IFRS

STAFF PAPER

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IASB® Meeting

Project	Goodwill and Impairment		
Paper topic	Value in use—use of post-tax inputs		
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Purpose of this paper

1. In this paper, the staff recommend that:

   (a) the Board confirm its previous tentative decision and include a preliminary view in the Discussion Paper to propose removing from IAS 36 *Impairment of Assets* the explicit requirement to use pre-tax inputs and a pre-tax discount rate to calculate value in use and to disclose the pre-tax discount rates used. Instead, an entity would be required:

      (i) to use internally consistent assumptions about cash flows and discount rates when estimating value in use; and

      (ii) to disclose the discount rate(s) actually used.

   (b) the Discussion Paper should contain a brief discussion on whether there is a need for guidance on how to avoid 'double counting' of the tax cash flows, where the tax cash flows included in the measurement of deferred tax assets or deferred tax liabilities are also included in the recoverable amount of an asset.

2. This paper contains no new analysis.

Structure of the paper

3. The paper is structured as follows:

   (a) Existing requirements (paragraphs 4–6);

   (b) Rationale for existing pre-tax basis (paragraph 7);

   (c) Post-implementation Review of IFRS 3 (paragraphs 8–12);

   (d) Tentative Board decisions in January 2018 (paragraphs 13–18);

   (e) Tax attribute and avoiding double counting (paragraphs 19–22);

   (f) Staff recommendation (paragraphs 23–24);

   (g) Question for the Board; and

   (h) Appendix A – Extracts from the Basis for Conclusions on IAS 36.

Existing requirements

4. In calculating value in use, IAS 36 requires an entity:

   (a) not to include income tax receipts or payments in estimates of future cash flows, ie to estimate cash flows on a pre-tax basis (paragraphs 50 and 51 of IAS 36); and

   (b) to use a pre-tax discount rate (paragraph 55 of IAS 36).

5. IAS 36 also requires an entity to disclose the pre-tax discount rate(s) applied to the cash flow projections (paragraph 134(d)(v) of IAS 36)[1].

6. It is important to bear in mind that the taxes referred to in the terms ‘pre-tax’ and ‘post-tax’ refer to income taxes payable by an entity on the income generated by its assets and not to the income taxes payable by a provider of finance (ie a lender or an equity shareholder) on income earned (ie interest or dividends) from the entity by that provider of finance.

[1] These requirements are applied in the impairment testing not only of goodwill but also of all other assets and cash-generating units within the scope of IAS 36.

Rationale for existing pre-tax basis

7. In issuing IAS 36, the International Accounting Standards Committee (IASC), the Board's predecessor, required the use of pre-tax inputs because the IASC observed that using post-tax inputs without specifying the tax attribute (ie the basis for estimating the future tax cash flows) that an entity should reflect in value in use could cause double counting of future tax consequences of temporary differences. Moreover, if the tax attribute to be reflected in value in use is specified, the ensuing calculations would possibly be complex and burdensome (see paragraphs BCZ81–BCZ84 of the Basis for Conclusions on IAS 36 reproduced in Appendix A).

Post-implementation Review of IFRS 3

8. During the Post-implementation Review (PIR) of IFRS 3, various stakeholders—preparers, investors, valuation experts and members of the Board's consultative groups—said that a pre-tax discount rate is hard to understand and does not provide useful information because that rate is not observable and is generally not used for valuation purposes. The current value of an asset is regarded and understood as a post-tax measure.

9. In practice, when estimating the value in use of an asset using a discounted cash flow technique for the purposes of IAS 36, income taxes payable on the income generated by the asset are deducted in deriving the cash flows available to an entity. Similarly, the discount rate used by the entity to discount these cash flows is a post-tax rate.

10. Having determined the value in use of an asset using post-tax inputs (ie post-tax cash flows and a post-tax discount rate), entities then, to comply with the disclosure requirement in IAS 36, calculate the pre-tax discount rate as the rate that is needed to discount pre-tax cash flows in order to reach the same value as calculated by discounting post-tax cash flows using the post-tax discount rate (see example in paragraph BCZ85 of the Basis for Conclusions on IAS 36, reproduced in Appendix A). In other words, the pre-tax discount rate is not an independent input in calculating value in use but simply a number derived from discounted cash flow calculations that are, in practice, performed using post-tax inputs. Disclosure of this computed pre-tax rate does not provide useful information because it is not the input that was used in estimating the recoverable amount

of an asset (or a cash generating unit (CGU)), and because users are not interested in that rate for the reasons explained in paragraph 8.

11. Consequently, many stakeholders have asked the Board to remove the requirements to calculate value in use using pre-tax inputs and a pre-tax discount rate.

12. These concerns were raised in the past in response to the 2002 Exposure Draft of proposed amendments to IAS 36. At that time, the Board decided that addressing these concerns raised issues that went beyond the scope of its project. The feedback on the 2002 Exposure Draft and the Board's considerations in retaining the use of pre-tax inputs are set out in paragraphs BC90–BC94 of the Basis for Conclusions on IAS 36, reproduced in Appendix A.

Tentative Board decisions in January 2018

13. In the light of the feedback summarised above and the staff's analysis, the Board tentatively decided in the January 2018 Board meeting to:

    (a) remove the explicit requirement to use pre-tax inputs in calculating value in use;

    (b) retain the requirement to disclose the discount rates used, but remove the requirement that the discount rate disclosed should be a pre-tax rate; and

    (c) require an entity to use internally consistent assumptions for cash flows and discount rates.

14. In **Agenda Paper 18A for the January 2018** Board meeting, the staff noted:

    (a) a pre-tax discount rate is not generally observable. As noted earlier, it is generally derived by first discounting post-tax cash flows using a post-tax discount rate to determine a present value, and then using reverse engineering (back solving) to find the pre-tax discount rate that must be applied to the pre-tax cash flows to obtain the same present value[2]; and

[2] In paragraph BC94 of the Basis for Conclusions on IAS 36, the Board observed that, conceptually, discounting post-tax cash flows at a post-tax discount rate and discounting pre-tax cash flows at a pre-tax discount rate should give the same result, as long as the pre-tax discount rate is the post-tax discount rate adjusted to reflect the specific amount and timing of the future tax cash flows.

(b) as a consequence of (a), using pre-tax inputs does not necessarily help in avoiding double counting unless the definition of value in use is made sufficiently precise to give a definitive answer to the question of what tax attribute an entity should reflect in value in use.

15. The Board made a similar amendment to IAS 41 *Agriculture* in May 2008 when it issued *Improvements to IFRSs* amending paragraph 20 of IAS 41 to delete the requirement to use a pre-tax discount rate but not attempting to resolve the ‘double counting’ issue. The Board’s considerations in removing the requirement to use a pre-tax discount rate are explained in paragraph BC6 of the Basis for Conclusions on IAS 41, which says:

> The Board noted that a willing buyer would factor into the amount that it would be willing to pay the seller to acquire an asset (or would receive to assume a liability) all incremental cash flows that would benefit that buyer. Those incremental cash flows would be reduced by expected income tax payments using appropriate tax rates (ie the tax rate of a market participant buyer). Accordingly, fair value takes into account future income taxes that a market participant purchasing the asset (or assuming the liability) would be expected to pay (or to receive), without regard to an entity's specific tax situation.

16. In the recent Exposure Draft *Annual Improvements to IFRS Standards 2018–2020*, the Board is proposing, among other things, an amendment to IAS 41 that would remove the requirement for entities to exclude cash flows for taxation when measuring the fair value of biological assets using a present value technique.

17. The Board’s tentative decision is also consistent with IFRS 13 *Fair Value Measurement*, which does not specify whether an entity uses pre-tax inputs or post-tax inputs. Paragraph B14(d) of IFRS 13 requires an entity to use internally consistent assumptions about cash flows and discount rates, stating:

> …after-tax cash flows should be discounted using an after-tax discount rate. Pre-tax cash flows should be discounted at a rate consistent with those cash flows…

18. This approach would therefore make the calculation of value in use in IAS 36 consistent with the requirements of IFRS 13 and IAS 41 for determining fair value (and hence for

determining fair value less costs of disposal). In line with the feedback from the PIR of IFRS 3, this approach also means that the value of an asset (or CGU) can be determined in a manner that reflects the way most assets are valued and the disclosure of a post-tax discount rate is likely to provide users of financial statements with more useful information than disclosure of a pre-tax discount rate.

Tax attribute and avoiding double counting

19. The feedback from the PIR of IFRS 3 mainly focused on the practicalities of the impairment test, and on the facts that the test was generally performed on a post-tax basis and that a pre-tax discount rate was not observable. There was only limited feedback requesting guidance on what tax attribute to include in value in use calculations and how to avoid double counting of the tax cash flows.

20. In the April 2019 Accounting Standards Advisory Forum (ASAF) meeting, a representative of the Australian Accounting Standards Board (AASB) presented research on IAS 36. One of the recommendations presented was to allow the use of a post-tax discount rate in the value in use calculation. Some ASAF members noted that how to determine post-tax inputs, including the tax attribute, would still remain as an issue even if the Board decided to remove the explicit requirement to use pre-tax inputs in calculating value in use. Those ASAF members agreed with the AASB's suggestion to clarify which tax attribute should be included in the value in use calculation.

21. The staff note that, consistent with the Board's observations in paragraph BC94 of the Basis for Conclusions on IAS 36, the 'double counting' issue exists whether a pre-tax or post-tax discount rate is used and therefore is an issue that theoretically exists in the existing IAS 36 requirements. This is because whether a pre-tax discount rate is used with pre-tax inputs or a post-tax discount rate is used with post-tax inputs, the resulting current value is a post-tax value of the asset (or CGU(s)) being measured. Grossing up the projected cash flows from post-tax cash flows to pre-tax cash flows should not cause the current value of the asset to change because the effect of grossing up cash flows should be offset by increase in the discount rate. The difference is that the tax effects of the asset (or CGU(s)) being tested are either included within the discount rate (pre-tax) or within the cash flows (post-tax) and those tax effects, whether included in the discount rate or the

cash flows, can also be included in an entity's deferred tax assets or liabilities, thus resulting in a 'double counting' issue whichever method is used.

22. In the staff's view, specifying how to avoid the 'double counting' of tax cash flows would require an extensive analysis of the interaction between IAS 36 and IAS 12 *Income Taxes* and would be likely to increase the costs and complexity of determining recoverable amount. Therefore, the staff do not recommend developing guidance on that topic, but this can be explored further in the Discussion Paper.

Staff recommendation

23. The staff recommend that the Board maintain the decision that it made in the January 2018 Board meeting and include a preliminary view in the Discussion Paper to propose removing the explicit requirement to use pre-tax inputs and a pre-tax discount rate to calculate value in use and to disclose the pre-tax discount rates used. Instead, an entity would be required:

    (a) to use internally consistent assumptions about cash flows and discount rates when estimating value in use; and

    (b) to disclose the discount rate(s) actually used.

24. The staff also recommend that the Discussion Paper should contain a brief discussion on whether there is a need for guidance on how to avoid 'double counting' of the tax cash flows, where the tax cash flows included in the measurement of deferred tax assets or deferred tax liabilities are also included in the recoverable amount of an asset.

Question for the Board

Question for the Board
1. Does the Board agree with the staff recommendations in paragraphs 23–24?

Appendix A
Extracts from the Basis for Conclusions on IAS 36

Income taxes

Consideration of future tax cash flows

BCZ81 Future income tax cash flows may affect recoverable amount. It is convenient to analyse future tax cash flows into two components:

(a) the future tax cash flows that would result from any difference between the tax base of an asset (the amount attributed to it for tax purposes) and its carrying amount, after recognition of any impairment loss. Such differences are described in IAS 12 *Income Taxes* as 'temporary differences'.

(b) the future tax cash flows that would result if the tax base of the asset were equal to its recoverable amount.

BCZ82 For most assets, an enterprise recognises the tax consequences of temporary differences as a deferred tax liability or deferred tax asset in accordance with IAS 12. Therefore, to avoid double-counting, the future tax consequences of those temporary differences—the first component referred to in paragraph BCZ81—are not considered in determining recoverable amount (see further discussion in paragraphs BCZ86–BCZ89).

BCZ83 The tax base of an asset on initial recognition is normally equal to its cost. Therefore, net selling price[28] implicitly reflects market participants' assessment of the future tax cash flows that would result if the tax base of the asset were equal to its recoverable amount. Therefore, no adjustment is required to net selling price to reflect the second component referred to in paragraph BCZ81.

28 In IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations*, issued by the IASB in 2004, the term 'net selling price' was replaced in IAS 36 by 'fair value less costs to sell'.

BCZ84 In principle, value in use should include the present value of the future tax cash flows that would result if the tax base of the asset were equal to its value in use—the second component referred to in paragraph BCZ81. Nevertheless it may be burdensome to estimate the effect of that component. This is because:

(a) to avoid double-counting, it is necessary to exclude the effect of temporary differences; and

(b) value in use would need to be determined by an iterative and possibly complex computation so that value in use itself reflects a tax base equal to that value in use.

For these reasons, IASC decided to require an enterprise to determine value in use by using pre-tax future cash flows and, hence, a pre-tax discount rate.

Determining a pre-tax discount rate

BCZ85 In theory, discounting post-tax cash flows at a post-tax discount rate and discounting pre-tax cash flows at a pre-tax discount rate should give the same result, as long as the pre-tax discount rate is the post-tax discount rate adjusted to reflect the specific amount and timing of the future tax cash flows. The pre-tax discount rate is not always the post-tax discount rate grossed up by a standard rate of tax.

Example

This example illustrates that a post-tax discount rate grossed-up by a standard rate of tax is not always an appropriate pre-tax discount rate.

At the end of 20X0, the carrying amount of an asset is 1,757 and its remaining useful life is 5 years. The tax base in 20X0 is the cost of the asset. The cost is fully deductible at the end of 20X1. The tax rate is 20%. The discount rate for the asset can be determined only on a post-tax basis and is estimated to be 10%. At the end of 20X0, cash flow projections determined on a pre-tax basis are as follows:

		20X1	20X2	20X3	20X4	20X5
(1)	Pre-tax cash flows (CF)	800	600	500	200	100

Value in use determined using post-tax cash flows and a post-tax discount rate

End of 20X0		*20X1*	*20X2*	*20X3*	*20X4*	*20X5*
(2)	*Deduction of the cost of the asset*	*(1,757)*	–	–	–	–
(3)	*Tax CF [((1) – (2)) × 20%]*	*(191)*	*120*	*100*	*40*	*20*
(4)	*Post-tax CF [(1) – (3)]*	*991*	*480*	*400*	*160*	*80*
(5)	*Post-tax CF discounted at 10%*	*901*	*396*	*301*	*109*	*50*
Value in use [Σ(5)] =						*1,757*

Value in use determined using pre-tax cash flows and a pre-tax discount rate (determined by grossing-up the post-tax discount rate)

Pre-tax discount rate (grossed-up) [10%/(100% – 20%)] 12.5%

End of 20X0		*20X1*	*20X2*	*20X3*	*20X4*	*20X5*
(6)	*Pre-tax CF discounted at 12.5%*	*711*	*475*	*351*	*125*	*55*
Value in use [Σ(6)] =						*1,717*

Determination of the 'real' pre-tax discount rate

A pre-tax discount rate can be determined by an iterative computation so that value in use determined using pre-tax cash flows and a pre-tax discount rate equals value in use determined using post-tax cash flows and a post-tax discount rate. In the example, the pre-tax discount rate would be 11.2%.

End of 20X0		*20X1*	*20X2*	*20X3*	*20X4*	*20X5*
(7)	*Pre-tax CF discounted at 11.2%*	*718*	*485*	*364*	*131*	*59*
Value in use [Σ(7)] =						*1,757*

The 'real' pre-tax discount rate differs from the post-tax discount rate grossed-up by the standard rate of tax depending on the tax rate, the post-tax discount rate, the timing of the future tax cash flows and the useful life of the asset. Note that the tax base of the asset in this example has been set equal to its cost at the end of 20X0. Therefore, there is no deferred tax to consider in the balance sheet.

Interaction with IAS 12

BCZ86 IAS 36 requires that recoverable amount should be based on present value calculations, whereas under IAS 12 an enterprise determines deferred tax assets and liabilities by comparing the carrying amount of an asset (a present value if the carrying amount is based on recoverable amount) with its tax base (an undiscounted amount).

BCZ87 One way to eliminate this inconsistency would be to measure deferred tax assets and liabilities on a discounted basis. In developing the revised version of IAS 12 (approved in 1996), there was not enough support to require that deferred tax assets and liabilities should be measured on a discounted basis. IASC believed there was still not consensus to support such a change in existing practice. Therefore, IAS 36 requires an enterprise to measure the tax effects of temporary differences using the principles set out in IAS 12.

BCZ88 IAS 12 does not permit an enterprise to recognise certain deferred tax liabilities and assets. In such cases, some believe that the value in use of an asset, or a cash-generating unit, should be adjusted to reflect the tax consequences of recovering its pre-tax value in use. For example, if the tax rate is 25 per cent, an enterprise must receive pre-tax cash flows with a present value of

400 in order to recover a carrying amount of 300.

BCZ89 IASC acknowledged the conceptual merit of such adjustments but concluded that they would add unnecessary complexity. Therefore, IAS 36 neither requires nor permits such adjustments.

Comments by field visit participants and respondents to the December 2002 Exposure Draft

BC90 In revising IAS 36, the Board considered the requirement in the previous version of IAS 36 for:

(a) income tax receipts and payments to be excluded from the estimates of future cash flows used to measure value in use; and

(b) the discount rate used to measure value in use to be a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the asset for which the future cash flow estimates have not been adjusted.

BC91 The Board had not considered these requirements when developing the Exposure Draft. However, some field visit participants and respondents to the Exposure Draft stated that using pre-tax cash flows and pre-tax discount rates would be a significant implementation issue for entities. This is because typically an entity's accounting and strategic decision-making systems are fully integrated and use post-tax cash flows and post-tax discount rates to arrive at present value measures.

BC92 In considering this issue, the Board observed that the definition of value in use in the previous version of IAS 36 and the associated requirements on measuring value in use were not sufficiently precise to give a definitive answer to the question of what tax attribute an entity should reflect in value in use. For example, although IAS 36 specified discounting pre-tax cash flows at a pre-tax discount rate—with the pre-tax discount rate being the post-tax discount rate adjusted to reflect the specific amount and timing of the future tax cash flows—it did not specify which tax effects the pre-tax rate should include. Arguments could be mounted for various approaches.

BC93 The Board decided that any decision to amend the requirement in the previous version of IAS 36 for pre-tax cash flows to be discounted at a pre-tax discount rate should be made only after the Board has resolved the issue of what tax attribute should be reflected in value in use. The Board decided that it should not try to resolve this latter issue as part of the Business Combinations project—decisions on the treatment of tax in value in use calculations should be made only as part of its conceptual project on measurement. Therefore, the Board concluded it should not amend as part of the current revision of IAS 36 the requirement to use pre-tax cash flows and pre-tax discount rates when measuring value in use.

BC94 However, the Board observed that, conceptually, discounting post-tax cash flows at a post-tax discount rate and discounting pre-tax cash flows at a pre-tax discount rate should give the same result, as long as the pre-tax discount rate is the post-tax discount rate adjusted to reflect the specific amount and timing of the future tax cash flows. The pre-tax discount rate is generally not the post-tax discount rate grossed up by a standard rate of tax.

…