Defined Benefit Liability Measurement by superannuation entities and certain related disclosures

The purpose of this paper is to provide relevant information for the Board to confirm the principles underpinning the measurement of defined benefit liabilities by superannuation entities to be included in the replacement standard for AAS 25 *Financial Reporting by Superannuation Plans* and agree on certain related sensitivity disclosures about significant assumptions.

1. Background

1.1 AAS 25 requires accrued benefits of a defined benefit plan to be measured as a present value of expected future benefit payments using "a current market-determined, risk-adjusted discount rate appropriate to the plan" [paragraph 50]. AAS 25 also requires that the liability be measured/remeasured at least every three years. It permits, but does not require, remeasurement in each of the two intervening years.

1.2 The 'default' position for defined benefit plans under AAS 25 is the presentation of a statement of net assets that does not include the defined benefit liability [paragraph 60]. The 'alternative reporting format' includes a statement of financial position and can be used only when the defined benefit liability is measured each year [paragraph 62].

1.3 Many entities only measure the defined benefit liability every three years, although an increasing number have started to measure it annually. Very few choose to present a statement of financial position.

1.4 ED 223 *Superannuation Entities* (December 2011) proposed that defined benefit liabilities be recognised in a statement of financial position and measured "… at the present value of the expected future benefit payments using the projected unit credit method in accordance with the approach in AASB 119 *Employee Benefits* for defined benefit obligations."[1] [paragraph 23]. ED 223 also explicitly proposed requiring that the defined benefit liability be an accrued benefit measure (not a vested benefit). This followed proposals in ED 179 *Superannuation Plans and Approved Deposit Funds* (May 2009) that were similar in the sense they were based on AASB 119.[2]

1 AASB 119 *Employee Benefits* requires long-term employee benefit liabilities to be measured using the projected unit credit method [paragraph 67] with actuarial assumptions that are unbiased and mutually compatible [paragraph 75], and include a discount rate determined by reference to a deep market in high-quality corporate bonds or government bonds in the absence of such a deep market [paragraph 83], and relevant assumptions about salaries and benefits [paragraph 87]. In the case of not-for-profit public sector entities the discount rate is the yield on government bonds [paragraph Aus83.1].

2 ED 179 proposed that superannuation entities recognise defined benefit liabilities as the accrued benefit amount using AASB 119, but with some exceptions. Those exceptions included: requiring the use of a risk-free discount rate based on current observable, objective rates that relate to the nature, structure and terms of the relevant obligations; and not factoring in administrative costs because they are not in the nature of member benefits. Based on the feedback received, this approach was subsequently rejected by the Board for a number of reasons, including because the differences from AASB 119 would add to complexity of the accounting.

1.5 ED 223 included the following proposed application guidance on measuring defined benefit liabilities (obligations):

> AG7 AASB 119 *Employee Benefits* requires defined benefit obligations to be measured at the present value of the expected future benefit payments using the 'projected unit credit method', which involves making an actuarial assessment of the variables that will determine the ultimate cost of defined benefit obligations. The assumptions underlying that assessment include assumptions about the demographic variables (such as rates of member turnover, disability and early retirement) and financial variables (such as future salary and benefit levels) that will affect the amount of expected future benefit payments. The assumptions used to measure obligations for defined benefit members' accrued benefits are the best estimates of the relevant variables. Expected future defined benefit payments are discounted at a rate determined by reference to market yields at the end of the period on high quality corporate bonds or, in the absence of a deep market for such bonds, the market yields at the end of the period on government bonds.
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> AG8 AASB 119 permits the use of estimates, averages and computational shortcuts to measure defined benefit obligations, provided that any short-hand techniques used yield a reliable approximation of the defined benefit obligations.

2. Feedback on ED 223 – written comments and December 2011 roundtables

2.1 The main matters relevant to this paper that were raised on the proposed measure in ED 223 for defined benefit liabilities are as follows.

* A potential advantage with the AASB 119 approach is that the actuarial profession is familiar with the projected unit credit method.
* Superannuation entities often have defined benefit members in multiple plans and/or with multiple employers and there would be little or no synergy from using AASB 119. Even in the few cases where there is a close correspondence between an employer and a particular superannuation plan's defined benefit members (and therefore, potentially, some correspondence between the employer's defined benefit amounts determined under AASB 119 and those for the plan), the employer and plan might use different assumptions, have different balance dates, or have different processes for finalising the figures. In some cases, the defined benefit amounts might not be material for some employers, but be material for a plan.
* The AASB 119 measurement approach can give a misleading or confusing impression of a plan's financial position for members and/or employer sponsors, because it could be very different from the amounts projected by actuaries. In particular, the amount determined by applying AASB 119 could be more volatile and sometimes larger and at other times smaller than the (funding) amount determined by actuaries and reported to the Australian Prudential Regulation Authority. Instead, the valuation method should be based on a long-term earning rate.

* The actuarial (or funding) basis for determining the defined benefit liability is more in keeping with the trustee's obligations to members than the approach in AASB 119. The AASB 119 discount rate might result in an overstated liability or an understated liability from a superannuation entity perspective.

* The objective of AASB 119 is to ensure appropriate allocation of operating costs by companies, while the fund's objective is to invest contributions received and assist employers in satisfying employee benefit obligations. These different objectives call for different measurement bases.

2.2 Many constituents commented on their preference for not having to recognise the liability (on the basis that the employer-sponsor already recognises a net liability) and others argued for vested benefits over accrued benefits (largely on cost-benefit grounds). However, based on a thorough redeliberation of the feedback received on ED 223, the Board has already resolved in meetings in 2012 to require recognition of a liability using an accrued benefit measure. Accordingly, the use of a vested benefit measurement or the retention of a non-recognition approach are not discussed further in this paper (although paragraphs 3.2(e) and 5.6(c) comment on how vested benefit amounts might be utilised in determining accrued benefits).

3. Board tentative decisions since ED 223

3.1 After considering the feedback on ED 223, the Board tentatively decided defined benefit liabilities should, in principle, be measured:

(a) as accrued benefits in a manner that recognises the expected cost of meeting defined benefit obligations in relation to service to date, but not necessarily in accordance with AASB 119 (June 2012 meeting); and

(b) in a manner that is not dependent on any existing plan assets and/or any existing funding arrangements (September 2012 meeting).

3.2 At its October-November 2012 meeting, the Board tentatively decided defined benefit liabilities should be measured as the amount that would be needed as at the reporting date to meet accrued member benefits when they are expected to fall due on the basis of the risks specific to the liability, including member demographic risks and the (notional) investment returns relevant to fulfilling benefit outflows. In this context, among other things, the Board noted that:

(a) it is assumed the accrued benefits will be fulfilled and, consistent with that assumption, there is no adjustment for credit risk;

(b) no reference is made to a notion of settlement/transfer and, consistent with that stance, there should be no margin in the liability relating to any inherent risk that the assumptions used in measuring the liability might be wrong;

(c) the expected cash outflows take into account the expected timing and probabilities attaching to various factors that reflect the characteristics of the members/beneficiaries (including expectations about the following: mortality;

rates of member turnover, disability, and early retirement; salaries and rates of salary adjustment);

(d) the defined benefit liability measure is a present value determined as the expected cash outflows discounted by a rate that reflects returns on a notional investment portfolio that would be expected to generate cash inflows to meet, but not exceed, benefit cash outflows when they are expected to fall due. The relevant investment portfolio reflects the opportunities available to the entity in investment markets and not necessarily the actual assets currently held by the superannuation entity to meet defined benefit liabilities and, accordingly, the discount rate is not dependent on whether the benefits are fully funded, under/over funded or entirely unfunded. However, the Board also noted it expects that, typically, there would be a strong relationship between:

    (i) the superannuation entity's investment portfolio (if it has one); and/or

    (ii) the superannuation entity's investment strategy in respect of the defined benefit members;

(e) the Basis for Conclusions to the replacement standard for AAS 25 could usefully note the application of materiality in measuring defined benefit liabilities and that, depending on the circumstances, defined benefit liabilities could be measured without undertaking a full actuarial valuation, perhaps based on methodologies that use the vested benefit calculations together with information on the extent of change/stability of the demographic assumptions for a plan; and

(f) although the use of risk-free discount rates would arguably facilitate comparability among entities, their use would inappropriately tend to result in overstated defined benefit liabilities and give rise to up-front deficits that would later reverse.

4. Consultation since November 2012

4.1 Staff undertook targeted consultation with key constituents between February and April 2013 that included discussions on measuring defined benefit liabilities in the context of the cumulative impact of the Board's recent tentative decisions.

4.2 In the context of determining an accrued benefit measurement model, most of those consulted expressed broad support for the Board's approach for a number of reasons, including:

* it is consistent with the manner in which trustees are required to think about managing their responsibilities with respect to defined benefit members;

* it provides a common basis that can be applied for both funded and unfunded plans; and

* in most circumstances, it should be reasonably cost-effective because it would generally share characteristics with the determination of member benefits for funding purposes.

4.3 Many of those consulted were focused on how they could apply the approach in a cost-effective manner. They were particularly concerned about whether the measurement requirements would effectively compel entities to use a significant level of actuarial services each year. Following discussions with AASB staff, those constituents generally seemed satisfied that the requirements would be in the nature of principles and professional judgement would be able to be applied in determining the precise approach to achieving the required measurement each year. Many were also concerned about implementation issues, including: the methodologies they could apply; and whether calculations could be done before balance date and 'rolled forward'.[3] Again, following discussions with AASB staff, those constituents generally seemed satisfied that they would be able to apply their professional judgement in implementing the requirements given that those requirements would be in the nature of principles.

4.4 Some constituents noted concerns about the scope for superannuation entities or their advisors being overly optimistic in identifying investment opportunities that would form the basis for the discount rate(s). These constituents want the requirements to include robust parameters around the selection of discount rate(s).

4.5 One constituent was overwhelmingly concerned about the scope for superannuation entities or their advisors being overly optimistic and recommended mandating a risk-free discount rate for all entities, even though they acknowledged this would not necessarily be a conceptually-based approach.

4.6 The following points were also raised in discussion with AASB staff in connection with the Board's tentatively decided principles for measuring defined benefit liabilities outlined in section 3 of this paper.

* The principles should refer to basing the discount rate on a long-term investment portfolio, with the implication being that the rate might be relatively more stable over time than mandated rates at particular dates.

* The approach taken in Professional Standard PS 400 *Investigations of the Financial Condition of Defined Benefit Superannuation Funds* (issued by the Institute of Actuaries of Australia in August 2010) could be useful as a guide. [That Actuarial Standard defines 'actuarial value' to mean: "the present value of a future payment, making allowance for the probability of survival to the date on

3 Paragraph 59 of AASB 119 notes: "... For practical reasons, an entity may request a qualified actuary to carry out a detailed valuation of the obligation before the end of the reporting period. Nevertheless, the results of that valuation are updated for any material transactions and other material changes in circumstances (including changes in market prices and interest rates) up to the end of the reporting period." Paragraph 60 goes on to note: "In some cases, estimates, averages and computational short cuts may provide a reliable approximation of the detailed computations illustrated in this Standard."

which the benefit falls due, and for the expected (or, where appropriate, notional) investment return which may be earned during that period".]

* It is appropriate to mention the entity's investment strategy in application guidance on determining discount rates on the basis that, in many cases, it would be relevant because trustees would generally be expected to have a documented strategy that is focused on meeting member benefits when they fall due. However, some constituents also cautioned that, although in theory the investment strategy reflects the 'best' way to invest to meet member benefits, an overly conservative trustee might invest in relatively less risky (lower return) assets. Accordingly, the references to investment strategy need to be carefully expressed and it should be emphasised that the relevant portfolio might not be the portfolio the entity currently has.

* It seems clear from the Board's tentative decisions that it is intended the assumed investment returns would be those that could be achieved on a portfolio judged by the trustees, on the basis of an assessment of the relative risks and returns available from the available investment options, to be the optimal way to generate the cash inflows needed to meet benefit payments. Accordingly, the discount rate would effectively include an element for risk.

* It should be made clear that the discount rate is net-of-tax. However, in discussion with AASB staff, it was acknowledged that the tentatively decided basis for measurement would involve taking into account the impact of investment taxes, which could be reflected through the discount rate(s) or as separate projected cash outflows.

5. Staff comments and recommendations on expressing the measurement principle

5.1 Although Board members will have the opportunity to consider the precise drafting of the requirements at the pre-ballot draft stage of the replacement standard for AAS 25, the following are staff recommendations on the broad approach to expressing the measurement requirements for defined benefit liabilities.

5.2 In the context of the Board's decisions to date, staff would expect the replacement standard to include a principle along the following lines:

> defined benefit liabilities must be measured as the present value of the projected accrued benefit payments relating to members' service to date on the basis of the expected timing of benefit payments.

5.3 In addition, staff would expect the replacement standard to identify the discount rate determining a present value of projected payments along the following lines:

> The expected notional returns (including fair value changes) on a portfolio of assets available to the entity that is judged by the trustees to be the optimal way to generate the cash inflows needed to meet

benefit payments, based on a realistic assessment of the relative risks and returns on those assets.

5.4 Staff would expect the application guidance to note that the projections of accrued benefit payments would take into account the timing and probabilities attaching to various factors that reflect the characteristics of the members/beneficiaries, including where relevant: expectations about mortality; rates of member turnover, disability, and early retirement; salaries and rates of salary adjustment, relative take-up of pension and lump sum options, rates of indexation of benefits, and reversionary benefits.

5.5 Staff would expect the application guidance to note the characteristics that a portfolio of assets to be used by an entity as a basis for determining the relevant discount rate(s) would need to possess.

(a) The relevant portfolio of assets would be expected to generate cash inflows that would meet, but not exceed, member benefits. Those cash inflows might be expected to vary over the relevant periods and to differ for different parts of a portfolio. The relevant portfolio would need to include sufficient liquid assets to meet benefit cash outflows when they are projected to fall due.

(b) The relevant portfolio of assets must be realistically obtainable for the entity in light of the existing and expected economic climate.

(c) The relevant portfolio of assets would need to take into account any restrictions in the entity's investment mandate – accordingly, for example, a plan that is committed to investing only in cash could not apply rates different from expected cash rates.

(d) The relevant portfolio would be expected to often be the same as the actual portfolio of assets due to the need for most entities/plans to have a suitable investment strategy in respect of meeting their obligations to defined benefit members. However, the relevant portfolio need not comprise the actual assets held by the entity/plan, for example, where an entity/plan is not fully funded or is entirely unfunded or where an entity/plan is transitioning to a revised investment strategy.

5.6 The Basis for Conclusions should note the Board's thinking on the following.

(a) The Board concluded that it is appropriate for the purposes of measuring defined benefit liabilities to assume the accrued benefits will be fulfilled and, consistent with that assumption, there is no adjustment for credit risk, for the following reasons:

(i) trustees have a responsibility to act in the best interests of members in meeting member benefits when they fall due;

(ii) the measure is not a fair value[4] (the Basis for Conclusions to ED 223 already includes discussion more broadly of the Board's consideration and rejection of a fair value measurement of defined benefit liabilities, which could be carried over to the standard's Basis for Conclusions); and

(iii) consistency with the 'fulfilment' approach to measuring employee benefits in AASB 119.

(b) The Board concluded that there is no basis under its approach for including a margin in the liability relating to any inherent uncertainty about the amount of the liability. This is consistent the Board's support for assuming the liability will be fulfilled rather than being settled with, or transferred to, another party that might demand a margin for taking on the risks associated with the liability.

(c) The Board noted that superannuation entities would be likely to use the services of an actuary to help measure defined benefit liabilities.[5] However, defined benefit liabilities would not necessarily be expected to be the subject of full actuarial valuations each year in circumstances where other methodologies could be applied to obtain a measure that is not materially misstated. The Board noted that, in staff discussions on the issue with constituents, it was identified that such methodologies might involve the use of vested benefit amounts determined each year and an assessment of the relationship between accrued benefits and vested benefits.

(d) The Board considered requiring the use of risk-free discount rates in measuring defined benefit liabilities on the basis that their use would arguably facilitate comparability among entities. However, the Board concluded the use of risk-free discount rates would tend to result in the amounts of defined benefit liabilities that would not faithfully represent the underlying economic phenomena, particularly because they would generally give rise to deficits that would later reverse.

6. Disclosure requirements

6.1 The Board has agreed on a number of disclosure requirements about defined benefit liabilities and the assumptions used in their measurement, which are outlined in the minutes of the April 2013 Board meeting at item 7 [see Board decision (c)]. Briefly, those requirements relate to the following:

* information on policies for managing benefit liabilities and related deficits/surpluses; typically including:

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4 As defined in AASB 13 *Fair Value Measurement*. AASB 13 defined 'fair value' as "The price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date." [AASB 13, Appendix A].

5 Prudential Standard SPS 160 *Defined Benefit Matters* (April 2012) made under [section 34C] of the *Superannuation Industry (Supervision) Act 1993* requires trustees to arrange for the undertaking of, and reporting on, regular actuarial investigations into the financial position of a defined benefit fund.

    + information on policies and processes, including the investment strategy or strategies for meeting benefit payments, the policies on meeting liquidity needs, and dealing with under-funding or over-funding (but not information on the creditworthiness of employer-sponsors); and

    + disclosure by sub-plan in circumstances where that would help to show how benefit liabilities and related deficits/surpluses are managed;

  * for each significant assumption, a sensitivity analysis, the basis/method for determining each significant assumption (where relevant to understanding the assumptions) and any significant changes to the basis or method from the previous period; typically covering:

    + the discount rate assumption(s), which would be expected to be significant in the vast majority of cases, particularly since its/their determination would potentially involve a significant level of judgement to be exercised;

    + any significant assumptions in respect of salary adjustments, retirements, resignations, mortality, disability and pension index rates, some of which will have a generally understood basis or methodology and some of which may need to be explained; and

    + in an entity with multiple defined benefit plans, it might be necessary to disclose significant assumptions as weighted averages or relatively narrow ranges; or there might be a need to provide disclosure by sub-plan; and

  * the impact of changes from the previous period, separately in respect of demographic assumptions and financial assumptions, noting that: separate disclosure of the impacts can provide useful information in understanding the underlying trends affecting defined benefit liabilities; and, in some cases, the only material impacts of changes from previous periods would be in respect of financial assumptions.

6.2 Staff have one further recommendation in relation to the requirement to disclose the basis/method for determining each significant assumption. In respect of the discount rate assumption, staff recommend that, when the portfolio of assets used as a basis for determining the relevant discount rate(s) applied in measuring a plan's defined benefit liabilities is different from the actual investments of the plan, the explanation would need to include commentary on why that is the case.

6.3 Staff have also recently received some additional feedback on the Board's decision to require the calculation of sensitivity analyses on significant assumptions. A number of constituents have commented that a sensitivity analysis for the discount rate assumption is most likely to be relevant in those circumstances where it is expected to be subject to material variation. They consider there needs to be some guidance to limit the extent of sensitivity analysis disclosure for other assumptions. For example, disclosure of a sensitivity analysis could be required only when an assumption is expected to vary, or actually varies, in a way that would have a material impact on the defined benefit liability. Based on that view, where the assumption is expected to be stable and has a recent record of stability, the sensitivity disclosure would not be required.

6.4 Staff note that the equivalent AASB 119 (2011)[6] disclosure requirement is as follows:

> a sensitivity analysis for each significant actuarial assumption (as disclosed under paragraph 144) as of the end of the reporting period, showing how the defined benefit obligation would have been affected by changes in the relevant actuarial assumption that were reasonably possible at that date; [paragraph 145(a)];

6.5 The Basis for Conclusions to AASB 119 (2011) does not explain the meaning of 'reasonably possible' but refers to its use in the sensitivity disclosure requirements in AASB 7 *Financial Instruments: Disclosures* [paragraph 40(a)]. Paragraph B19 of AASB 7 explains:

> B19 In determining what a reasonably possible change in the relevant risk variable is, an entity should consider:
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> (a) the economic environments in which it operates. A reasonably possible change should not include remote or 'worst case' scenarios or 'stress tests'. Moreover, if the rate of change in the underlying risk variable is stable, the entity need not alter the chosen reasonably possible change in the risk variable. Moreover, if the rate of change in the underlying risk variable is stable, the entity need not alter the chosen reasonably possible change in the risk variable. For example, assume that interest rates are 5 per cent and an entity determines that a fluctuation in interest rates of ±50 basis points is reasonably possible. It would disclose the effect on profit or loss and equity if interest rates were to change to 4.5 per cent or 5.5 per cent. In the next period, interest rates have increased to 5.5 per cent. The entity continues to believe that interest rates may fluctuate by ±50 basis points (i.e. that the rate of change in interest rates is stable). The entity would disclose the effect on profit or loss and equity if interest rates were to change to 5 per cent or 6 per cent. The entity would not be required to revise its assessment that interest rates might reasonably fluctuate by ±50 basis points, unless there is evidence that interest rates have become significantly more volatile; and
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> (b) the time frame over which it is making the assessment. The sensitivity analysis shall show the effects of changes that are considered to be reasonably possible over the period until the entity will next present these disclosures, which is usually its next annual reporting period.

6.6 AASB 7 paragraph B19 makes it clear that the 'reasonably possible' criterion relates to the chosen sensitivity range for a particular assumption; not to whether there should be disclosure of a sensitivity analysis for a particular assumption. By implication, it also infers that expected and actual stability of an assumption is not a basis for non-disclosure.

6.7 Staff are not aware that the requirements in paragraph 145 of AASB 119 have yet been applied by any Australian entities and, accordingly, there is no experience to draw on in this regard. Staff observe that, in the context of the financial statements of an employer-sponsor, the application of materiality may mitigate the impact of the disclosures requirements. In the context of superannuation entity financial statements where there is a single stand-alone defined benefit plan, the same disclosures might be

6 Applies to periods beginning on or after 1 January 2013.

more likely to be judged to have a material impact. In the context of superannuation entity financial statements where there are multiple defined benefit plans (and possibly other multiple defined contribution plans), overall, the general materiality of the disclosures might depend on the extent to which the various defined benefit plans share similar characteristics and therefore respond similarly to changes in the societal and economic environment.

6.8 Notwithstanding that one of the Board's principles in developing the replacement standard for AAS 25 has been to generally conform to other Australian Accounting Standards to the extent feasible, staff recommend that sensitivity disclosures not be required for assumptions that have exhibited stability over the long term and are expected to remain stable over the timeframe of the defined benefit liability. Our view is based on the notion that sensitivity disclosures for such assumptions would be unhelpful and potentially misleading. In respect of significant assumptions for which sensitivity analyses are not disclosed because they are considered stable, staff recommend that there be a requirement to explain the basis for determining their stability.

Board members are asked to identify their views on the staff comments and recommendations in sections 5 and 6 (in particular, paragraphs 6.2 and 6.8).