
Consultative Group for Rate Regulation

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Contacts **Nhlanhla Mungwe (nmungwe@ifrs.org)**
Mariela Isern (misern@ifrs.org)

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Purpose of the paper

- This purpose of this paper is to gather input from the members of the IASB Consultative Group for Rate Regulation (Consultative Group) on the feedback received on the proposed treatment of inflation in the Exposure Draft *Regulatory Assets and Regulatory Liabilities* (Exposure Draft). In particular, the feedback relates to the proposals for the accounting for inflation when a regulatory agreement adjusts the regulatory capital base for inflation.

Structure of the paper

- The paper is divided into the following sections:
 - proposed requirements;
 - feedback received;
 - regulatory approaches used to compensate inflation; and
 - questions for the Consultative Group.

Proposed requirements

- Paragraph B13 of the Exposure Draft says that the regulatory capital base might measure property, plant and equipment on a basis including an inflation adjustment not reflected in an entity's financial statements prepared by applying IFRS Standards.

Proposed requirements—*continued*

- Illustrative example 7C.2 accompanying the Exposure Draft illustrates that if a regulatory agreement adjusted the regulatory capital base in the current period for inflation, giving an entity the right to add an inflation adjustment in the regulated rates to be charged to customers in future periods, that right would not meet the definition of a regulatory asset. This is because, according to the Exposure Draft, it is not a right to recover total allowed compensation for goods or services already supplied to customers.
- The Exposure Draft sees the inflation adjustment to the regulatory capital base as a form of target profit provided by the regulatory agreement. Applying the requirement in paragraph B10 of the Exposure Draft, target profit that a regulatory agreement entitles an entity to add in a regulated rate for goods or services supplied in a period forms part of the total allowed compensation for goods or services supplied in the same period. In Illustrative example 7C.2 the inflation adjustment will be included in the regulated rate only in future periods.
- The footnote to Illustrative example 7C.2 states that two broadly equivalent regulatory approaches are typically used to compensate entities for inflation:
 - some regulatory agreements apply a nominal return that includes inflation to the regulatory capital base.
 - other regulatory agreements adjust the regulatory capital base for inflation and apply to it a real return rate excluding inflation.
- The Exposure Draft says that neither approach results in a regulatory asset.

Feedback received

- A few respondents—mainly a few standard-setters in Asia-Oceania and Europe, a few accounting firms and a few preparers—said it was unclear how the proposals deal with inflation adjustments reflected in either the regulatory returns or the regulatory capital base. Some of these respondents said the Standard should make clearer that the inflation adjustment to the regulatory capital base that an entity is entitled to recover through increased rates in the future should be considered a regulatory asset.

Regulatory approaches used to compensate inflation

- As previously mentioned, two regulatory approaches are typically used to compensate entities for inflation on the regulatory capital base (RCB):
 - **Nominal RCB x Nominal return rate (nominal approach)**—the nominal regulatory capital base is multiplied by a return rate that includes inflation. A regulatory capital base that stays constant in nominal terms effectively loses its underlying value by inflation each year and the nominal return rate aims to compensate for that loss.
 - **Real RCB x Real return rate (real approach)**—the regulatory capital base is adjusted by inflation so that it holds its value over time. The regulatory capital base is multiplied by a real return rate because inflation is already compensated for through the inflation-adjusted regulatory capital base.

Regulatory approaches used to compensate inflation—*continued*

- To illustrate the two regulatory approaches, assume the following example. The regulatory capital base consists of a single asset with a value of CU100.¹ The asset’s expected useful life is 10 years. The nominal return rate is 7.11%, the real return rate is 4.5% and the expected inflation is 2.5%. The nominal and real return rates are applied to the unrecovered balance of the regulatory capital base at the beginning of the year. Both the nominal and real rates remain constant during the period of 10 years.
- Table 1 shows the entity’s future revenues, both on an undiscounted and discounted basis, when a **nominal rate** of return is applied to a **nominal regulatory capital base (RCB)**.

Table 1 Nominal approach												
Nominal return		7.11%										
<i>In CU</i>		1	2	3	4	5	6	7	8	9	10	Total
Opening RCB		100	90	80	70	60	50	40	30	20	10	
Depreciation (A)		10	10	10	10	10	10	10	10	10	10	100
Closing RCB		90	80	70	60	50	40	30	20	10	0	
Nominal return (B)		7.11	6.40	5.69	4.98	4.27	3.56	2.85	2.13	1.42	0.71	39.12
Revenue (A) + (B)		17.11	16.40	15.69	14.98	14.27	13.56	12.85	12.13	11.42	10.71	139.12
<i>Discount factor (7.11%)</i>		0.93	0.87	0.81	0.76	0.71	0.66	0.62	0.58	0.54	0.50	
Present value	100.00	15.98	14.30	12.77	11.38	10.12	8.98	7.94	7.00	6.15	5.39	

- Table 2 shows an entity’s future revenues, both on an undiscounted and discounted basis, when a **real rate** of return is applied to an **inflation adjusted regulatory capital base**.

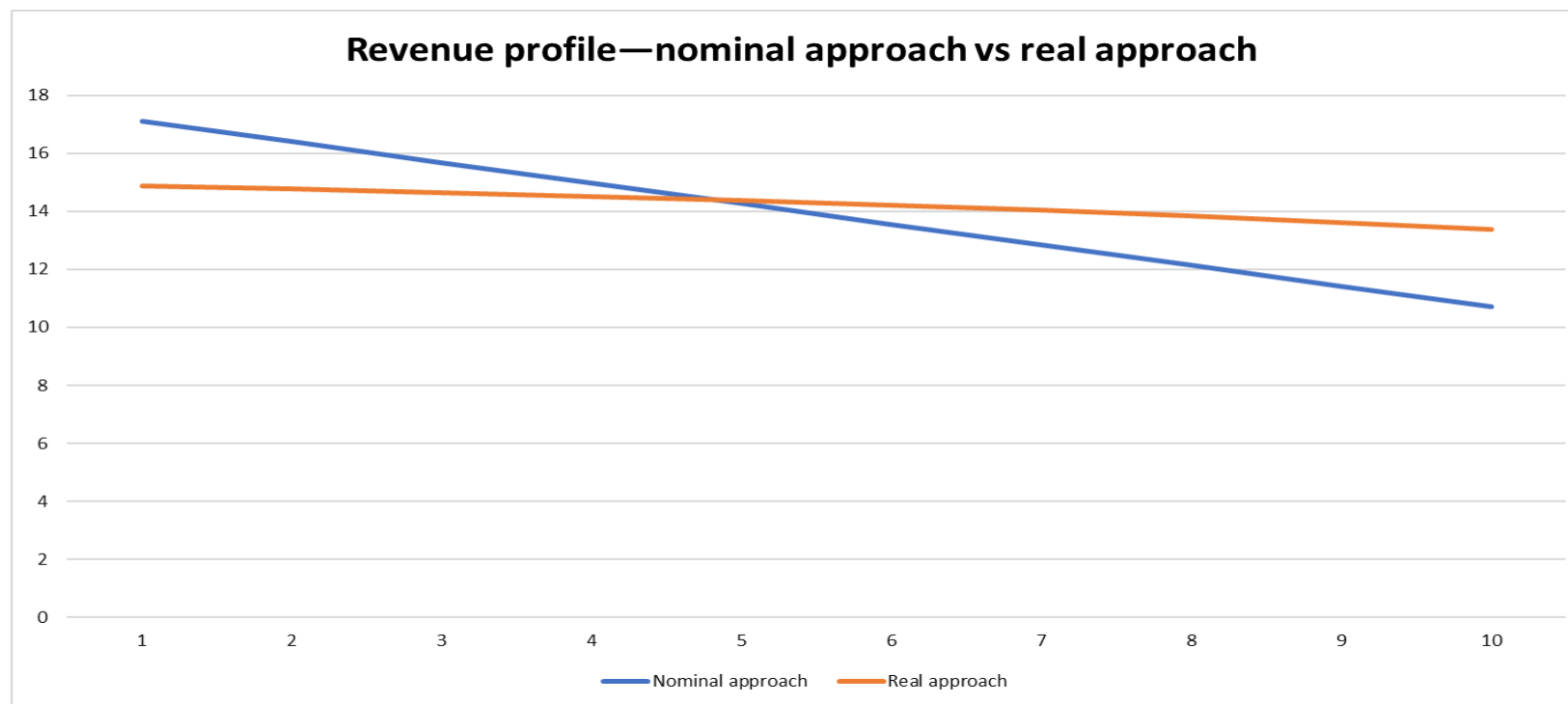
Table 2 Real approach												
Inflation		2.50%										
Real return		4.50%										
<i>In CU</i>		1	2	3	4	5	6	7	8	9	10	Total
Opening RCB		100.00	92.25	84.05	75.38	66.23	56.57	46.39	35.66	24.37	12.49	
Inflation adjustment (Table 3)		2.50	2.31	2.10	1.88	1.66	1.41	1.16	0.89	0.61	0.31	14.83
Depreciation (A)		10.25	10.51	10.77	11.04	11.31	11.60	11.89	12.18	12.49	12.80	114.83
Closing RCB		92.25	84.05	75.38	66.23	56.57	46.39	35.66	24.37	12.49	0.00	
Real return (B)		4.61	4.26	3.88	3.48	3.05	2.61	2.14	1.64	1.12	0.58	27.37
Revenue (A) + (B) (Table 4)		14.86	14.76	14.65	14.52	14.37	14.21	14.03	13.83	13.61	13.38	142.20
<i>Discount factor (7.11%)</i>		0.93	0.87	0.81	0.76	0.71	0.66	0.62	0.58	0.54	0.50	
Present value	100.00	13.88	12.87	11.92	11.03	10.19	9.41	8.67	7.98	7.33	6.73	

- Both regulatory approaches are **equivalent in present value terms**.

(1): Monetary amounts are denominated in ‘currency units’ (CU).

Regulatory approaches used to compensate inflation—*continued*

- Although both regulatory approaches are equivalent in present value terms, over the life of the asset the two approaches can result in very different revenue profiles.
- The graph illustrates the revenue profiles for the nominal approach and the real approach.



- In the nominal approach, revenues are higher in the earlier part of an asset's life and lower later in the asset's life. This approach brings the cash flows forward, which may be better aligned with an entity's debt servicing requirements. This means the rates consumers pay are higher in the earlier part of an asset's life. In the real approach, the revenues are more stable throughout the life of the asset.
- When considering which approach to use, the regulators consider different factors. For example, regulators would consider whether the priority is to improve an entity's ability to finance the investments (if so, the nominal approach may be preferable) or to maintain more stable rates for customers over time (if so, the real approach may be preferable).

Regulatory approaches used to compensate inflation —continued

- A few respondents argued that the inflation adjustment to the regulatory capital base would give rise to a regulatory asset.
- Table 3 considers the example in page 4 and assumes the inflation adjustment to the regulatory capital base gives rise to a regulatory asset. Table 3 shows the reconciliation of such a regulatory asset from Year 1 to Year 10.

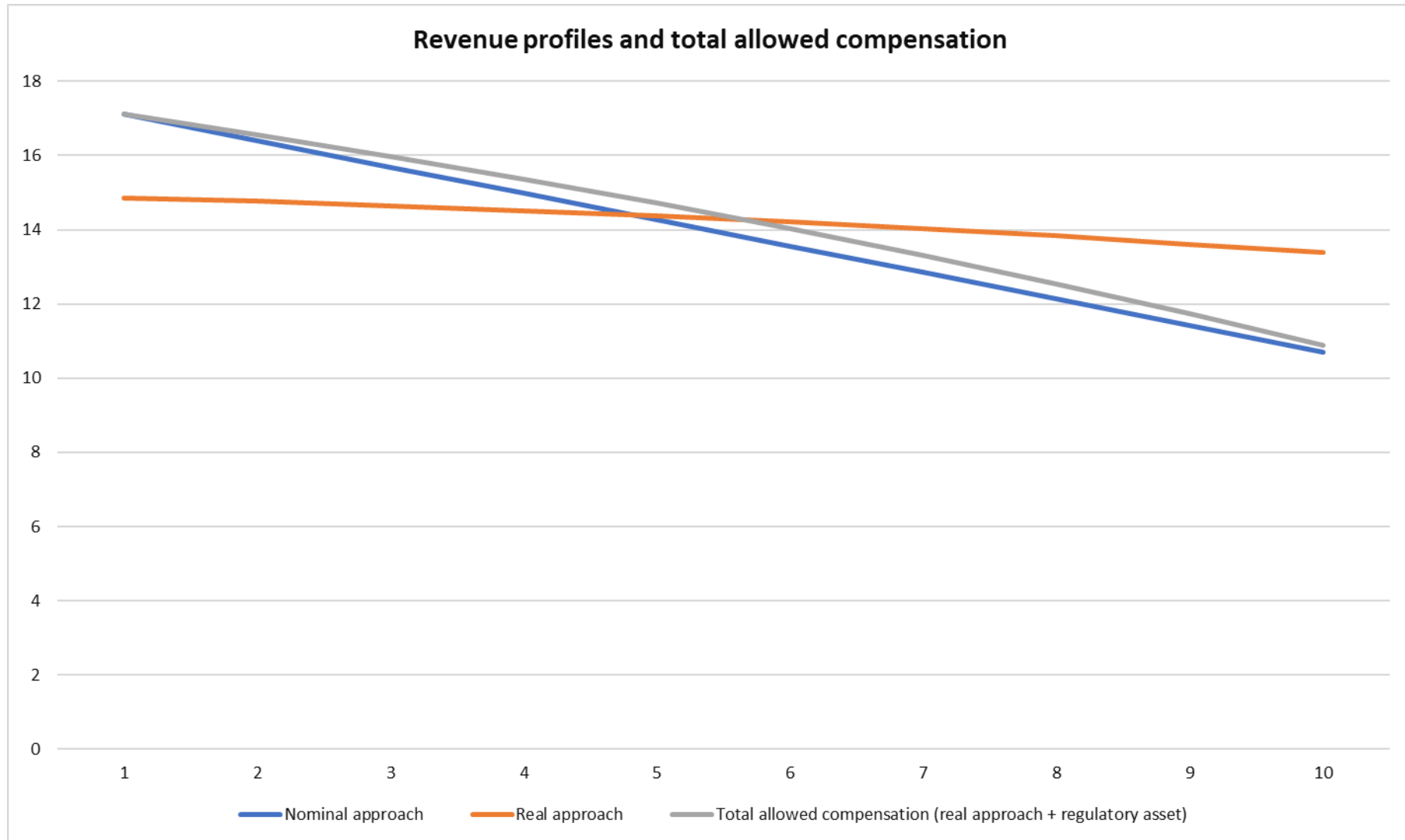
<i>In CU</i>	1	2	3	4	5	6	7	8	9	10	Total
Opening balance	0.00	2.25	4.05	5.38	6.23	6.57	6.39	5.66	4.37	2.49	
Addition (Table 2)	2.50	2.31	2.10	1.88	1.66	1.41	1.16	0.89	0.61	0.31	14.83
Regulatory interest income	0.11	0.21	0.28	0.33	0.35	0.36	0.34	0.29	0.22	0.13	2.62
Recovery	-0.36	-0.71	-1.05	-1.37	-1.67	-1.96	-2.23	-2.48	-2.71	-2.93	-17.45
Closing balance	2.25	4.05	5.38	6.23	6.57	6.39	5.66	4.37	2.49	0.00	

- Table 4 shows the total allowed compensation (TAC) for the goods or services supplied in each of the years the asset is being operated.

<i>In CU</i>	1	2	3	4	5	6	7	8	9	10	Total
Revenue (real approach) (Table 2)	14.86	14.76	14.65	14.52	14.37	14.21	14.03	13.83	13.61	13.38	142.20
Reg income / (Reg expense)	2.25	1.80	1.33	0.85	0.34	-0.18	-0.73	-1.29	-1.88	-2.49	0.00
TAC	17.11	16.56	15.98	15.36	14.71	14.02	13.30	12.54	11.73	10.89	142.20

Regulatory approaches used to compensate inflation—*continued*

- The graph below illustrates the revenue profile using the nominal approach (blue line), the real approach (orange line) and the total allowed compensation profile using the real approach combined with the accounting for the regulatory asset (grey line).



Questions for the Consultative Group:

1. Would you agree with feedback received from some respondents that an inflation-adjusted regulatory capital base would give rise to a regulatory asset? Why or why not?
2. If the final Standard would require entities to account for such an inflation related regulatory asset, would you anticipate any operational challenges?
3. Would such an inflation related regulatory asset provide useful information to users of financial statements?

References

- Australian Energy Regulator, *Why do we index the regulatory asset base?*. Available at: <https://www.aer.gov.au/system/files/Fact%20sheet%20-%20Indexation%20of%20the%20regulatory%20asset%20base.pdf>
- Economic Consulting Associates, *A regulatory puzzle: Inflation, RAB and WACC*, October 2021. Available at: <https://www.eca-uk.com/2021/10/12/a-regulatory-puzzle-inflation-rab-and-wacc/>