, etc. which are the expenses that are incurred in these departments.

General corporate overhead expenses also are not typically included in the reserve and represent activities that cannot be attributed to a specific business unit or are required for general corporate purposes. Most of these expenses come from corporate departments such as, corporate services, top-level executives and their staff, planning departments, general legal activities, general accounting and budgeting, lobbying efforts by employees and agents to support legislative matters, governmental affairs, corporate communications, etc. and include expenses that are incurred in these departments such as salaries, rent, printing, postage, etc.

***Health insurance***

There is not explicit U.S. GAAP guidance that requires a health care entity to record claim adjustment expenses and thus there is diversity in practice. Depending on the nature of the health insurance written, entities expense the costs as incurred or reserve for the costs in accordance with the property/casualty or life practices indicated above.