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STAFF PAPER

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Project	**Rate-regulated Activities**		
Paper topic	Rate adjustment examples		
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Purpose of the education session

1. The purpose of this education session is to continue developing the underlying basis for a new accounting model (the model) for rate-regulated activities. The model aims to give users of financial statements relevant and understandable information that represents faithfully rights and obligations arising from the rate-adjustment mechanism in a '*defined rate regulation*' regulatory agreement. Those rights and obligations affect the entity's financial position, financial performance and future cash flows.

2. The Board previously decided not to develop an intangible asset model that aims to reflect all the rights and obligations created by a regulatory agreement. Instead, the Board decided to focus on a model that aims to recognise, as assets and liabilities, only the rights and obligations arising from the rate-adjustment mechanism. For convenience, we use the labels 'regulatory assets' and 'regulatory liabilities' for those rights and obligations.[1]

3. We aim to develop a clear description of the principles underpinning the model, the nature of the assets and liabilities that the model aims to recognise, and the overall mechanics of the model before we ask the Board to make decisions. Consequently, we are not asking the Board to make decisions about the model in

[1] In February 2017, the Board tentatively decided that the staff should continue developing the model using the approach described in Agenda Paper 9A *The model's general approach*.

this meeting. Instead, the paper asks the Board whether our analysis is clear and whether it has any questions that could further improve clarity.

Purpose of this paper

4. The purpose of this paper is to demonstrate, using numerical examples, how the rate-adjustment mechanism contained in a regulatory agreement creates rights and obligations that the model seeks to recognise as regulatory assets and regulatory liabilities. Through the examples, we also show how the model could derecognise the regulatory assets and regulatory liabilities as the rights are consumed and the obligations are fulfilled.

5. This paper contains:

   (a) Background (paragraphs 6–7);

   (b) Introduction to the illustrative examples:

      (i) the regulatory agreement (paragraphs 8–12); and

      (ii) the rate-setting mechanism (paragraphs 13–22).

   (c) Adjustments to the regulated rate—illustrative examples:

      (i) Example 1—input price variance (paragraphs 23–30);

      (ii) Example 2—maintenance timing difference (paragraphs 31–40);

      (iii) Example 3—accelerated depreciation (paragraphs 41–47);

      (iv) Example 4—regulatory capitalisation of costs (paragraphs 48–56); and

      (v) Example 5—prefunding of construction (paragraphs 57–66).

   (d) Next Board discussion (paragraph 67); and

   (e) Questions for the Board (paragraph 68).

Background

6. This paper expands the analysis discussed by the Board in May 2017 and responds to clarifying questions raised by Board members in that meeting.[2] A summary of the Board's discussions during its meetings in April and May 2017 is contained in Agenda Paper 9A *Update of the Board's discussions*. That paper also summarises the description of 'defined rate regulation', including the basis of the rate-setting mechanism and rate-adjustment mechanism, which has been developed from evidence gathered during the project.

7. This paper should be read in conjunction with Agenda Paper 9A.

Introduction to the illustrative examples

The regulatory agreement

8. The five examples presented in this paper relate to a fictional water utility company, Entity W. Although the entity and related examples are fictional and contain simplifying assumptions, they are based on examples seen in our research to date.

9. Entity W carries out rate-regulated activities in compliance with a regulatory agreement established by the government of Country X. The regulatory agreement grants Entity W the right to supply clean and waste water services in Country X for an indefinite period. The rate regulator, which is a government body, can only terminate the agreement if Entity W persistently fails to satisfy its obligations under the regulatory agreement. Entity W can only terminate the agreement if the rate regulator persistently fails to approve a regulated rate that is intended to recover Entity W's 'allowable costs' (see paragraph 16(a)).

10. The regulatory environment demonstrates all of the characteristics of defined rate regulation that the Board discussed in its May 2017 meeting. In particular, the regulatory agreement describes the basis on which the rate chargeable to customers each period is calculated (ie the rate-setting mechanism), including the

[2] See Agenda Paper 9 *Developing the basis for the model*, May 2017.

basis on which the rate-adjustment mechanism works. The basis for the rate calculation is sufficiently precise that Entity W is able to identify and measure amounts that relate to different components of the regulated rate for the period.

11. The regulatory agreement requires the entity to keep detailed accounting records to support the amounts included in its annual regulatory report. The record-keeping requirements are designed to facilitate the functioning of the rate-adjustment mechanism and the entity's accounting records are subject to third-party verification.

12. Entity W prepares IFRS financial statements and a regulatory report for each annual period ending 31 December.

The rate-setting mechanism

13. The regulated rate is reviewed and set every three years. In mid-20X0, the rate regulator approves Entity W's budgets and forecasts for the three-year period from 1 January 20X1 to 31 December 20X3. Estimated demand for the period is based on population and other statistical forecasts provided by the government of Country X.

14. The estimated amounts used to calculate the regulated rate for each year ending 31 December are as follows:

Year to 31 December	**20X1 CU000[3]**	**20X2 CU000**	**20X3 CU000**	**Total CU000**
Regulatory report—forecast				
Revenue (= allowable costs plus allowable return))	215	210	205	630
Allowable costs	(215)	(210)	(205)	(630)
Allowable return	**0**	**0**	**0**	**0**

[3] In this Agenda Paper, currency amounts are denominated in 'currency units' (CU).

15. The five examples contained in paragraphs 23–66 assume that each regulated rate adjustment described is within the scope of the model, is material to Entity W and will be included within the future regulated rate. The examples aim to focus on the principles of the model and so contain simplifying assumptions. Those simplifications mean that, for regulatory purposes, the entity makes no profit or loss in any year and the accounting adjustments recognised using the model produce the same result.

16. The following simplifying assumptions apply:

    (a) the regulatory agreement states that Entity W has the right to charge a regulated rate that is intended to recover its 'allowable costs'. The regulatory agreement does not give Entity W the right to earn a return on the carrying value of its approved 'regulatory asset base' (RAB);[4]

    (b) except for differences explicitly stated, amounts recognised during each period as 'allowable costs' for regulatory purposes are the same as expenses recognised in profit or loss using existing IFRS Standards;

    (c) except for differences explicitly stated, the carrying amount (ie cost less accumulated depreciation or amortisation) of the entity's RAB is the same as the carrying amount of tangible and intangible assets using existing IFRS Standards;

    (d) except for variances explicitly stated, there are no variances in the number of customers or quantity and quality of services sold, ie actual amounts arising from transactions during each period are the same as the estimated amounts used to initially calculate the regulated rate (see paragraph 14);

    (e) there are no regulatory assets or liabilities to bring forward as at 1 January 20X1, which is the beginning of the three-year period under review; and

    (f) the time value of money is immaterial.

[4] The RAB is defined in law or by the regulator as the regulatory asset value on which the allowed rate of return can be earned. This may be calculated according to a variety of accounting methods and can include tangible and intangible assets, working capital and construction work in progress.

17. The examples illustrate five types of adjustment:

    (a) Example 1—input price variance (paragraphs 23–30);

    (b) Example 2—maintenance timing difference (paragraphs 31–40);

    (c) Example 3—accelerated depreciation (paragraphs 41–47);

    (d) Example 4—regulatory capitalisation of costs (paragraphs 48–56); and

    (e) Example 5—prefunding of construction (paragraphs 57-66).

18. The following table shows the monetary amounts that are included in the annual regulatory reports that Entity W submits to the rate regulator, together with the amounts that the entity would report in its IFRS financial statements, firstly using existing IFRS Standards and then using the model. The total 'regulated rate adjustment income or expense' recognised in profit or loss each period using the model is then considered by looking at each adjustment separately.

19. In each example, we show the regulated rate adjustment in profit or loss as a separate line item of income or expense, located between the revenue recognised using IFRS 15 *Revenue from Contracts with Customers* (amounts billed) and the operating expenses recognised using existing IFRS Standards. We have not used a sub-total to identify this line item as being an adjustment to revenue or to operating costs. This presentation is one of the topics we are considering as we develop proposals for presentation. We are not asking the Board to decide on presentation in this meeting but are interested in hearing any preliminary views.

Overall results

20. Entity W records the following at 31 December:

Year to 31 December	20X1 CU000	20X2 CU000	20X3 CU000	Total CU000
Regulatory report—actuals[5]				
Revenue (amounts billed)	215	212	205	**632**
Allowable costs	(215)	(212)	(205)	**(632)**
Profit/ (Loss) (as forecast—paragraph 19)	0	0	0	**0**
Existing IFRS Standards				
Revenue (amounts billed)	215	212	205	**632**
Operating expenses	(153)	(304)	(164)	**(621)**
Profit/ (Loss)	62	(92)	41	**11**
Proposed model				
Revenue (amounts billed)	215	212	205	**632**
Regulated rate adjustment: income/ (expense)	**(62)**	**92**	**(41)**	**(11)**
Operating expenses	(153)	(304)	(164)	**(621)**
Profit/ (Loss) (as forecast—paragraph 19)	0	0	0	**0**
Net regulatory (liability)/ asset	(62)	30	(11)	

21. The regulated rate adjustment is made up of the following adjustments:

Year to 31 December	20X1	20X2	20X3	End 20X3 Regulatory (liability)/ asset
	CU000	CU000	CU000	CU000
Example 1—Estimation variance	2	(2)	-	**0**
Example 2—Enhanced maintenance	(50)	100	(50)	**0**
Example 3—Accelerated depreciation	(4)	(4)	8	**0**
Example 4—Overheads capitalised	20	(2)	(2)	**16**
Example 5—Prefunding	(30)	0	3	**(27)**
Regulated rate adjustment: income/ (expense)	**(62)**	**92**	**(41)**	**(11)**

[5] The actual results reported to the rate regulator reflect an increased input cost of CU2,000 (see Example 1). In the regulatory returns, the additional CU2,000 cost incurred in 20X1 is deferred and recognised in 20X2, when cost is recovered through the higher rate billed to customers.

22. The following paragraphs consider each of the five adjustments, showing how each right or obligation arises to create a regulatory asset or regulatory liability, then how each right is consumed or obligation is fulfilled to reduce the carrying amount of the regulatory asset or regulatory liability previously recognised.

Adjustments to the regulated rate—illustrative examples

Example 1—input price variance

23. The regulatory agreement gives Entity W the right to charge a regulated rate intended to recover the actual input cost incurred for chemicals used in treating waste water. Entity W includes any estimation variance arising in the regulated rate for the next year.

24. The estimated input cost for each year 20X1-20X3 is CU30,000. During 20X1, the actual input cost of the chemicals is CU2,000 higher than estimated. This creates an allowable variance of CU2,000, which is included in the rate charged to customers during 20X2. No further input cost variances arise during the three-year period.

Originating right and its reversal

25. The right to charge an extra CU2,000 in 20X2 arises only because the rate-adjustment mechanism specifies that the input cost variance arising in 20X1 is added to the rate charged in 20X2. This creates a right, arising from the regulatory agreement and from the input cost variance, which has the potential to produce economic benefits for Entity W. The economic benefit arises because, as a result of past transactions, the entity has a right to charge a regulated rate that enables Entity W to transfer goods or services to customers during 20X2 on terms that are favourable to the entity: ie at a higher price than it would otherwise have charged in the absence of the rate-adjustment mechanism and of the input cost variance in 20X1.[6]

[6] Paragraph 4.8(a)(iii) of the Exposure Draft *Conceptual Framework for Financial Reporting* (the Conceptual Framework ED) states that an economic resource can take the form of a right to exchange economic resources with another party on favourable terms.

26. Entity W cannot control whether its customers will buy water services in the future. However, the definition of an asset does not require that the right to charge a favourable rate will produce economic benefits in all circumstances. Instead, the definition of an asset merely requires that the entity has the right and, in addition, that any economic benefits arising from that right flow to the entity (either directly or indirectly) rather than to another party. The regulatory agreement grants Entity W the right to supply water services in Country X and to charge the favourable regulated rate for those services. The same rights are not available to all other parties. Consequently, we conclude that this right meets the definition of an asset and should be recognised by Entity W in its IFRS financial statements.[7]

27. During 20X2, Entity W bills customers using the higher regulated rate and recognises another asset—cash or a receivable. Assuming Entity W sells sufficient services during 20X2 to recover the CU2,000 from customers, it will not have the right, at the end of 20X2, to continue to transfer goods or services at a favourable rate. As a result, the entity no longer has a regulatory asset at 31 December 20X2.

Applying the model

28. Without the proposed model, Entity W recognises a 'loss' of CU2,000 in 20X1 but then recognises a 'profit' of CU2,000 in 20X2 when the increased rate is billed to customers.

29. Using the model, the entity will, at 31 December 20X1, recognise a regulatory asset of CU2,000, together with the related regulated rate adjustment income in profit or loss.[8] During 20X2, Entity W includes the CU2,000 in its bills to customers and receives cash or recognises a receivable. Entity W also recognises a related regulated rate adjustment expense in profit or loss for the period to reflect the fact the amount of revenue recognised in 20X2 using IFRS 15 includes CU2,000 that was already recognised as regulated rate adjustment income in 20X1.

[7] In the Board's next meeting, we will consider the effects of uncertainty on the measurement of this right and whether the uncertainty should be considered when developing recognition criteria for the model.
[8] At a future Board meeting, the staff will bring a paper to discuss how any rate adjustment in profit or loss should be described and presented.

30. Entity W records the following at 31 December:

Year to 31 December	20X1 CU000	20X2 CU000	20X3 CU000
Existing IFRS Standards			
Revenue (amounts billed)	30	32	30
Operating expenses	(32)	(30)	(30)
Profit/ (Loss)	(2)	2	0
Proposed model			
Revenue (amounts billed)	30	32	30
Regulated rate adjustment: income/ (expense)	2	(2)	0
Operating expenses	(32)	(30)	(30)
Profit/ (Loss)	0	0	0
Regulatory (liability)/ asset	2	0	0

Example 2— maintenance timing difference

31. For the three-year period 1 January 20X1 through 31 December 20X3, Entity W is required to carry out an agreed programme of enhanced maintenance on the network of pipes supplying water to customers' premises and removing waste water from those premises. The estimated cost of the agreed work is CU150,000.

32. The regulatory agreement states that Entity W can choose when, during the three-year period, to carry out the work. However, the rate regulator decides that the cost will be spread evenly for customers through the regulated rate in each of the three years 20X1-20X3. As a result, Entity W has the right to charge a regulated rate intended to produce cash inflows of CU50,000 each year through the amounts billed to customers for the delivery of water services.

33. During 20X1 and 20X3, Entity W does not carry out any of the agreed maintenance work on the network of pipes. Instead, the entity completes all of the agreed work during 20X2. The work costs CU150,000, as forecast.

Originating obligation and its reversal

34. The regulatory agreement specifies that the CU50,000 included in the regulated rate charged to customers during 20X1 relates to the enhanced maintenance work that Entity W is obliged to carry out on its pipe network. As a result, at 31 December 20X1, the entity has a present obligation to transfer economic benefits as a result of past events because:

    (a) it has already received economic benefits (the CU50,000 billed to customers during 20X1); and

    (b) it has no practical ability to avoid transferring economic benefits that it would not otherwise have had to transfer had it not received that benefit. The benefits to be transferred are the regulated goods or services that will be priced using the unfavourable regulated rate.

35. Some may argue that an obligation to carry out maintenance work does not create a present obligation because the entity will receive a benefit in exchange for incurring the cost of the maintenance work. We consider this to be a valid observation. However, we suggest that the obligation the model identifies is not the obligation to incur the maintenance costs. Instead, the obligation is to charge a regulated rate that results in the entity transferring goods or services to customers during 20X2 on terms that are unfavourable to the entity, ie at a lower price than it would otherwise have charged in the absence of the rate-adjustment mechanism and the CU50,000 already received in 20X1. Consequently, we conclude that this obligation meets the definition of a liability and should be recognised by Entity W in its IFRS financial statements.[9]

36. During 20X2, Entity W carries out the whole of the agreed maintenance work at a cost of CU150,000. Consequently, the obligation that arose during 20X1 has now been fulfilled because, at 31 December 20X2, the entity is no longer obliged to transfer goods or services to customers on unfavourable terms. Instead, Entity W has a right, arising from the regulatory agreement and the costs incurred during 20X2, and that right has the potential to produce economic benefits for Entity W.

[9] Paragraph 4.28(c) of the Conceptual Framework ED states that an obligation to transfer an economic resource can take the form of an obligation to exchange economic resources with another party on unfavourable terms.

The economic benefit arises because, as a result of completing the maintenance work, the entity has a right to charge a regulated rate that will enable it to transfer goods or services to customers during 20X3 on terms that are favourable to the entity, ie at a higher price than it would otherwise have charged in the absence of the rate-adjustment mechanism and of the additional CU50,000 costs incurred during 20X2 that have not already been recovered through the regulated rate in 20X1-20X2.

37. As discussed in example 1 (paragraphs 25-26), we conclude that the right to charge the additional amount (CU50,000 in this example) meets the definition of an asset and should be recognised by Entity W in its IFRS financial statements.

Applying the model

38. Without the proposed model, Entity W recognises a profit of CU50,000 for each of the years 20X1 and 20X3 when it bills those amounts to customers but incurs none of the agreed maintenance costs during those years. Entity W recognises a loss of CU100,000 in 20X2, when it incurs the maintenance costs of CU150,000 but bills to customers only the 20X2 instalment of CU50,000.

39. Using the model, Entity W will recognise a regulatory liability of CU50,000 at 31 December 20X1, together with a related regulated rate adjustment expense in profit or loss. During 20X2, it recognises the costs incurred of CU150,000 together with related regulated rate adjustment income of CU100,000 in profit or loss. This rate adjustment income reflects the fulfilment of the CU50,000 liability recognised at 31 December 20X1, and the origination of the CU50,000 regulatory asset as at 31 December 20X2. During 20X3, Entity W bills customers CU50,000, which is included within the revenue recognised using IFRS 15. That billing to customers consumes the right that was recognised as a regulatory asset as at 31 December 20X2. Consequently, during 20X3 a regulated rate adjustment expense of CU50,000 is recognised in profit or loss to reflect the consumption of the regulatory asset.

40. Entity W records the following at 31 December:

Year to 31 December	20X1 CU000	20X2 CU000	20X3 CU000
Existing IFRS Standards			
Revenue (amounts billed)	50	50	50
Operating expenses	0	(150)	0
Profit/ (Loss)	50	(100)	50
Proposed model			
Revenue (amounts billed)	50	50	50
Regulated rate adjustment: income/ (expense)	(50)	100	(50)
Operating expenses	0	(150)	0
Profit/ (Loss)	0	0	0
Regulatory (liability)/ asset	(50)	50	0

Example 3—accelerated depreciation

41. At the end of 20X0, Entity W purchased new software to upgrade its customer billing system. The cost of the software was CU24,000 and its useful economic life is three years, starting from 20X1. The rate regulator approved the cost of CU24,000 but decided that Entity W is entitled to recover the cost through the regulated rate over two years (20X1 and 20X2), instead of three years. Consequently, the regulated rate in 20X1 and 20X2 includes CU12,000 per year, but the regulated rate in 20X3 does not include any amount to reflect the use of the asset in delivering services to customers during that year.

Originating obligation and its reversal

42. Entity W uses the software in its interactions with customers over the software's three-year economic life. However, instead of recovering the cost from customers in equal instalments of CU8,000 over three years, Entity W receives accelerated benefits from customers because it bills CU12,000 in each of the two years 20X1-20X2. As a result, the entity is obliged to transfer goods or services to customers during 20X3 on terms that are unfavourable to the entity: ie at a lower price than it would otherwise have charged in the absence of the rate-adjustment mechanism and of the amounts already received in 20X1-20X2.

43. Consequently, we conclude that, at the end of 20X1 and 20X2, Entity W has a present obligation to transfer economic benefits as a result of past events, ie liability, because:

    (a) it has already received economic benefits (the extra CU4,000 billed to customers in each year 20X1-20X2); and

    (b) it has no practical ability to avoid transferring economic benefits in 20X3 that it would not otherwise have had to transfer had it not received that benefit. The benefits to be transferred are the regulated goods or services that will be priced using the unfavourable regulated rate.

44. During 20X3, Entity W fulfils its obligation to provide goods or services at the reduced (unfavourable) rate.

Applying the model

45. Entity W recognises a depreciation expense of CU8,000 in profit or loss in each of the three years 20X1-20X3, reflecting the consumption of the software over its useful economic life. Without the proposed model, Entity W recognises a 'profit' of CU4,000 in each of 20X1 and 20X2 when it bills customers CU12,000 per year. Entity W then recognises a 'loss' of CU8,000 in 20X3 when the reduced rate is billed to customers but the asset continues to be consumed and a depreciation expense of CU8,000 is recognised in profit or loss.

46. Using the model, Entity W recognises a CU4,000 regulated rate adjustment expense in profit or loss for each year 20X1 and 20X2. This results in a regulatory liability of CU4,000 at 31 December 20X1, which increases to CU8,000 at the end of 20X2. During 20X3, Entity W recognises regulated rate adjustment income in profit or loss to reflect the fulfilment of its obligation to transfer services to customers on unfavourable terms. Entity W also derecognises the regulatory liability.

47. Entity W records the following at 31 December:

Year to 31 December	20X1 CU000	20X2 CU000	20X3 CU000
Existing IFRS Standards			
Revenue (amounts billed)	12	12	0
Operating expenses	(8)	(8)	(8)
Profit/ (Loss)	4	4	(8)
Proposed model			
Revenue (amounts billed)	12	12	0
Regulated rate adjustment: income/ (expense)	(4)	(4)	8
Operating expenses	(8)	(8)	(8)
Profit/ (Loss)	0	0	0
Regulatory (liability)/ asset	(4)	(8)	0

Example 4—regulatory capitalisation of costs

48. During 20X1, Entity W built an extension to one of its water treatment plants. The rate regulator approved the cost of CU170,000, which included CU20,000 of overheads that do not qualify for inclusion in the carrying amount recognised using IAS 16 *Property, Plant and Equipment*. The regulatory agreement specifies that Entity W adds the full cost of CU170,000 to its RAB in 20X1. The CU170,000 added to the RAB will be included in the regulated rate on a straight-line basis over the ten-year useful economic life of the plant, beginning in 20X2. Entity W depreciates the plant on the same basis in its IFRS financial statements.

Originating right and its reversal

49. The regulatory agreement creates a right for Entity W to charge a regulated rate intended to recover its allowable costs (see paragraph 16(a)). In the absence of the rate-adjustment mechanism, Entity W would have recognised the overhead costs of CU20,000 as an allowable cost during 20X1 and would have been entitled to charge a regulated rate intended to recover that cost through the regulated rate without delay. However, the rate regulator decided that customers should not face a ‘rate spike’ in 20X1. Instead, the rate regulator decided to provide greater stability of prices for customers by adding the overhead cost of CU20,000 to the

RAB. This spreads, for customers, the CU20,000 cost evenly over a ten-year period.

50. Consequently, at the end of 20X1, Entity W has a right, arising from the regulatory agreement and the costs incurred, which has the potential to produce economic benefits for the entity. The economic benefit arises because, as a result of past transactions, Entity W has a right to charge a regulated rate intended to enable the entity to transfer goods or services to customers from 20X2 onwards on terms that are favourable to the entity, ie at a higher price than it would otherwise have charged in the absence of the rate-adjustment mechanism and of the costs incurred in 20X1.

51. As discussed in example 1 (paragraphs 25–26) and example 2 (paragraph 37), we conclude that the right to charge the additional amount (CU20,000 in this example) meets the definition of an asset and should be recognised by Entity W in its IFRS financial statements.

52. In each year from 20X2 onwards, a part of the entity's right to charge a favourable rate is consumed as it bills customers using the higher rate. In exchange, Entity W obtains another asset—cash or a receivable.

Applying the model

53. Without the proposed model, Entity W would record a 'loss' of CU20,000 in 20X1. This reflects the overhead costs that are expensed through profit or loss because IAS 16 does not permit them to be included in the initial costs of an item of plant. When the plant comes into use in 20X2, Entity W starts to depreciate it using IAS 16. At the same time, Entity W starts to charge its customers for the goods or services provided by using the plant. The regulated rate charged by Entity W in 20X2 onwards includes an amount intended to enable the entity to recover both its depreciation cost and the allowable overhead cost. Consequently, the regulated rate chargeable in 20X2 onwards is CU2,000 per year higher than it would have been if the rate regulator had allowed the entity to treat the CU20,000 as an allowable cost when incurred and recovered it through the rate in 20X1. Consequently, without the model, Entity W will record a 'profit' of CU2,000 in each year from 20X2 onwards, reflecting the delayed recovery of the CU20,000 allowable costs incurred and recognised in profit or loss in 20X1.

54. Using the model in 20X1, Entity W recognises a regulatory asset of CU20,000 and records a corresponding regulated rate adjustment income in profit or loss. Consequently, Entity W recognises no profit or loss in 20X1 during the construction of the plant because the regulatory agreement gives the entity the right to charge a regulated rate intended to enable Entity W to fully recover the approved cost of CU170,000.

55. During 20X2 onwards, Entity W recognises a regulated rate adjustment expense in profit or loss to reflect the consumption of its right to charge the higher, favourable rate until the CU20,000 of allowable costs are recovered. In this example, Entity W recognises a decrease in its regulatory asset, together with a related regulated rate adjustment expense in profit or loss, of CU2,000 per year for ten years. This reflects the pattern in which the entity recovers its allowable overhead cost from customers through the regulated rate.

56. Entity W records the following at 31 December:

Year to 31 December	**20X1**	**20X2**	**20X3**
	CU000	**CU000**	**CU000**
Existing IFRS Standards			
Revenue (amounts billed)	0	2	2
Operating expenses	(20)	(0)	(0)
Profit/ (Loss)	(20)	2	2
Proposed model			
Revenue (amounts billed)	0	2	2
Regulated rate adjustment: income/ (expense)	20	(2)	(2)
Operating expenses	(20)	(0)	(0)
Profit/ (Loss)	0	0	0
Regulatory (liability)/ asset	20	18	16

Example 5—prefunding of construction

57. During 20X0, the rate regulator approved a plan for Entity W to upgrade sections of its pipe network. The upgrade work is scheduled to be carried out in 20X2 at a cost of CU90,000. To help the entity's cash flow, the rate regulator approves a rate increase that will provide Entity W with CU30,000 cash in 20X1 through amounts billed to customers prior to construction.

58. Entity W carries out the upgrade work in 20X2 and incurs costs of CU90,000, as forecast. The entity considers the amount of CU90,000 in the cost of the pipes using IAS 16 but includes only CU60,000 in the RAB. The RAB amount is reduced to reflect the fact that CU30,000 of the total CU90,000 upgrade cost was collected from customers in 20X1. The upgraded network comes into use at the start of 20X3. The regulated rate chargeable from 20X3 onwards includes an amount of CU6,000 per year, which will be billed each year over the ten-year useful life of the upgraded pipes. This entitles Entity W to charge a regulated rate intended to recover CU60,000 (CU6,000 over ten years) of the upgrade costs incurred from customers in 20X3 onwards.

Originating obligation and its reversal

59. The regulatory agreement specifies that the CU30,000 included in the regulated rate charged to customers during 20X1 relates to the upgrade work, which has not been carried out by the end of 20X1. As a result, at 31 December 20X1, the entity has a present obligation to transfer economic benefits as a result of past events because:

    (a) it has already received economic benefits (the CU30,000 billed to customers during 20X1); and

    (b) it has no practical ability to avoid transferring economic benefits that it would not otherwise have had to transfer had it not received that benefit. The benefits to be transferred are the regulated goods or services that will be priced using the unfavourable regulated rate.

60. Some may argue that an obligation to carry out the upgrade work does not create a present obligation because the entity will receive a benefit in exchange for incurring the cost of the upgrade work, ie it will exchange an asset, cash, for another asset, property. We consider this to be a valid observation. However, consistent with the discussion in paragraph 35 we suggest that the obligation created is not an obligation to incur the upgrade costs. Instead, the obligation is to charge a regulated rate that results in the entity transferring goods or services to customers from 20X3 onwards on terms that are unfavourable to the entity, ie at a lower price than it would otherwise have charged in the absence of the rate-adjustment mechanism and of the CU30,000 already received in 20X1.

Consequently, we conclude that this obligation meets the definition of a liability and should be recognised by Entity W in its IFRS financial statements.

61. The upgrade work is completed during 20X2 but the upgraded network pipes do not come into use until the start of 20X3. Some may argue that Entity W should recognise the CU30,000 in profit or loss during 20X2, when the entity carries out the required upgrade work. However, the upgrade work enhances and increases the carrying amount of the entity's own assets: it does not transfer goods or services to customers or any other party. Consequently, by carrying out the upgrade work, Entity W does not fulfil its obligation to charge a regulated rate that results in the entity transferring goods or services to customers on terms that are unfavourable to the entity. Instead, that obligation is fulfilled as the entity transfers goods or services at the unfavourable regulated rate applicable from 20X3 onwards.

Applying the model

62. Without the proposed model, Entity W recognises a 'profit' of CU30,000 in 20X1 to reflect the amount billed to customers through the regulated rate. During 20X2, Entity W exchanges a cash asset for another asset, the upgraded network pipes. From 20X3 onwards, Entity W will show an annual 'loss' of CU3,000 because the rate will include only CU6,000 per year (see paragraph 58) but the depreciation charged in profit or loss using IAS 16 will be CU9,000 per year (being the CU90,000 upgrade cost, depreciated on a straight-line basis over ten years).

63. Using the model, at 31 December 20X1, Entity W will recognise a regulatory liability of CU30,000, together with a regulated rate adjustment expense of the same amount in profit or loss. This reflects the fact that the entity has billed customers that amount but has not carried out any of the upgrade work that the amount is designed to fund, nor has it fulfilled its obligation to transfer goods or services using the unfavourable regulated rate.

64. During 20X2, Entity W completes the upgrade work. Entity W does not recognise any amounts in profit or loss relating to that work. Instead, the entity recognises a CU90,000 increase in property, plant and equipment (an asset), and a related decrease in cash of CU90,000, being the cost of the upgrade work.

65. During 20X3, Entity W starts to use the upgraded pipes to transfer goods or services to its customers. From 20X3, Entity W recognises annual regulated rate adjustment income in profit or loss to reflect the fulfilment of its obligation to charge the lower, unfavourable rate when transferring goods or services to customers. In this example, Entity W recognises the regulated rate adjustment income and related decrease in the regulatory liability on the same basis as the depreciation charged for the consumption of those pipes. Consequently, using the model, the entity reduces the regulatory liability by CU3,000 per year over ten years. This means that the prefunding of CU30,000 received from customers in 20X1 is recognised in profit or loss on the same basis as, and over the same periods in which, the entity recognises as expenses the related costs for which the prefunding is intended to compensate.

66. Entity W records the following at 31 December:

Year to 31 December	**20X1 CU000**	**20X2 CU000**	**20X3 CU000**
Existing IFRS Standards			
Revenue (amounts billed)	30	0	6
Operating expenses	(0)	(0)	(9)
Profit/ (Loss)	30	0	(3)
Proposed model			
Revenue (amounts billed)	30	0	6
Regulated rate adjustment: income/ (expense)	(30)	0	3
Operating expenses	(0)	(0)	(9)
Profit/ (Loss)	0	0	0
Regulatory (liability)/ asset	(30)	(30)	(27)

Next Board Discussion

67. In the next meeting we plan to discuss implications of removing some of the simplifying adjustments used in the examples in this paper. In particular, we aim to introduce matters involving uncertainty and introduce concepts around the basis of measurement. We also aim to discuss whether uncertainty should be reflected through a recognition hurdle or through measurement.

Questions for the Board

68. We do not ask the Board to make decisions about the model at this meeting. Instead, we are seeking views on the clarity of the analysis in this paper to help us identify areas on which to focus to make progress in developing the model.

Questions for the Board

1. For each example presented, do you agree with our conclusions about:
   - the timing and amount of the originating regulated rate adjustments recognised?
   - the pattern and timing of the reversal of the regulated rate adjustments recognised?
2. Do you have any preliminary views or suggestions about how the regulated rate adjustment could be presented in profit or loss (paragraph 19)?