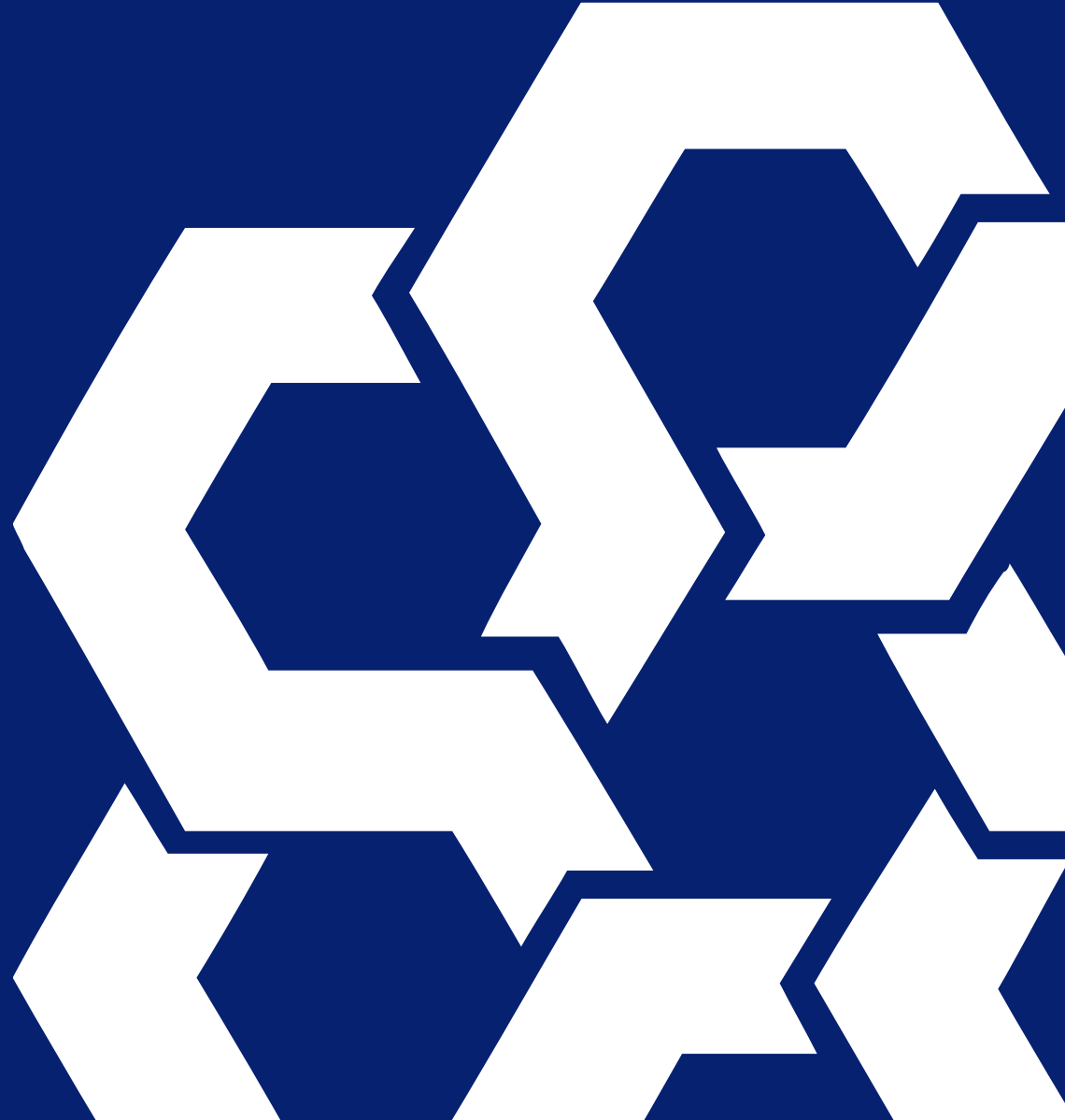

Features of different regulatory schemes

Overview

- Purpose of the paper
- The Exposure Draft
- Rate-setting process and types of regulatory schemes
- How well do the proposals fit with the different schemes?
- Users' needs
- References

Purpose



Purpose

- Many respondents to the Exposure Draft *Regulatory Assets and Regulatory Liabilities* said the proposed guidance on total allowed compensation does not fit well with incentive-based regulatory schemes.
- This paper provides information about the main features of different regulatory schemes and the staff's preliminary assessment of how well the proposals fit with different schemes.

The Exposure Draft

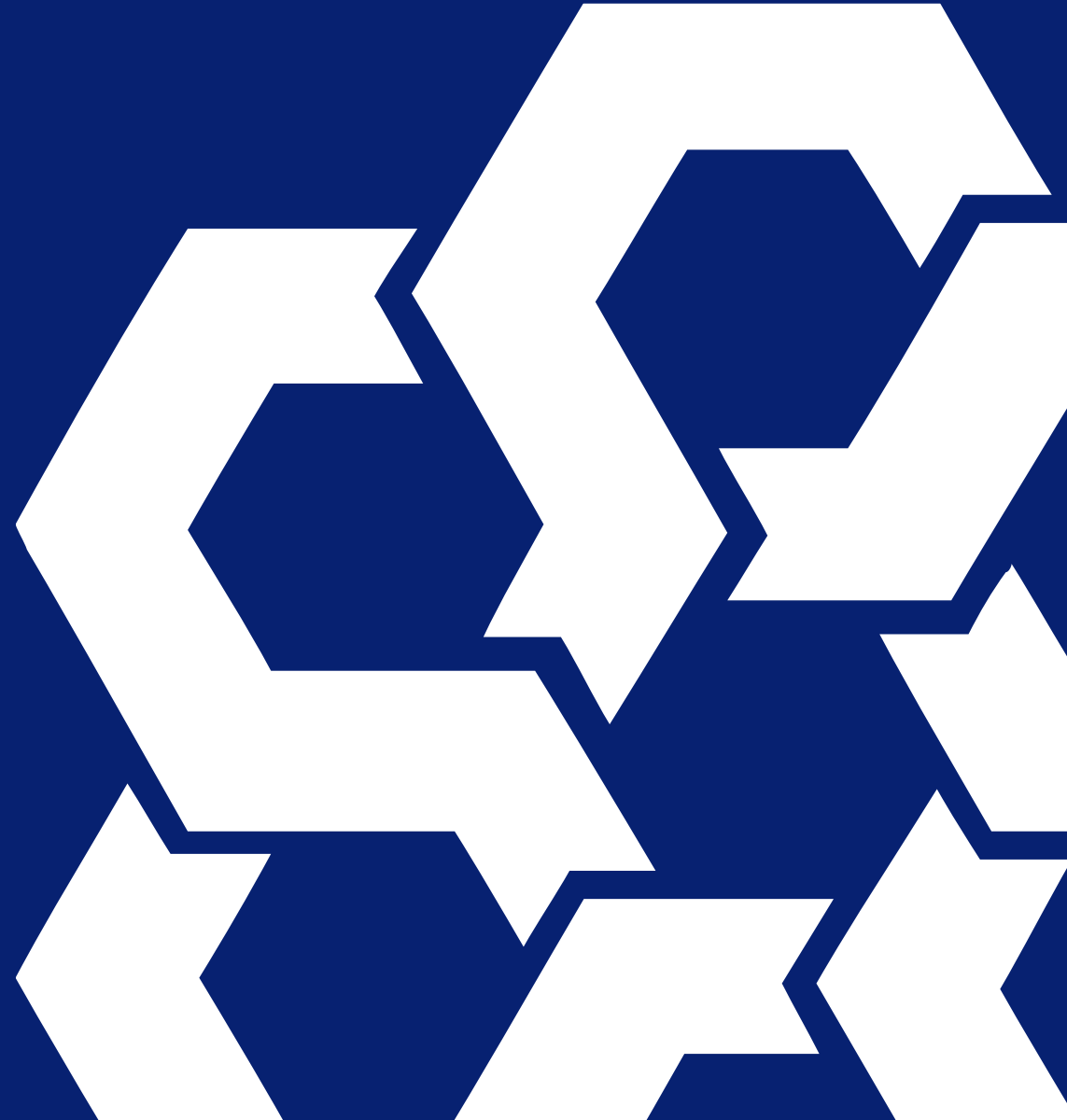


The Exposure Draft

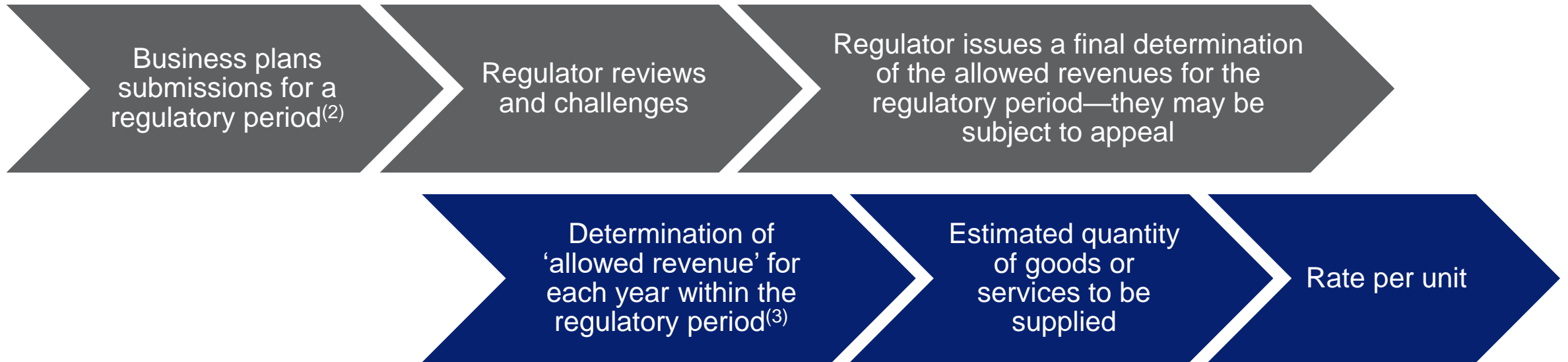
- Focused on the conditions that are necessary for a regulatory asset or a regulatory liability to exist. A few respondents said that focus was an efficient approach to ensure different regulatory schemes are included without needing to identify and define them.
- A regulatory asset or regulatory liability arises when part or all of total allowed compensation for goods or services supplied in a period is included in determining the regulated rates charged to customers in a different period.
- Many respondents—mainly preparers in Europe and Asia-Oceania—raised concerns about whether the guidance on total allowed compensation would fit well with incentive-based regulatory schemes.
- The guidance in paragraphs B6–B8 and some of the illustrative examples accompanying the Exposure Draft—for example, compensation for depreciation expense—were of particular concern for respondents subject to incentive-based schemes.⁽¹⁾ See slides 18–23 and 25–28.

(1): In particular, Illustrative Examples 2B and 2C accompanying the Exposure Draft.

Rate-setting process and types of regulatory schemes



Rate-setting process



• Allowed revenue: amount of revenue that an entity is entitled to earn during a period of typically 12 months based on an estimated quantity of goods or services to be supplied in that period.



(2): The length of the regulatory periods (or price control periods) vary across industries and jurisdictions (typically between one and five years, although some are longer).

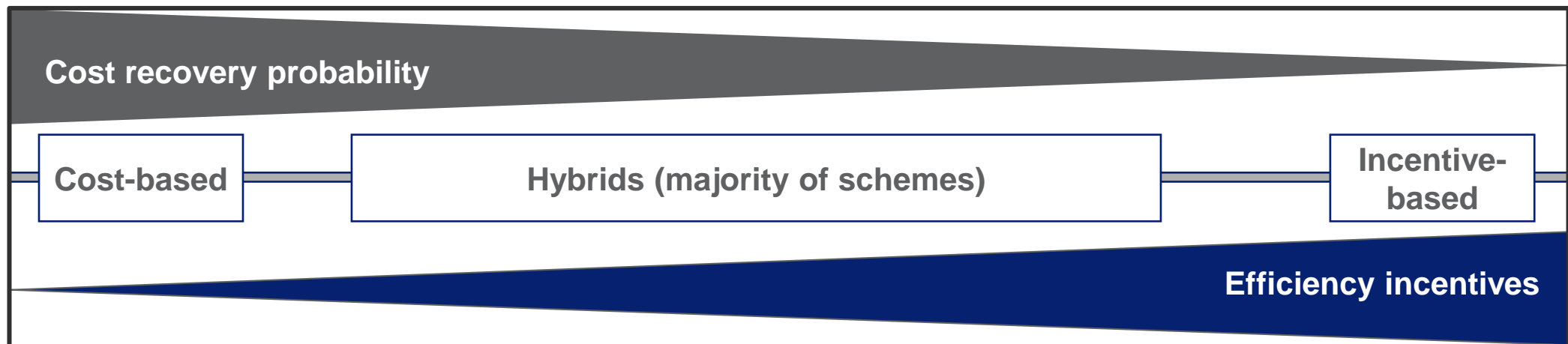
(3): Other possible terms are 'revenue requirement' or 'authorised revenue'.

Differences in timing

- The **main challenge** of this project is to determine a **set of principles** that would require the recognition of regulatory assets and regulatory liabilities arising from a wide variety of regulatory schemes.
- To do so, we **focus on differences in timing**. This is because the existence of differences in timing is the **feature that is common** to the variety of regulatory schemes that will be in the scope of the final Standard.
- In July 2022, the IASB tentatively decided that the application guidance in the final Standard focus on:
 - helping entities to identify differences in timing; and
 - the most common differences in timing that could arise from various types of regulatory schemes.

Types of regulatory schemes

- Throughout this project, stakeholders have highlighted two general types of regulatory schemes:
 - cost-based (commonly known as ‘cost-of-service’ or ‘return-on-base rate’)—slides 11–12; and
 - incentive-based (including revenue-cap or price-cap regulation)—slides 13–23.
- In cost-based schemes there is a high probability that the entity will recover its costs. In incentive-based schemes, the entity is incentivised to operate efficiently and as a result there is a risk that it may not recover its costs. Most regulatory schemes are a hybrid of both cost-based and incentive-based schemes.



Cost-based

- Theory—Regulator allows the entity to recover its expenses and earn a ‘fair’ return on the investment. The approach is good for limiting the risks borne by the entities but provides no incentives for cost reduction.
- The ‘allowed revenue’ is closely linked to operating expenditure and depreciation included in the financial statements, although only prudently incurred capital expenditure can be recovered and earn a return.
- True-up mechanisms ensure that actual costs are recovered. Consequently, in cost-based schemes, allowed revenues are based on costs recognised applying applicable accounting standards.
- In some cost-based schemes, allowed revenue is based on estimated costs. True-up mechanisms are used to adjust the allowed revenue for differences between estimated costs and actual costs.
- The depreciation of the regulatory capital base (RCB)⁽⁴⁾ and the returns on the RCB are important components of entities’ allowed revenues. Slide 12 describes the relationship between the RCB and an entity’s assets. Understanding this relationship will be relevant for assessing how the proposals fit with different regulatory schemes (slides 25–28).

(4): Other terms commonly used are ‘regulatory asset base’ (RAB), ‘regulatory asset value’ (RAV) and ‘regulatory capital value’ (RCV).

Cost-based—Regulatory capital base (RCB) and an entity's assets

- Regulatory accounting and reporting requirements are aligned as much as possible to accounting standards. This means that the following are generally aligned with any differences separately tracked:
 - componentisation of assets recorded;
 - measurement basis;
 - capitalisation policies; and
 - depreciation rates.
- Regulatory rules generally require regulatory information to be reconciled to audited financial statements (reconciliation may be at a high-level only).
- The rate setting aims to create direct links between an entity's expenses with its revenue requirements and rates charged to customers.

Incentive-based

- Theory—Regulator sets *ex ante* a fixed rate for the service to be provided by the entity, who is then incentivised to optimise its processes since it will increase profits by reducing costs. Typically incentive-based regulation creates greater incentives for cost reduction and exposes entities to more risk than cost-based schemes.
- The calculation of the regulated rate tends to be more focused on targeted outputs (that is, quantity/quality of the services) rather than on a set of inputs (that is, output regulation rather than input regulation).
- Within incentive-based, we highlight a couple of approaches:
 - building-block approach (slide 14); and
 - total expenditure (totex) approach (slides 15–16).

Incentive-based—building-block approach

- This approach uses a ‘building-block’ methodology to determine ‘allowed revenue’. Each of the individual building blocks are separately assessed and determined *ex ante* based on forecasts.
- Main building blocks to determine the ‘allowed revenue’ are:
 - depreciation of the regulatory capital base (RCB)—the RCB may include construction-work-in-progress;
 - returns on the RCB;
 - operating expenditures;
 - incentives (bonuses or penalties); and
 - other items (for example, tax) or adjustments.
- Differences between forecasts and actual amounts may give rise to ‘true-ups’ in regulated rates charged in the future. However, these ‘true-ups’ are expected to be less than those typically seen in cost-based regulation.

Incentive-based—totex approach

- The regulator determines ‘allowed revenue’ by considering estimates of total expenditures (totex: opex and capex), adjusting them for efficiency and productivity targets. Under the building-block approach the regulator carries out the efficiency assessment for opex and for capex separately.
- A percentage of totex is capitalised in the RCB (slow money), with the non-capitalised part of totex being recovered in the year in which it is allowed (fast money).
- The split between slow money and fast money is informed by the ratio of capex/totex and opex/totex and other considerations (for example, companies’ business plans). As a result, this approach dilutes the link between the RCB and the actual assets of the entity.

Incentive-based—totex approach—*continued*

- The ‘allowed revenue’ would include:
 - depreciation of RCB;
 - returns on RCB;
 - fast money;
 - performance incentives—included on a forecast basis;
 - pass-through costs (for example, licence fees); and
 - other items or adjustments.

Incentive-based—building-block and totex

- In both approaches (building-block and totex) regulators use techniques such as efficiency audits, efficiency factors, benchmark techniques etc to assess the opex/capex submitted by the entities for efficiency. The ultimate goal is that the determination of ‘allowed revenue’ amount includes opex/capex that have passed the efficiency test.
- When using benchmarking techniques, each entity can increase its profit if it is more efficient than the benchmarked level. This technique increases the risk for entities because their revenue is disconnected from their actual costs.
- Many incentive-based schemes include true-ups and other mechanisms that seek to:
 - share efficiency gains, determined by comparing actual costs with expected/budgeted costs. This regulatory mechanism seeks to combine properties of cost-based with properties of incentive-based.
 - pass demand risk to customers by adjusting for differences between forecasted and actual consumption volumes in future rates.
 - enable an entity to recover non-controllable costs by adjusting for differences between forecasted and actual non-controllable costs in future rates.

Incentive-based—Regulatory capital base (RCB) and an entity's assets

- In incentive-based schemes, the relationship between the RCB and an entity's assets is less direct than in cost-based schemes. However, the Exposure Draft assumed there is always a close relationship between the RCB and an entity's assets. Consequently, some of the proposals in the Exposure Draft have raised concerns amongst stakeholders subject to incentive-based schemes. In particular, the proposals for accounting for regulatory assets and regulatory liabilities arising from differences between the recovery pace of the RCB and the assets' useful lives.
- Understanding the relationship between RCB and entities' assets is important for assessing how the proposals fit with different regulatory schemes (slides 25–28). Slides 19–23 analyse the following aspects of this relationship:
 - componentisation, including differences between building-block and totex approach (slides 19–21);
 - measurement (slide 22); and
 - depreciation pace (slides 22–23).

Incentive-based—Regulatory capital base (RCB) and an entity's assets—*continued*

Componentisation

- The RCB may include opex and capex and other items such as working capital movements or performance incentives.

Building-block approach—the RCB may be split into asset classes that are different from those used for accounting purposes. Generally the RCB is not maintained at an asset level as the RCB is not tracked at individual assets but rather it captures amounts spent on maintaining and upgrading the network as a whole. RCB and entities' assets may differ due to the following:

- initial value of the RCB—in some cases, entities subject to incentive-based schemes went through a privatisation process. When these entities were privatised the initial values of their RCB was established based on average market values, which represented in some cases a discount to the entities' fixed asset values.

Incentive-based—Regulatory capital base (RCB) and an entity's assets—*continued*

Componentisation (continued)

- regulators may assess capex efficiency and decide to exclude capex from the RCB.
- the RCB may include items that would not qualify for capitalisation under IAS 16 *Property, Plant and Equipment*.
- costs capitalised for accounting purposes may not have been included in the RCB (for example, contributed assets).
- different starting date for depreciation. For example, regulatory capex may be depreciated as spent, not when placed in service.
- different treatment of disposals. Disposals may be deducted from RCB using the sales proceeds, not based on the assets' net book values written down.

Incentive-based—Regulatory capital base (RCB) and an entity's assets—*continued*

Componentisation (continued)

Totex—the RCB (slow money) is a percentage of totex.

- The percentage of totex allocated to slow money may not exactly equate to the capex/totex ratio. In many cases, the regulators decide to provide entities more fast money than that represented by the opex/totex ratio. In addition, regulators may change the percentage of totex that is included in the RCB for different reasons (for example, an entity's financing needs).
- Under the totex approach, there is no direct or meaningful linkage between the RCB and an entity's fixed assets.

Incentive-based—Regulatory capital base (RCB) and an entity's assets—*continued*

Measurement

- In some cases, the RCB may be measured using historical cost, however, in some other cases the RCB is adjusted for inflation. For revenue determinations, regulators generally forecast inflation. Differences between forecasted and actual inflation rates used are typically adjusted for in future rates.
- It would be complex to isolate the inflation adjustment on an individual asset basis.

Depreciation

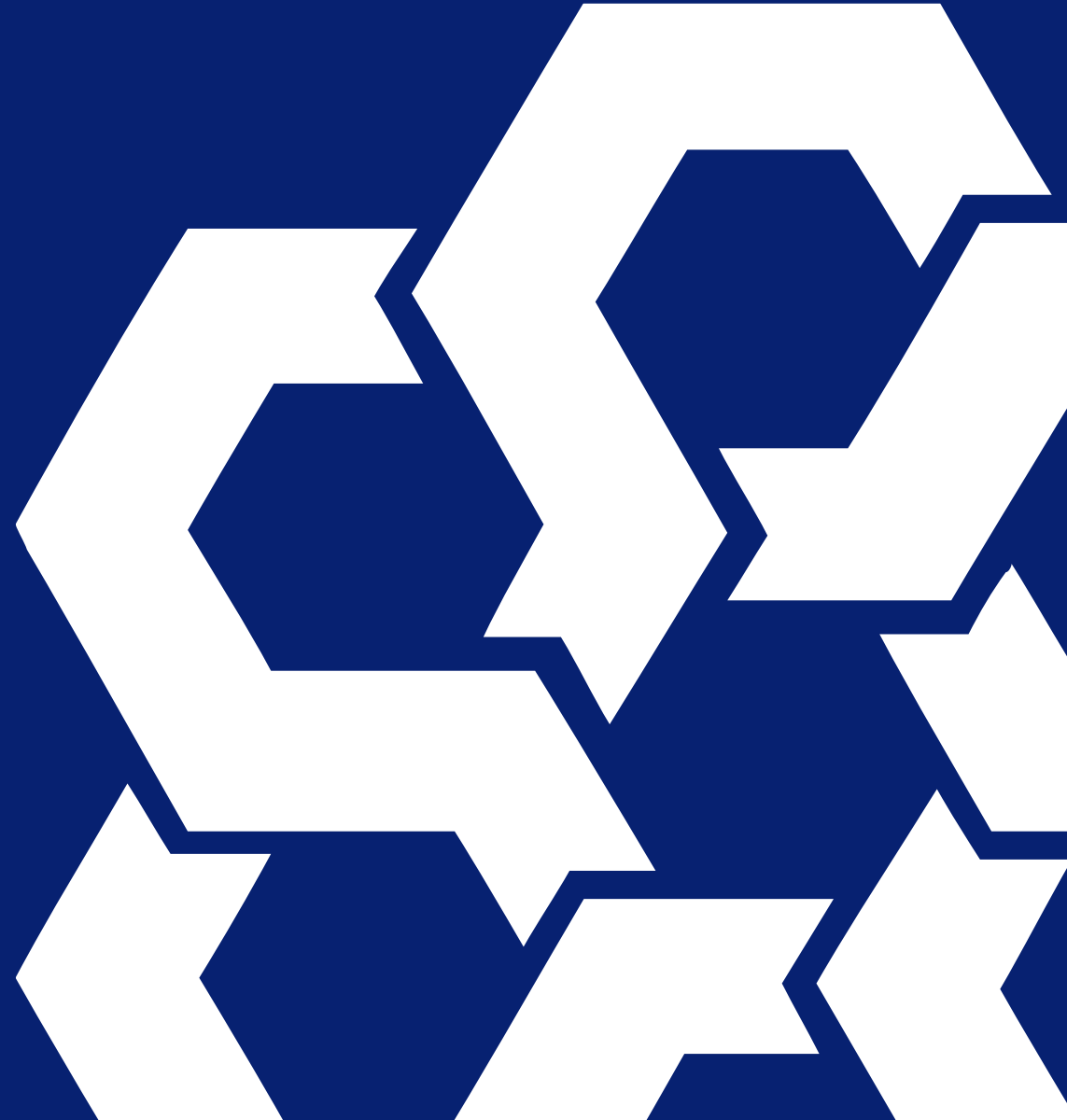
- As a starting point, regulators may consider the economic lives of the primary network assets when determining the regulatory depreciation periods. For example, when the RCB is split in asset classes, each class may have its own depreciation profile based on the average of the economic lives of the assets included in that class. As a result, the regulatory recovery pace is a blended rate, which can differ from the accounting useful lives.

Incentive-based—Regulatory capital base (RCB) and an entity's assets—*continued*

Depreciation (continued)

- However, when determining the regulatory recovery pace of the RCB or the recovery pace of the asset classes within the RCB, regulators may also consider a variety of factors such as:
 - the financing of the entity—regulators would consider both an entity's financing needs and the financing available to the entity, for example, via bonds with specific durations;
 - uncertainty about the future role of some industries (for example, gas) or technological changes (for example, the introduction of smart meters) may trigger an accelerated regulatory depreciation of the assets; and
 - intergenerational equity considerations.
- Changes in the factors above may cause changes in the basis on which the regulatory depreciation of the RCB (or of the asset classes within the RCB) is determined from one regulatory period to another regulatory period.

How well do the proposals
fit with the different
schemes?



How well do the proposals fit with the different schemes?

Proposals	Cost-based schemes	Incentive-based schemes	The IASB's tentative decisions
<p>1. The Exposure Draft proposes that total allowed compensation comprises:</p> <ul style="list-style-type: none"> • amounts that recover allowable expenses minus chargeable income; • target profit; and • regulatory interest income and regulatory interest expense. 	<p>This articulation of total allowed compensation works well with cost-based schemes as the regulated rate is determined to allow entities to recover their expenses and obtain a return on the investment.</p> <p>✓</p>	<p>In incentive-based schemes, the recoverability of costs plays a less important role than in cost-based schemes. Consequently, any direct link between regulatory compensation and allowable expenses may be limited to some pass-through costs. 🔍</p>	<p>[July 2022] The application guidance should focus on:</p> <ul style="list-style-type: none"> • helping entities to identify differences in timing instead of specifying the components of total allowed compensation; and • the most common differences in timing that could arise from various types of regulatory schemes.

(✓): The proposals fit fairly well with cost-based schemes.

(🔍): The redeliberations may need to consider how the final Standard can fit better with incentive-based schemes.

How well do the proposals fit with the different schemes?

Proposals	Cost-based schemes	Incentive-based schemes	The IASB's tentative decisions
2. Allowable expense is defined as 'an expense, as defined in IFRS Standards, that a regulatory agreement entitles an entity to recover by adding an amount in determining a regulated rate.'	'Allowed revenue' is closely linked to operating expenditure and depreciation included in the financial statements. There is a mapping between the regulatory compensation and the related costs. ✓	The components of allowed revenue may not always have a direct link with accounting expenses (see slides 27–28) or allowed costs for regulatory purposes may be measured using a different basis than that used for accounting purposes. ⚠	[October 2022] The final Standard should clarify that a regulatory agreement may determine the amount that compensates an entity for an allowable expense using a basis different from the basis the entity uses to measure the expense in accordance with IFRS Accounting Standards.

(✓): The proposals fit fairly well with cost-based schemes.

(⚠): The redeliberations may need to consider how the final Standard can fit better with incentive-based schemes.

How well do the proposals fit with the different schemes?

Proposals	Cost-based schemes	Incentive-based schemes	The IASB's tentative decisions
<p>3. The Illustrative Examples assume the following simplifications:⁽⁵⁾</p> <ul style="list-style-type: none"> • there is a one-to-one relationship between regulatory compensation and accounting expense (for example, regulatory depreciation can be traced back to accounting depreciation); 	<p>These assumptions work fairly well with cost-based schemes because there is a close relationship between the RCB and an entity's assets in terms of:</p> <ul style="list-style-type: none"> • componentisation of assets recorded; • measurement basis; • capitalisation policies; and • depreciation rates. 	<p>The components of the allowed revenue may not always have a direct link with accounting expenses. In incentive-based schemes the rate is not designed to provide compensation for depreciation expense as the RCB and entities' fixed assets are not comparable (slides 19–23).</p>	<p>[October 2022] The final Standard should:</p> <ul style="list-style-type: none"> • provide guidance to help an entity determine whether its RCB and its property, plant and equipment have a direct relationship; • retain the proposals for an entity to account for regulatory assets or regulatory liabilities

(5): [Illustrative Examples 2B and 2C](#) accompanying the Exposure Draft illustrate the case when the regulatory recovery period of the regulatory capital base (RCB) is longer or shorter than an asset's useful life. A regulatory asset would arise when the recovery period of the RCB is longer than an asset's useful life. A regulatory liability would arise when the recovery period of the RCB is shorter than an asset's useful life.

How well do the proposals fit with the different schemes?

Proposals	Cost-based schemes	Incentive-based schemes	The IASB's tentative decisions
<ul style="list-style-type: none"> the RCB consists of a single asset, which implies the RCB can be reconciled to an entity's fixed asset register; and the measurement basis of the RCB is the same as that used to measure property, plant and equipment in accordance with IAS 16 <i>Property, Plant and Equipment</i> (that is, cost). 	<p>This close alignment allows the RCB to be reconciled to an entity's assets.</p> <p>The proposals in the Exposure Draft for accounting for regulatory assets or regulatory liabilities arising when the recovery period of the RCB is different from the assets' useful lives could be operationalised by entities subject to these schemes. ✓</p>	<p>Stakeholders have said that the proposals in the Exposure Draft for accounting for regulatory assets or regulatory liabilities arising when the recovery period of the RCB is different from the assets' useful lives would be operationally complex, costly and would not result in useful information. 🔍</p>	<p>arising from differences between the regulatory recovery period and the assets' useful lives if the entity has concluded that its RCB and its property, plant and equipment have a direct relationship; and</p> <ul style="list-style-type: none"> require the entity to provide disclosures to enable users of financial statements to understand the reasons for its conclusion.

(✓): The proposals fit fairly well with cost-based schemes.

(🔍): The redeliberations may need to consider how the final Standard can fit better with incentive-based schemes.

Users' needs



Users' needs

- We have gathered feedback from users both during and after the comment period of the Exposure Draft.⁽⁶⁾ These users said their analyses mostly focused on the expected growth of the RCB and entities' ability to generate cash flows and meet covenants.
- Some of these users said that they give very little attention to the statement of financial performance and that their main source of information is the regulatory reports. Having said that, all users we spoke to welcomed a model that would require entities to account for regulatory assets or regulatory liabilities arising from:
 - performance incentives;
 - quantity variances; and
 - mechanisms for sharing efficiency gains.

This would enhance the information users currently have on these items and would also reduce the need to provide non-IFRS reconciliations between the regulated revenues earned and the statement of financial performance.

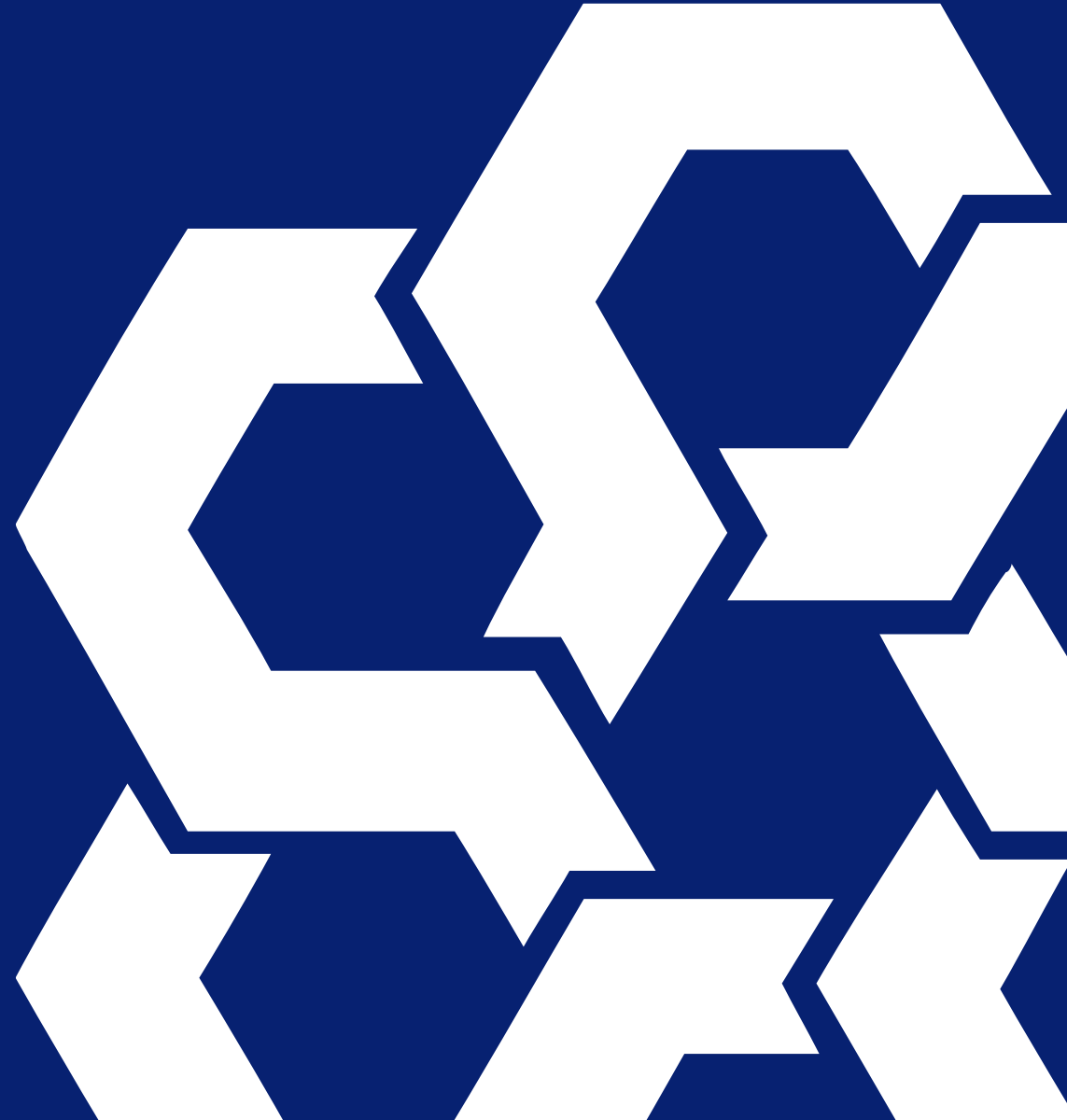
(6): Users we spoke to during the comment period were mainly equity or credit analysts covering the power, utilities and infrastructure sectors in Asia-Oceania, Europe and North America. Users we spoke to after the comment period were mainly rating agencies and buy-side investors in Asia-Oceania and Europe.

Users' needs

- All users we spoke to said that accounting for regulatory assets and regulatory liabilities that do not represent actual adjustments to future rates such as those arising from differences between the regulatory recovery pace and the assets' useful lives would:
 - make the understanding of financial performance more difficult;
 - not result in useful information. Users would not consider these regulatory assets and regulatory liabilities in their analyses⁽⁷⁾; and
 - affect entities' earnings before interest, tax, depreciation and amortisation (EBITDA), which is a measure considered in many covenants. This may cause entities to renegotiate covenants with their creditors.

(7): This is consistent with the messages given by members of the Consultative Group for Rate Regulation that are users of financial statements (see [Agenda Paper 9B](#) discussed at May 2022 IASB meeting).

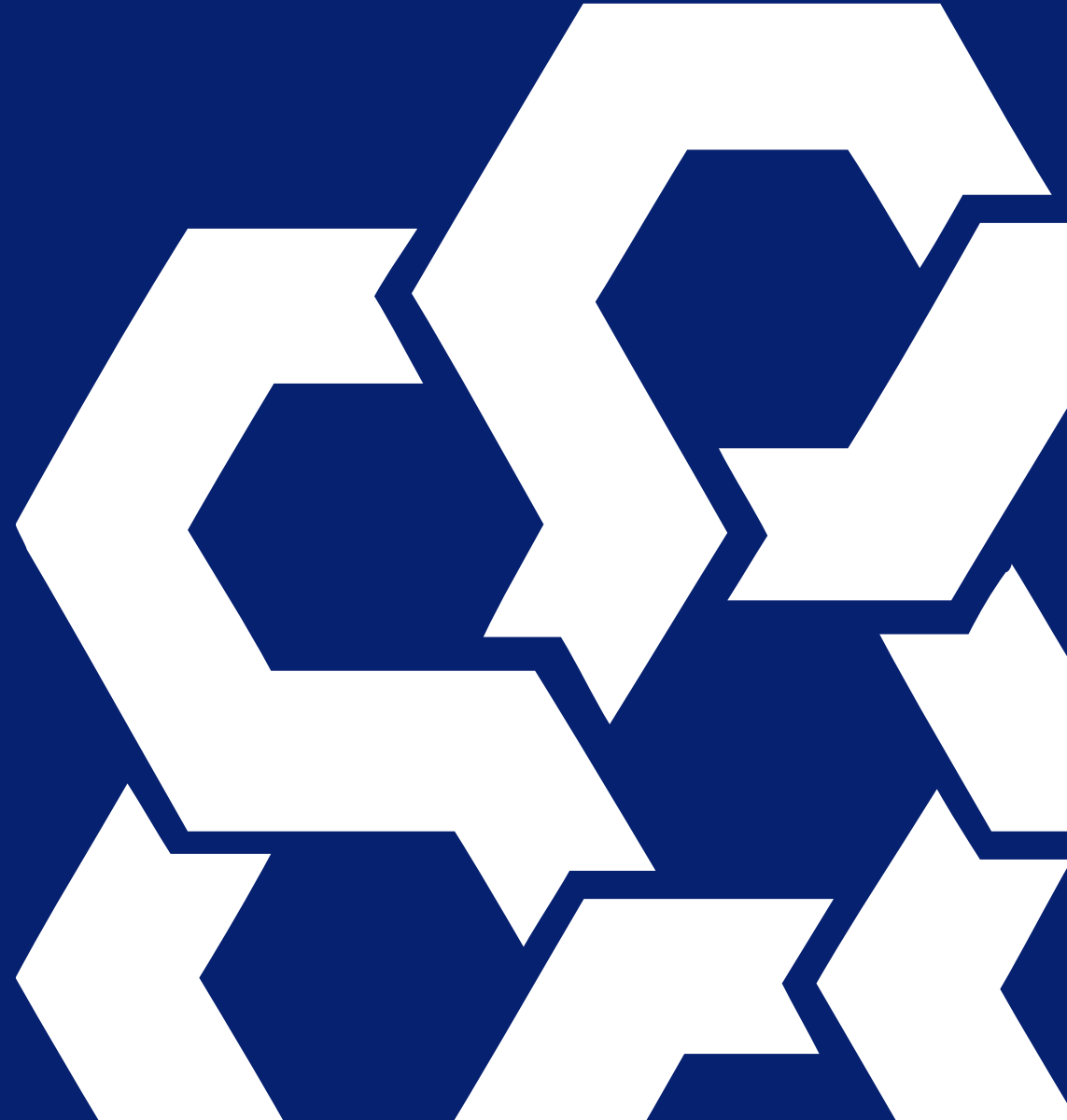
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Thank you



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