

STAFF PAPER

March 2020

IASB® Meeting

Project	Rate-regulated Activities		
Paper topic	Background and Regulatory Capital Base (RCB)		
CONTACT(S)	Umair Shahid	ushahid@ifrs.org	+44 (0)20 7246 6414
	Neal Beauchamp	nbeauchamp@ifrs.org	+44 (0)20 7246 6423
	Mariela Isern	misern@ifrs.org	+44 (0)20 7246 6483

This paper has been prepared for discussion at a public meeting of the International Accounting Standards Board (Board) and does not represent the views of the Board or any individual member of the Board. Comments on the application of IFRS® Standards do not purport to set out acceptable or unacceptable application of IFRS Standards. Technical decisions are made in public and reported in IASB® Update.

Purpose of this paper

1. This paper provides background information about total allowed compensation and analyses how to determine whether regulatory returns on regulatory capital base (RCB) for a period should be regarded as forming part of total allowed compensation for goods or services supplied in that period or in a different period. The answer to this question will determine **when** those returns affect profit.
2. This paper does not ask the Board to make any decisions. However, it provides analysis that is used further in Agenda Paper 9B *Regulatory returns on Construction Work in Progress (CWIP) base* for the staff recommendations. Questions to the Board relating to the matters discussed in this paper and Agenda Paper 9B are in Agenda Paper 9D *Summary of staff recommendations*.

Structure of this paper

3. This paper is structured as follows:
 - (a) background—total allowed compensation and its components (paragraphs 6–17);

- (b) principle for target profit (paragraphs 18–21); and
 - (c) regulatory returns on regulatory capital base (RCB) (paragraphs 22–32).
4. The background section provides information that the Board discussed in previous meetings. The sections dealing with the principle for target profit and with regulatory returns on RCB includes analysis that was not discussed by the Board in previous meetings.
5. The paper and the appendix include examples to illustrate the application of the staff proposals for regulatory returns on RCB.

Background—total allowed compensation and its components

6. At the meetings held in 2019, the Board discussed the following description of total allowed compensation:

The total allowed compensation is the amount that an entity is entitled to charge customers for the goods or services supplied.¹

7. Total allowed compensation is a key concept in the model because it is compared with the amounts already charged to customers in a reporting period, that is amounts that an entity recognised as revenue in that reporting period in accordance with IFRS 15 *Revenue from Contracts with Customers*. That comparison determines whether the entity:
- (a) has not charged all or part of the compensation to which it is entitled for the goods or services it already supplied and, consequently, whether it has a present right to include outstanding compensation in determining the regulated rate(s)² in future period(s); or

¹ This description was discussed at the June 2019 Board meeting. Agenda Paper 9A can be found: <http://cm.ifrs.org/-/media/feature/meetings/2019/june/iasb/ap9a-rat-regulated-activities.pdf>

² Regulated rate—a transaction price that a regulatory agreement entitles an entity to charge customers in a period for goods or services supplied in the **same period**. To emphasize the similarities and differences with that concept, the staff’s current working definition of total allowed compensation is ‘the amount that a regulatory agreement entitles an entity to charge customers, in the **same period or a different period**, in exchange for goods or services supplied in a specified period’. [emphasis added]

- (b) has already charged customers compensation for goods or services it has not yet supplied and, consequently, whether it has a present obligation to deduct that compensation in determining the regulated rate(s) in future period(s).
8. In other words, the model uses the concept of total allowed compensation to:
- (a) underpin **when** an entity would recognise and derecognise regulatory assets and regulatory liabilities and the **amount** of those assets and liabilities, as reflected in the following descriptions:
- (i) regulatory asset—the present right to add an amount to the regulated rate(s) to be charged to customers in future periods because the total allowed compensation for the goods or services already supplied *exceeds* the amount already charged to customers.
- (ii) regulatory liability—the present obligation to deduct an amount from the regulated rate(s) to be charged to customers in future periods because the total allowed compensation for the goods or services already supplied *is lower than* the amount already charged to customers.
- (b) reflect in the statement(s) of financial performance - through the recognition of regulatory income or regulatory expense as well as revenue recognised in accordance with IFRS 15 - the compensation that the entity is entitled to for a given period in exchange for the goods or services supplied to customers during that period, regardless of when the related amounts are reflected in the regulated rate(s).
9. The recognition and derecognition of regulatory assets and regulatory liabilities is effectively a depiction of the differences between total allowed compensation and amounts already charged to customers. Because regulatory assets and regulatory liabilities are rights to increase, or obligations to decrease, future regulated rates, which will consequently affect the amount of revenue in future periods, it follows that:
- (a) amounts of total allowed compensation that are not charged to customers until after the same period when goods or services are supplied will become revenue in a future period when those amounts

- are included in the regulated rates (ie when the entity recovers the regulatory asset by including those amounts in the regulated rates); and
- (b) amounts charged to customers and recognised as revenue before the period in which the goods or services are supplied will become total allowed compensation in a future period when those amounts are deducted in determining the regulated rates (ie when the entity fulfils the regulatory liability by deducting those amounts in determining the regulated rates).
 - (c) an entity is compensated or charged, explicitly or implicitly, regulatory interest for each of the differences in timing described in paragraphs 9(a)-(b) above (ie the entity is compensated for the delayed recovery of a regulatory asset (regulatory interest income), or charged for the delayed fulfilment of a regulatory liability (regulatory interest expense)). This regulatory interest also forms part of total allowed compensation and, often in the same period but sometimes in a different period, of the amounts charged to customers.

Components of total allowed compensation

10. At meetings held in 2019, the Board discussed the components of total allowed compensation as follows:³
- (a) allowable expenses and chargeable income (paragraphs 14–15); and
 - (b) target profit, the main elements of which are:
 - (i) margins on allowable expenses (paragraph 16(a));
 - (ii) regulatory interest (paragraph 16(b));
 - (iii) performance incentives (ie bonuses and penalties)—
(paragraph 16(c)); and
 - (iv) regulatory returns on RCB (paragraph 17(b)).
11. In applying the model, total allowed compensation has a dual nature:

³ Agenda Paper 9A discussed at the June 2019 Board meeting.

- (a) on one hand, a regulatory nature. This is because its components are items that the regulatory agreement treats as either allowable or chargeable when determining the regulated rate(s).
 - (b) on the other hand, an accounting nature. This is because an entity is required to determine total allowed compensation for goods or services it supplied in the current period so that it knows whether and when regulatory assets or regulatory liabilities exist and when it has recovered or fulfilled them (paragraph 9). When making such a determination, the entity relies to some extent on judgements it needs to make for accounting purposes, for example in determining whether expenditure is an expense or part of the cost of an asset or in estimating an asset's useful life.
12. The regulatory agreement determines the regulated rates to be charged to customers in exchange for all the goods or services supplied to customers in a period. From an accounting perspective however, it does not determine:
- (a) whether all components of compensation included when determining those regulated rates are part of total allowed compensation for goods or services supplied in that period, rather than in an earlier or later period;
 - (b) whether all total allowed compensation for goods or services supplied in that period is reflected in the regulated rates for that period, rather than having already been included in regulated rates for an earlier period, or having to be included in regulated rates for a future period.
13. For allowable expenses and chargeable income, and for **some** elements of the target profit, it is straight-forward to determine whether they form part of total allowed compensation for the goods or services for the same period or for a different period (see paragraphs 14–16). However, determining this is more difficult for some other elements of target profit (paragraph 17).

Items discussed in previous Board meetings*Allowable expenses and chargeable income*

14. If a regulatory agreement treats an expense as allowable, that fact establishes that the expense relates to an entity's supply of goods or services in some period. In applying the model, an entity would treat that allowable expense as relating to the period in which it is incurred and recognised by applying IFRS Standards. Consequently, that allowable expense gives rise to an amount of total allowed compensation for goods or services supplied in the period when it was incurred and recognised in the statement(s) of financial performance.
15. As in the case of allowable expenses, the fact that a regulatory agreement treats an amount of income as chargeable in determining the regulated rate establishes that this amount reduces the total allowed compensation for goods or services supplied in some period. In applying the model, an entity would treat that chargeable income as relating to the period in which it is recognised by applying IFRS Standards.

Target profit

16. The target profit is the profit that an entity is entitled to add in determining the regulated rate. For the following elements of target profit, their allocation as compensation for goods or services supplied in a specified period is often straight-forward and these have been discussed at earlier Board meetings:
 - (a) *margins on allowable expenses*: in determining the regulated rate, some regulatory agreements may entitle an entity to recover the amount of the allowable expense incurred plus a profit margin that varies with the amount of the expense, for example, a fixed percentage mark-up on the expense. That profit margin forms part of total allowed compensation for goods or services supplied in the same period as the period in which the entity incurred and recognised the related allowable expense as an expense by applying IFRS Standards.
 - (b) *regulatory interest*: regulatory interest income on regulatory assets and/or regulatory interest expense on regulatory liabilities is recognised over the life of the regulatory asset and/or regulatory liability and,

consequently, regulatory interest forms part of total allowed compensation for goods or services supplied in the period(s) over which the regulatory asset or regulatory liability is outstanding.

- (c) *performance incentives (ie bonuses and penalties)*: there is a wide range of performance incentives that a regulatory agreement may provide to an entity in order to reward it with a bonus for achieving, or penalise it for failing to achieve, specified performance criteria attributable to goods or services supplied: for example, targeted levels of service quality, reliability or customer satisfaction. Such a bonus or penalty forms part of total allowed compensation for goods or services supplied over the period in which the incentive performance criteria were monitored and evaluated. We refer to such incentives as non-construction related and distinguish them from performance incentives (ie bonuses and penalties) that relate to construction activities. We discuss construction related performance incentives in Agenda Paper 9C *Performance incentives*.

Items not discussed in previous Board meetings

17. The Board's previous discussions did not explicitly address a general principle for when target profit and one of its elements (regulatory returns on RCB) should be regarded as forming part of total allowed compensation for goods or services supplied. This is discussed in the following sections:
- (a) target profit (considered generally and except for the other elements discussed in paragraph 16) (paragraphs 18–21); and
 - (b) regulatory returns on RCB (paragraphs 22–32).

The analysis in the following sections is used further in Agenda Paper 9B for the staff recommendations.

Principle for target profit

18. The **model's general principle** for an entity to reflect total allowed compensation for goods or services supplied, in the period when those goods or services are

supplied, has been implicit in the Board's previous discussions on the definitions of total allowed compensation, regulatory assets and regulatory liabilities. The model's general principle can, however, be made explicit as follows:

The model's general principle is that an entity shall reflect total allowed compensation for goods or services supplied in the period when those goods or services are supplied.

19. Previous discussions of the Board did not, however, address how to determine **when** target profit should form part of total allowed compensation. The staff observe that applying the model's general principle above may be challenging in the case of target profit. This is because it may be difficult to establish the link between target profit and goods or services supplied in a particular period. (In contrast, if allowable expenses are recognised in a period accordance with IFRS Standards, that fact provides a natural basis for concluding that the related component of total allowed compensation relates to goods or services supplied in that period.)
20. The staff is of the view that the fact the regulatory agreement entitles an entity to charge customers target profit in a specified period (by including those amounts in the regulated rates to be charged for the period), establishes that that target profit relates to goods or services supplied to customers in that period, unless there is a compelling reason to link it to goods or services supplied in a different period. Agenda Papers 9B and 9C identify two circumstances in which the staff think there is such a compelling reason.
21. We therefore recommend the above to be reflected through the following **principle for determining when target profit forms part of total allowed compensation:**

Target profit that a regulatory agreement entitles an entity to charge customers for a specified period forms part of total allowed compensation for goods or services supplied in that period.

Regulatory returns on regulatory capital base (RCB)

22. An important component of the regulated rates for entities within the scope of the model is a component derived on the basis of a regulatory return rate applied to a base specified by the regulatory agreement, such as a regulatory capital base (RCB).^{4, 5} In that component:
- (a) the regulatory return generally reflects the regulator's estimate of an entity's cost of capital; and
 - (b) the RCB comprises mainly assets used in supplying goods or services although the carrying amounts of those assets for regulatory purposes may differ from those determined under IFRS Standards. For example, the RCB may include amounts that, in accordance with IAS 16 *Property, Plant and Equipment*, the entity did not capitalise but expensed.
23. Because these regulatory returns are tied to the RCB, which is a broad asset base, in some cases it may not be clear whether, under the model, the period in which a regulatory agreement entitles an entity to include these returns in the regulated rates is also the period in which that element of target profit is part of total allowed compensation for goods or services supplied to customers and, consequently, whether it should affect profit or loss for that period.
24. For the same reasons as set out in paragraphs 19–20, the staff is of the view that the principle for target profit above (see paragraph 21) can be applied to the **regulatory returns on RCB**. This would mean that those regulatory returns would form part of total allowed compensation in the period in which the regulatory agreement entitles the entity to include them in the regulated rates:

Regulatory returns on RCB that a regulatory agreement entitles an entity to charge customers for a specified period

⁴ Other terms such as regulatory asset base (RAB) or regulatory asset value (RAV) are also used to refer to the RCB.

⁵ In the document titled *'Financeability and financing the asset base – a discussion paper'* published in 2010, Ofwat, the regulator of the water sector in England and Wales, showed that 'return on capital' represented approximately 26.8 per cent of the revenue requirement for 2010-2015.

form part of total allowed compensation for goods or services supplied in that period.

25. Table 1 includes an example that illustrates the application of the principle for regulatory returns in paragraph 24.

Table 1—Example 1

Fact pattern

Entity A has invested in an item of property, plant and equipment (PPE) at the end of X0 amounting to CU1,000. The investment cost includes CU200 of borrowing costs capitalised applying IAS 23 *Borrowing Costs* (all amounts are capitalised at the end of X0 and the borrowings are fully repaid by Entity A as of that date). The useful life of the item of PPE is 4 years and the regulatory agreement allows:

- (a) recovery through the regulated rates of the investment during a period of 4 years starting from the beginning of X1; and
- (b) regulatory return of 8% on the opening outstanding balance of the RCB, which consists of only this item of PPE.

As a result, the regulatory agreement establishes that the entity is allowed to charge customers an amount of CU330 through the regulated rate in X1 to cover:

- (a) depreciation expense of CU250; and
- (b) regulatory return of CU80 (ie 8% * CU1,000).

The regulatory agreement determines the regulated rate for X1 on the basis of an estimated level of units sold. The fact pattern assumes that actual quantities supplied to customers equal estimated quantities.

Application of the model and of the principle for regulatory returns in paragraph 24

The total allowed compensation (TAC) for goods or services supplied in X1 of CU330 consists of:

- (a) recovery of depreciation expense of CU250 (ie allowable expense); and
- (b) regulatory return of CU80 (ie target profit).

26. In Example 1, the regulatory returns on the RCB that the regulatory agreement entitles the entity to include in determining the regulated rates in X1 are part of total allowed compensation for that period because:
- (a) goods or services are being supplied using the item of PPE (ie consuming the item of PPE and incurring depreciation expense as a result); and
 - (b) the 8% regulatory return is applied to the investment in PPE outstanding at the beginning of X1 (ie the regulatory agreement entitles Entity A to include this return in the regulated rates during X1).
27. In the staff's view, the principle in paragraph 24 for recognising regulatory returns is aligned with the general principle of the model (see paragraph 18), because the item of PPE in Example 1 is being used for supplying goods or services over the period in which the regulatory agreement entitles the entity to include these regulatory returns in the regulated rates. According to Example 1, the regulatory returns that Entity A would be entitled to in years X1–X4 would follow a declining pattern as the outstanding opening balance of the item of PPE is also declining.⁶ Some may question such a declining pattern as it may differ from the pattern of consumption of the item of PPE (reflected through depreciation). However, the staff have not identified any basis to challenge the declining regulatory pattern for regulatory returns to recommend that entities use another pattern instead.
28. However, the staff think that in the following cases, there may be questions about whether the principle for regulatory returns in paragraph 24 is aligned to the **model's general principle** aiming to reflect total allowed compensation in the period in which the related goods or services are supplied:

⁶ Entity A would be entitled to regulatory returns amounting to CU80, CU60, CU40 and CU20 in years X1-X4, respectively.

- (a) when the regulatory agreement uses a different useful life for recovery of the cost of an item of PPE than the useful life determined in accordance with IFRS Standards. We discuss this issue in paragraphs 29–32 below; and
- (b) when regulatory returns for a period include an amount derived by applying a specified return rate to an item of PPE that is under construction—thus, no goods or services are being supplied with that item of PPE during the construction period(s) and in this period(s) the regulatory agreement entitles the entity to include those returns in the regulated rates. This is discussed in Agenda Paper 9B.

Different recovery pattern for regulatory purposes than IFRS useful life

29. There could be cases when the pattern of recovery of an asset established for regulatory purposes differs from the asset’s useful life determined for accounting purposes. In such situations, the accelerated or decelerated recovery of the cost of an item of PPE would give rise to a regulatory liability or a regulatory asset, respectively, due to the different pattern of recovery of the depreciation expense (which regulatory agreements typically consider as an allowable expense).
30. Table 2 below includes an example of such a scenario to illustrate the application of the:
- (a) model in the case of accelerated recovery of allowable expenses through the regulated rates charged (ie allowable expenses that are not yet incurred in accordance with IFRS Standards but will be incurred when supplying goods or services in future periods); and
 - (b) the principle for regulatory returns on RCB discussed in paragraph 24 for determining whether these returns relate to total allowed compensation for goods or services supplied in the same period or a different period.

Table 2—Example 2⁷

⁷ This example illustrates a scenario that creates a regulatory liability. The appendix to this paper illustrates a scenario that creates a regulatory asset (see Table 3—Example 3 in the appendix).

Fact pattern

This example uses the same fact pattern as Example 1, except:

- (a) the regulatory agreement entitles Entity A to recover the full amount invested in the asset and related regulatory returns over a period of 2 years (ie from X1 to X2); and
- (b) Entity A is able to recover all amounts during the years X1 to X2 (ie no variances arise between the estimated quantities of goods or services the regulatory agreement used to determine the regulated rates to be charged to customers in each of the years X1 and X2 and the actual quantities of goods or services sold during these years).

Application of the model and of the principle for regulatory returns on RCB in paragraph 24⁸

The total allowed compensation for the goods or services supplied in each of years X1–X4 is shown in Figure 1:

	X1	X2	X3	X4	TOTAL
Allowable expense - depreciation (CU1,000 over 4 years)	250	250	250	250	1,000
Target profit - regulatory return (8% on opening RCB)	80	40	-	-	120
Total allowed compensation	330	290	250	250	1,120
Amount charged per year	580	540	-	-	1,120
Difference	(250)	(250)	250	250	-

Because the regulatory agreement entitles Entity A to recover the investment in the asset over a shorter period (ie 2 years) than the asset's useful life (ie 4 years), the amounts charged to customers during years X1–X2 exceed total allowed compensation for goods or services supplied during those years. The entity recognises a regulatory liability in X1. During X2 there is a further addition to that regulatory liability, resulting from the increasing amount of Entity A's obligation to deduct an amount in determining the regulated rates to be charged to customers in years X3–X4.

⁸ A similar example was discussed in paragraph 52 of Agenda Paper 9D *Measurement: discounting estimated cash flows* for the June 2019 Board meeting.

If no other transactions took place in years X1–X4, Figure 2 illustrates the following effects of applying the model and the principle for regulatory returns on RCB in paragraph 24 to this fact pattern:

- (a) in the statement(s) of financial performance:
- (i) regulatory returns in X1 and X2 because the regulatory agreement entitles the entity to include these returns in the regulated rates charged during these years.
 - (ii) regulatory expense when recognising the regulatory liability in X1 and when recognising a further addition to that regulatory liability in X2.
 - (iii) regulatory interest expense over the life of the regulatory liability in accordance with paragraph 16(b).
 - (iv) regulatory income because of the fulfilment of regulatory liability as related amounts are deducted in determining the future regulated rates.
- (b) in the statement of financial position—recognition of a regulatory liability.

Figure 2					
Statement of financial performance	X1	X2	X3	X4	TOTAL
Revenue*	580	540	-	-	1,120
Regulatory income/(expense)	(250)	(250)	250	250	-
Expenses - depreciation	(250)	(250)	(250)	(250)	(1,000)
Profit/(loss)	80	40	-	-	120
Statement of financial position					
Regulatory liability	(250)	(500)	(250)	-	
*Components of revenue	X1	X2	X3	X4	TOTAL
<i>Recovery of capital asset cost</i>	500	500	-	-	1,000
<i>Return on unrecovered capital asset base</i>	80	40	-	-	120
Revenue	580	540	-	-	1,120

Figure 3 shows the reconciliation of movements in the balance of regulatory liability during the years X1 to X4:

Figure 3					
Regulatory liability		X1	X2	X3	X4
Opening		-	(250)	(500)	(250)
Origination		(250)	(250)	-	-
Regulatory interest	8%	-	(20)	(40)	(20)
Fulfilment		-	20	290	270
Closing balance		(250)	(500)	(250)	-

The profit in years X1–X4 (see Figure 2) equals the regulatory returns of CU120 (see target profit line in Figure 1) that the regulatory agreement entitles the entity to charge when supplying goods or services during these years. This regulatory return can be further analysed as shown in Figure 4:

- the regulatory return of 8% on the opening RCB before deducting the regulatory liability. In this case, the opening RCB before deducting the regulatory liability equals the depreciated IFRS cost of the asset for years X1–X4, reflecting its useful life of four years; and
- the regulatory interest expense arising from the regulatory liability, calculated using 8% on the opening balance of the regulatory liability. The regulatory agreement applies the same rate to both the regulatory liability and the larger base (ie the RCB) of which it is part.

Figure 4					
Analysis of regulatory return in total allowed compensation	X1	X2	X3	X4	TOTAL
RCB before deducting regulatory liability (CU1,000 at the start of X1)	1,000	750	500	250	
Regulatory return on RCB @ 8% before deducting regulatory liability	80	60	40	20	200
Regulatory interest expense over the life of the regulatory liability	-	(20)	(40)	(20)	(80)
Regulatory return that forms part of total allowed compensation	80	40	-	-	120

In years X3 and X4 the two components in (a) and (b), illustrated in Figure 4, offset each other exactly because:

- the RCB before deducting the regulatory liability is, in effect, the balance the RCB would have had if the asset were recovered over the useful life of 4 years instead of the regulatory life of 2 years.
- the asset is recovered over a period shorter than its useful life, the total regulatory return provided over the useful life is CU120 and this is less than it would be if the asset were recovered over the 4 years (ie CU200).

That difference of CU80 is a charge for early recovery. Thus, that difference is regulatory interest, and is reported as such.

31. As illustrated in Figure 2 of Example 2, the outcome from applying the principle for regulatory returns on RCB in paragraph 24 would result in a profit pattern that is aligned with the pattern determined by the regulatory agreement (ie regulatory returns on RCB are reflected in the period the regulatory agreement entitles the entity to include those regulatory returns in the regulated rates rather than over the IFRS useful life of the asset (CU120 is recognised over X1 and X2 not over the entire period in which asset will be used to supply goods or services as determined in accordance with IFRS Standards)).
32. In the staff's view the outcome illustrated in Figure 2 of Example 2 is appropriate because goods or services are being supplied in the period in which the regulatory agreement includes the regulatory returns on RCB in the regulated rates, thus is aligned with the general principle of the model (see paragraph 18).

Appendix—Numerical example for different useful lives (regulatory asset)

- A1. The numerical example in Table 3 below illustrates a scenario when the pattern of recovery of an asset established for regulatory purposes differs from the asset's useful life determined for accounting purposes (see paragraph 29). Specifically, Table 3 illustrates application of:
- (a) the model in the case of decelerated recovery of allowable expenses through the regulated rates charged (ie allowable expenses that are incurred in supplying goods or services in earlier periods but are included in regulated rates in later periods); and
 - (b) the principle for regulatory returns on RCB discussed in paragraph 24 for determining whether these returns relate to total allowed compensation for goods or services supplied in the same period or a different period.

Table 3—Example 3**Fact pattern**

This example uses the same fact pattern as Example 1, except:

- (a) the useful life of the item of PPE is 2 years;
- (b) the regulatory agreement entitles Entity A to recover the full amount invested in the asset and related regulatory returns over a period of 4 years (ie from X1 to X4); and
- (c) Entity A is able to recover all amounts during the years X1 to X4 (ie no variances arise between the estimated quantities of goods or services the regulatory agreement used to determine the regulated rates to be charged to customers in each of the years X1 to X4 and the actual quantities of goods or services sold during these years).

Application of the model and of the principle for regulatory returns on RCB in paragraph 24

The total allowed compensation for the goods or services supplied in each of years X1-X4 is shown in Figure 5:

	X1	X2	X3	X4	TOTAL
Allowable expense - depreciation (CU1,000 over 2 years)	500	500	-	-	1,000
Target profit - regulatory return (8% on opening RCB)	80	60	40	20	200
Total allowed compensation	580	560	40	20	1,200
Amount charged per year	330	310	290	270	1,200
Difference	250	250	(250)	(250)	-

Because the regulatory agreement entitles Entity A to recover the investment in the asset over a longer period (ie 4 years) than the asset's useful life (ie 2 years), the amounts charged to customers during years X1–X2 are lower than the total allowed compensation for goods or services supplied during those years. The entity recognises a regulatory asset in X1. During X2 there is a further addition to that regulatory asset, resulting from the increasing amount of Entity A's right to add an amount in determining the regulated rates to be charged to customers in years X3–X4.

If no other transactions took place in years X1–X4, Figure 6 illustrates the following effects of applying the model and the principle for regulatory returns on RCB in paragraph 24 to this fact pattern:

- (a) in the statement(s) of financial performance due to:
- (i) regulatory returns in X1 to X4 because the regulatory agreement entitles the entity to include these returns in the regulated rates charged during these years.
 - (ii) regulatory income when recognising the regulatory asset in X1 and when recognising a further addition to that regulatory asset in X2.
 - (iii) regulatory interest income over the life of the regulatory asset in accordance with paragraph 16(b).

- (iv) regulatory expense because of the recovery of the regulatory asset as related amounts are added in determining the future regulated rates.

(b) in the statement of financial position—recognition of a regulatory asset.

Figure 6					
Statement of financial performance	X1	X2	X3	X4	TOTAL
Revenue*	330	310	290	270	1,200
Regulatory income/(expense)	250	250	(250)	(250)	-
Expenses - depreciation	(500)	(500)	-	-	(1,000)
Profit/(loss)	80	60	40	20	200
Statement of financial position					
Regulatory asset	250	500	250	-	
*Components of revenue					
	X1	X2	X3	X4	TOTAL
<i>Recovery of capital asset cost</i>	250	250	250	250	1,000
<i>Return on unrecovered capital asset base</i>	80	60	40	20	200
Revenue	330	310	290	270	1,200

Figure 7 shows the reconciliation of movements in the balance of regulatory asset during the years X1 to X4:

Figure 7					
Regulatory asset	X1	X2	X3	X4	
Opening	-	250	500	250	
Origination	250	250	-	-	
Regulatory interest income 8%	-	20	40	20	
Recovery	-	(20)	(290)	(270)	
Closing balance	250	500	250	-	

The profit in years X1-X4 (see Figure 6) equals the regulatory returns of CU200 (see target profit line in Figure 5) that the regulatory agreement entitles the entity to charge when supplying goods or services during these years. This regulatory return can be further analysed as shown in Figure 8:

- (a) the regulatory return of 8% on the opening RCB excluding the regulatory asset. In this case, the opening RCB excluding the regulatory asset equals the depreciated IFRS cost of the asset for years X1–X2, reflecting its useful life of two years; and
- (b) the regulatory interest income arising from the regulatory asset, calculated using 8% on the opening balance of the regulatory asset. The regulatory agreement applies the same rate to both the regulatory asset and the larger base (ie the RCB) of which it is part.

Figure 8

Analysis of regulatory return in total allowed compensation	X1	X2	X3	X4	TOTAL
RCB before adding regulatory asset (CU1,000 at the start of X1)	1,000	500	-	-	
Regulatory return on RCB @ 8% before adding regulatory asset	80	40	-	-	120
Regulatory interest income over the life of the regulatory asset	-	20	40	20	80
Regulatory return that forms part of total allowed compensation	80	60	40	20	200

The first component (a) (regulatory return of 8% on the opening RCB excluding the regulatory asset) is included only in X1 and X2 because that balance becomes zero at the end of X2. That balance is also the carrying amount of the asset in accordance with IAS 16.

The second component (b) (regulatory interest income) is compensation for delayed recovery and so is included over the life of the regulatory asset.