

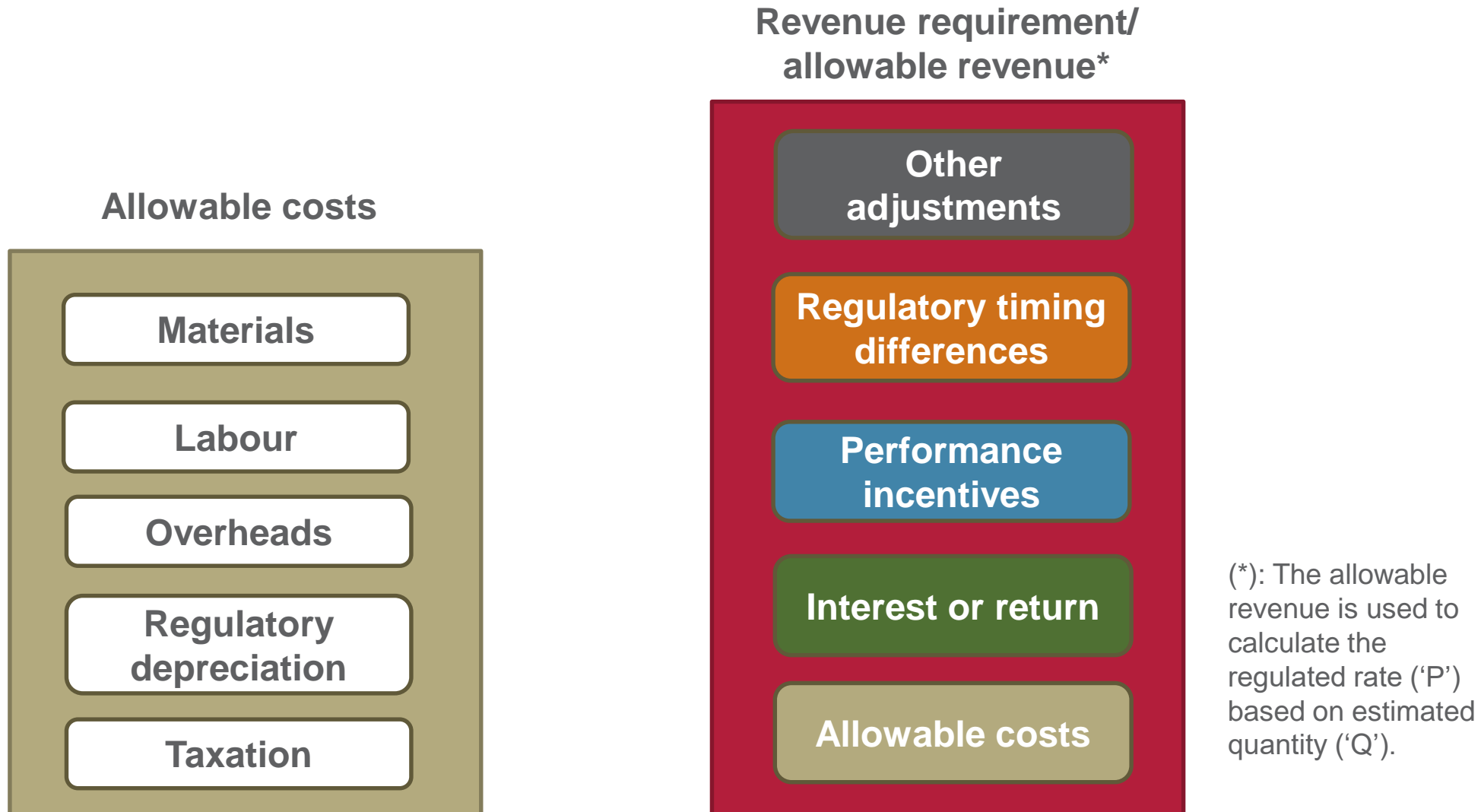
Rate-regulated Activities Measurement

EEG meeting
March 2019

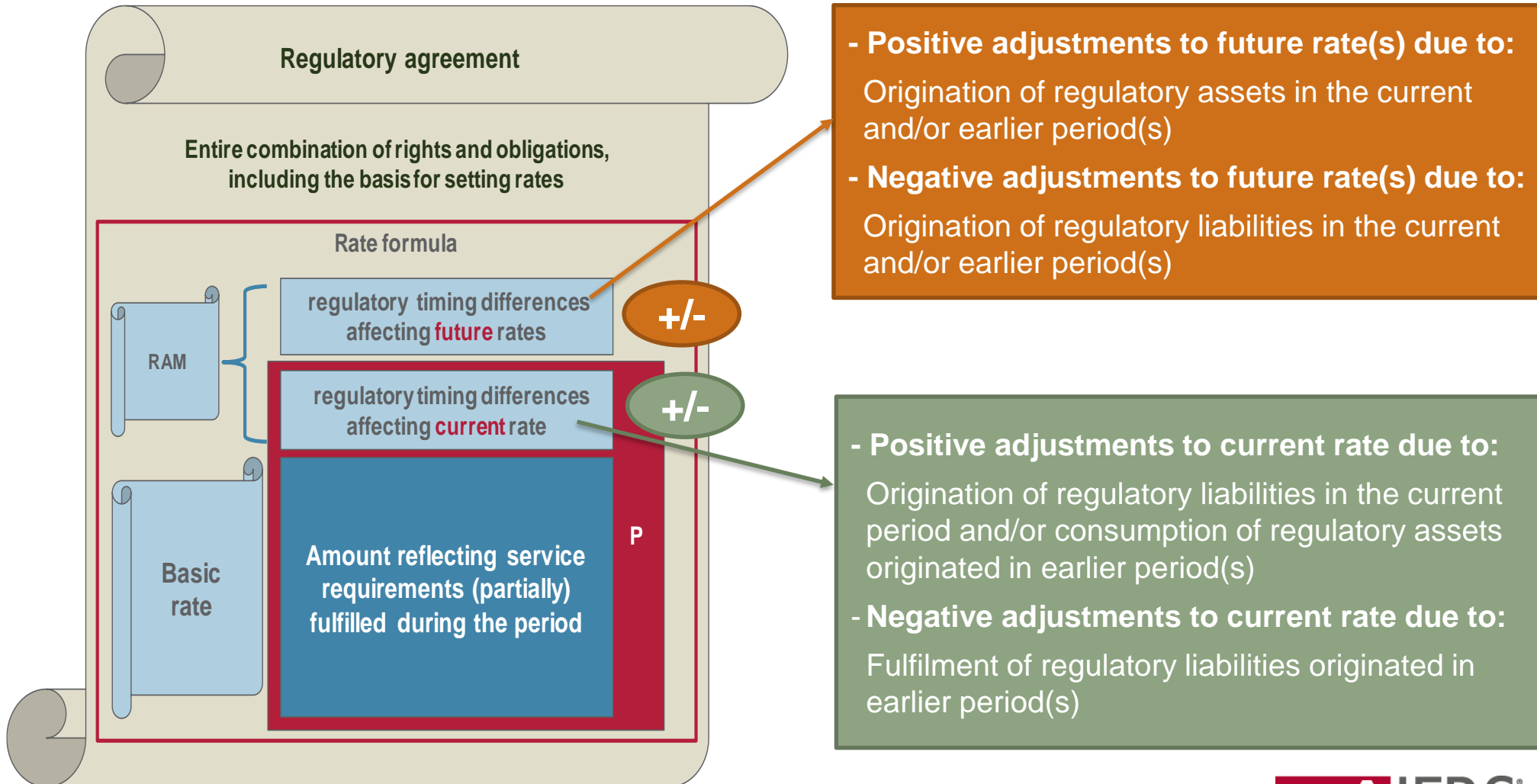
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Background

General practice—common features of the regulatory approach for setting the regulated rate



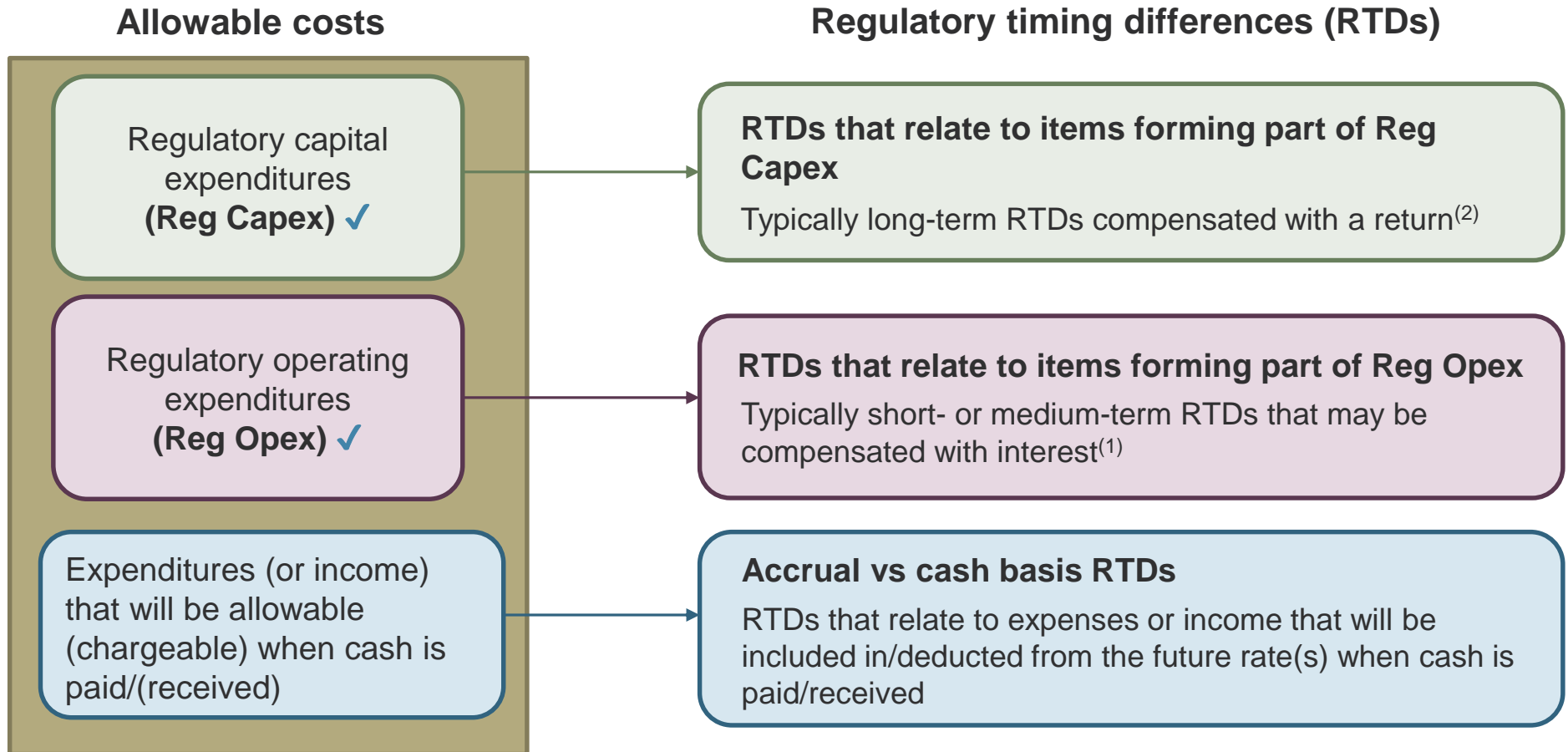
Board's considerations—regulatory timing differences and their effect in the regulated rate ('P')



Board's considerations—accounting for regulatory timing differences (RTDs)

Activities		Accounting	
Delivery period	Billing period	Statement of financial position	Statement of financial performance
Current period	Future period(s)	Origination of regulatory asset	Regulatory income
	Previous period(s)	Fulfilment of regulatory liability	
Previous period(s)	Current period	Consumption of regulatory asset	Regulatory expense
Future period(s)		Origination of regulatory liability	

Board's considerations—types of regulatory timing differences (1/2)



✓: Rewards & penalties can form part of either Reg Capex or Reg Opex. Typically, may give place to short-term RTDs. Example 2 in AP1G illustrates a RTD relating to this item.

(1): Example 1 in AP1G illustrates this RTD.

(2): Example 5 in AP1G illustrates this RTD.

Board's considerations—types of regulatory timing differences (2/2)

Accrual vs cash basis RTDs

RTDs that relate to expenses or income that will be included in/deducted from the future rate(s) when cash is paid/received

Some regulatory timing differences arise when an entity recognises an expense or income in the current period, but the regulatory agreement will not include that item in 'allowable expenditures' until a future period when the entity pays or receives the related cash.

Example of items sometimes treated in this way are pension costs, deferred taxation, asset retirement obligations, environmental clean-up provisions and derivatives used for hedging. In many such cases, the related liability or asset is measured explicitly or implicitly on a present value basis in accordance with IFRS Standards.

Example 3 in AP1G illustrates a specific case that would give rise to this type of regulatory timing differences.



Measurement model— part 1

Objectives

Board's tentative decisions—objectives of the proposed measurement model

The measurement of the regulatory timing differences* should reflect:

- a) estimates of future cash flows; and
- b) discounting of estimated future cash flows.

The measurement of regulatory timing differences should reflect:

- a) updated estimates of future cash flows if changes occur; and
- b) unchanged discount rate, unless the regulatory agreement changes the interest or return rate applicable to the estimated future cash flows.

* The Board has primarily discussed measurement with regulatory assets in mind. The Board will discuss the implication of matters discussed for the measurement of regulatory assets on the measurement of regulatory liabilities at a future meeting.

Example 1A in AP1G illustrates the mechanics of the measurement model using as a basis the fact pattern of Example 1 also in AP1G.

Board's considerations underpinning the measurement objective

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Variability of cash flows (slide 11)

Time value of money

Relevance of the information (slide 12)

Board's considerations—variability of cash flows

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Characteristics of regulatory assets

Variability of cash flows

The timing and amount of resulting cash flows are highly predictable.

Value sensitivity to market factors or other risks

The cash flows resulting from regulatory assets are subject to credit risk, demand risk and performance risk but the level of sensitivity to market factors will typically be low.

Measurement uncertainty

There is typically little measurement uncertainty about the cash flows resulting from regulatory assets.

Board's considerations—relevance of the information

Users of financial statements have told us that they are particularly interested in information that helps them identify originating timing differences and their effects in profit or loss in the periods when the timing difference originates and reverses.

This information helps users to distinguish between:

- fluctuations in revenue (or related expenses) for which the rate-adjustment mechanism provides compensation; and
- fluctuations in revenue (or related expenses) for which there is no compensation.

Users have told us that they are not interested in changes in value of regulatory assets merely due to changes in the discount rate.

Focus of interest is changes in future cash flows (due to performance or regulatory environment).



Measurement model— part 2

Initial
measurement

Board's tentative decisions

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Estimates of future cash flows

- Estimates of future cash flows include margins, interests or returns
- Use either the 'most likely amount' or 'expected value' method
- Apply the same method consistently from origination to reversal

Present value of future cash flows (regulatory assets)

Discount rate

- Typically, use interest or return rate established by the regulatory agreement to discount estimates of future cash flows.
- If the regulatory interest rate or return rate does not compensate an entity for the time value of money and uncertainty inherent in the cash flows, the entity should use a rate that reflects the time value of money and inherent uncertainty to discount the estimated future cash flows and recognise any loss in profit or loss immediately.
- If the regulatory interest rate or return rate is set at a level that provides an excess in compensation because of an identifiable transaction or event, an entity should recognise the excess in the period in which the identifiable transaction or event occurs.

Board's considerations—expected value and most likely amount

The *Conceptual Framework* highlights that possible variations in the amount or timing of future cash flows are considered when selecting a single amount from within a range of possible cash flows. The amount that provides the most relevant information is usually one from within the central part of the range, for example:

Method	Estimated amount	Features
Most likely amount (statistical mode)	Is the single most likely ultimate inflow in a range of possible cash inflows arising from an asset.	This method may be preferred to the expected value method to better predict the future stream of cash flows if the possible outcomes are binary or are concentrated on one outcome (ie one stream of cash flows).
Expected value (statistical mean)	Is the sum of probability-weighted amounts in a range of possible cash inflows arising from an asset.	The expected value is not intended to predict the ultimate cash inflow—it reflects the entire range of outcomes, giving more weight to outcomes that are more likely.

Some IFRS Standards require entities to apply judgement when assessing which method better predicts the amount of future cash flows arising from an asset.

Example 4 in AP1G illustrates the use of the most likely amount and expected value methods when estimating future cash flows.

Board's tentative decisions

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Estimates of future cash flows

- Estimates of future cash flows include margins, interests or returns
- Use either the 'most likely amount' or 'expected value' method
- Apply the same method consistently from origination to reversal

Present value of future cash flows (regulatory assets)

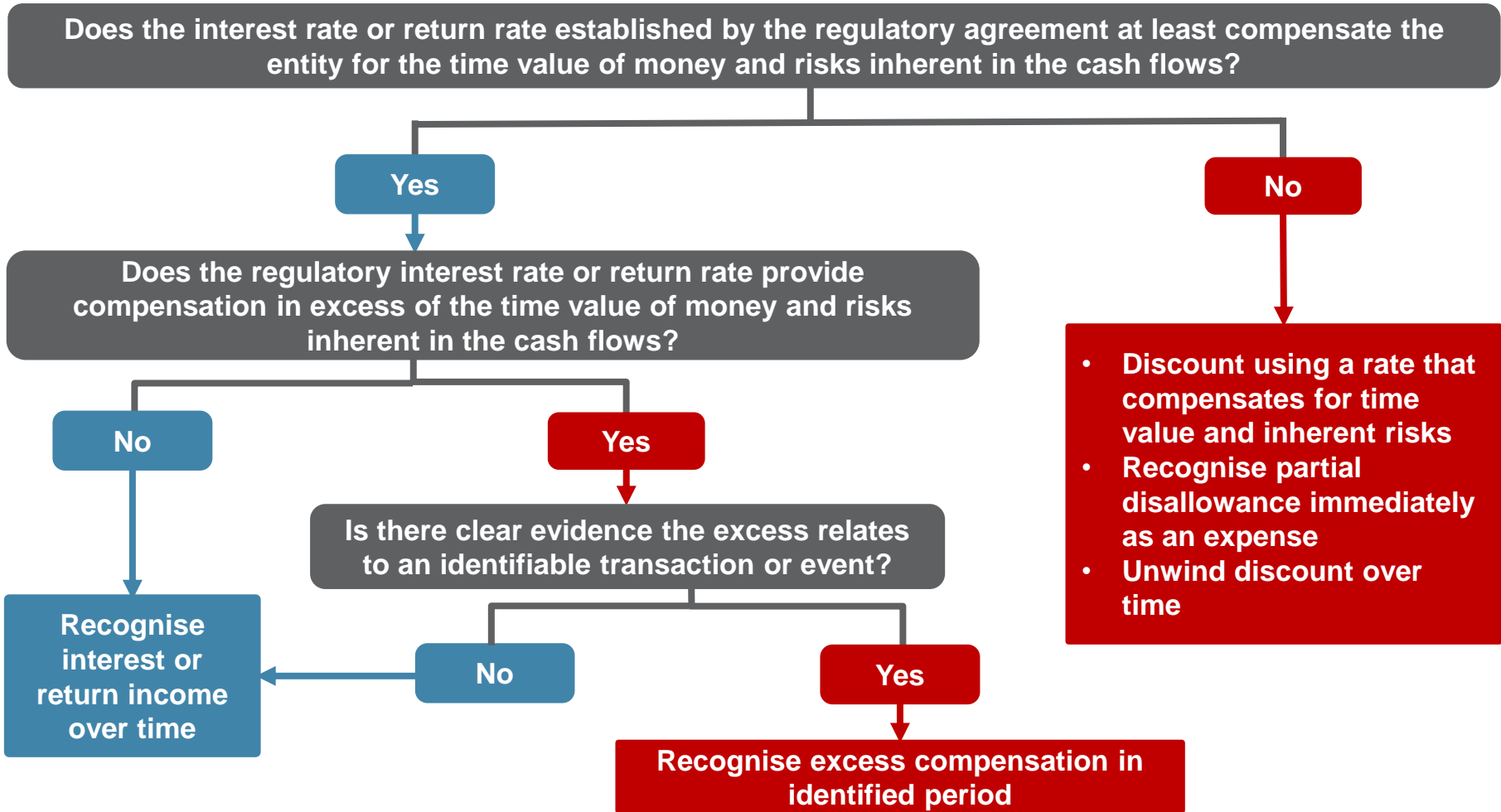
Discount rate

- Typically, use interest or return rate established by the regulatory agreement to discount estimates of future cash flows.
- If the regulatory interest rate or return rate does not compensate an entity for the time value of money and uncertainty inherent in the cash flows, the entity should use a rate that reflects the time value of money and inherent uncertainty to discount the estimated future cash flows and recognise any loss in profit or loss immediately.
- If the regulatory interest rate or return rate is set at a level that provides an excess in compensation because of an identifiable transaction or event, an entity should recognise the excess in the period in which the identifiable transaction or event occurs.

Common practice—common regulatory interest/return rates

Types of regulatory timing differences		Common returns given
Reg Opex	Short-term (within 24 months—typically operating variance allowances or rewards/penalties)	0% interest rate or interest rate above risk-free, close to borrowing rate appropriate for the relevant period
	Medium-term (approx. 2–5 years—operating expenses triggered by a specific event such as a storm)	Rate above risk-free, close to borrowing rate appropriate for the relevant period
Reg Capex	Long-term (approx. 5 years or more—capital expenditures)	WACC or RoE

Board's considerations—determining the discount rate



Common practice and Board's considerations— reg opex

- Due to the low risk environment and high credit rating of the entities, regulatory agreements tend to use a generic rate for both regulatory assets and regulatory liabilities that will reverse over similar periods, often close to corporate borrowing rates for financial instruments with similar maturities or rates that reflect the entity's incremental borrowing rate.
- In most cases, we would expect that interest/return rates set up by regulators for these regulatory timing differences would not differ materially from the rates that reflect characteristics of the cash flows arising from the regulatory assets and regulatory liabilities.

For measuring regulatory assets resulting from regulatory timing differences that relate to items forming part of the regulatory operating expenditure, the Board tentatively decided that:

- (a) an entity should use a discount rate that reflects, at least, compensation for the time value of money and uncertainty inherent in the cash flows; but
- (b) when the regulatory interest rate or regulatory return rate provides an additional return above the compensation in (a), an entity should use that regulatory interest rate or regulatory return rate as the discount rate unless there is clear evidence that the excess relates to an identifiable transaction or event.

The Board asked the staff to bring to a future meeting further analysis on the implications of this decision for measuring regulatory liabilities relating to items forming part of the regulatory operating expenditure.

Regulatory return provides compensation for...



... time-lag between origination and reversal of a regulatory timing difference



Time value of money

Price for bearing uncertainty

Other factors
Cost of Capital—Ensuring financial viability of the entity including continuing investment in the infrastructure

Note to previous slide—reg capex

Time value of money

The time value of money is typically represented by the interest/ return rate on risk-free monetary assets that have maturity dates of durations that are comparable to the period covered by the cash inflows arising from regulatory assets.

Price for bearing uncertainty

In a defined rate regulation environment, the credit risk of the regulated entity's customers is relatively low. The regulatory agreement protects the entity's financial viability by including bad debt expenses in the allowable costs included in the rate, which passes much of the credit risk to customers. Regulatory assets do not give the entity an unconditional right to receive cash inflows. Instead, the entity has an unconditional right to include the monetary amount of the RTD in the future rate(s) to be charged to customers. As a result, the cash inflows that ultimately result from a regulatory asset are subject to demand risk, ie the risk that the quantity of goods or services demanded by future customers might not be sufficient to enable the entity to bill the entire RTD. The nature of the environment in which defined rate regulation operates means that such risk is typically low.

Other factors

RTDs arising from items forming part of the regulatory capital expenditures attract a higher interest/ return rate than RTDs that relate to items forming part of the regulatory operating expenditures. That higher rate is commonly based on the regulator's estimate of the entity's weighted average cost of capital (WACC) and aims to provide compensation for factors beyond time value of money and the risks inherent in the cash flows.

When the period in which interest/returns accrue and the period in which billings occur **coincide**, the following two techniques would result in the same measurements:

Method 1: \sum Estimates of future cash flows **including** regulatory interests/returns
discounted using the regulatory rate

Method 2: \sum Estimates of future cash flows **without** including regulatory interests/returns
discounted at a 0% rate

Example 5 in AP1G includes a fact pattern to illustrate Method 1 (Example 5A) and Method 2 (Example 5B).

When the period in which interest/returns accrue and the period in which billings occur **do not coincide**, these two methods will not result in identical measurements.

Example 5C in AP1G illustrates Method 1 and Example 5D in AP1G illustrates Method 2 when the period in which interest/returns accrue and the period in which billings occur do not coincide.

For regulatory timing differences that relate to items forming part of the regulatory capital base, the Board tentatively decided that an entity should include only the estimated future cash flows arising from the original regulatory timing difference and discount them at a rate of 0%—that is, the entity should exclude the cash flows relating to the regulatory overall return and recognise that overall return as revenue in profit or loss as it is included in the rate charged to customers.^{(1), (2)}

(1): See Method 2 in slide 23.

(2): This tentative decision is not intended to override the case when the regulatory interest rate or return rate does not compensate an entity for the time value of money and uncertainty inherent in the cash flows. In such a case, the entity would use a rate that reflects the time value of money and inherent uncertainty to discount the estimated future cash flows and recognise any loss in profit or loss immediately.

Board's considerations and Board's tentative decision—accrual vs cash basis RTDs

The Board considered what discount rate to use when measuring regulatory assets or regulatory liabilities resulting from RTDs relating to items of expense or income that will form part of the regulatory operating expenditure or the regulatory capital base when cash is paid or received.

The staff recommended that an entity should:

- (a) use the same discount rate that it uses when measuring the underlying liability or underlying asset; and
- (b) adjust the measurement of the regulatory asset or regulatory liability to reflect any risks that are not present in the related underlying items.

The Board expressed concerns about how the staff's recommendations would apply to particular cases such as deferred tax and asked the staff to provide further analysis.



Measurement model— part 3

Subsequent
measurement

The model should adopt the treatment required by IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors* to account for changes in estimated future cash flows. Consequently:

- (a) the effect of a change in estimated future cash flows should be recognised prospectively in profit or loss in:
 - (i) the period of change, if the change affects only that period; or
 - (ii) the period of change and future periods, if the change affects both; and
- (b) if the change gives rise to a change in a regulatory asset, the change should be recognised by adjusting the carrying amount of the related asset in the period of change.

Board's considerations—changes in estimates of future cash flows⁽¹⁾

Triggers of changes in estimates:

- Finalisation of a rate determination
- Variances between estimated and actual inputs to the estimation
- Changes in facts or circumstances

IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors

The effects of changes in accounting estimates should be accounted for prospectively in profit or loss in:

- (a) the period of change, if the change affects only that period; or
- (b) the period of change and future periods, if the change affects both.

If the change gives rise to a change in an asset or liability, adjust the change in carrying value of the related asset or liability in the period of change.

(1): Examples 6 and 7 in AP1G illustrate changes in estimates of future cash flows.

Common practice—changes in interest or return rates⁽¹⁾

- Rate regulators typically establish procedures or policies to periodically update the interest/ return rates given/charged for RTDs to reflect changes in underlying market rates.
- New rates apply prospectively to both old and new regulatory assets and regulatory liabilities.
- Changes in the interest/ return rates affect both the estimates of future cash flows and the discount rate.
- Re-estimating future interest/ return income would normally have no significant effect on the carrying amount of the regulatory asset.

(1): Example 7A in AP1G illustrates changes in the interest or return rates.

When a regulator changes the interest rate or return rate used to compensate an entity, the entity should:

- (a) measure the outstanding regulatory asset balance using the revised interest rate or return rate to discount the estimated future cash flows; and
- (b) recognise any resulting change in the carrying amount of the regulatory asset in the period of change.

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