

Incentivising efficient expenditure

Questions regarding totex, IRIS and innovation

For use by external stakeholders

This document provides questions to guide feedback on our 7 November 2022 workshop “*Forecasting and incentivising efficient expenditure for EDBs*”. These questions focus on totex, IRIS, and innovation and are intended to inform our review of the Part 4 input methodologies (IM Review).

Along with these questions we have published:

1. a model that demonstrates the broad financial equivalence of the treatment of opex and capex in the respective IRIS incentive mechanisms; and
2. a brief companion staff paper.

The workshop slides and staff working paper (*Electricity distributors’ expenditure incentives under the current Part 4 approach and under a totex approach*) we published before the workshop are available [here](#) along with the recording of the workshop.

It would be useful if you could take these into account when answering the questions that follow.

Completed forms should be sent to im.review@comcom.govt.nz, with ‘INCENTIVES SUBMISSION – [your submitter name]’ in the subject line of the email. Please provide us with your feedback by 5pm Tuesday 6 December 2022.

If you have supporting documents that you consider would improve our understanding of the issues, please attach them with your response and reference them in your feedback below.

All completed forms and supporting documents provided to us in this context will form part of the record for the IM Review. We intend to publish completed forms and supporting documents provided to us to enable other stakeholders to engage with them throughout the IM Review. Any request that we not publish content in a completed form or supporting document provided to us must be clear and explicit with reasons supporting why that content is confidential or commercially sensitive. We will consider any such requests on their merits.

A. Questions relating to the problem of capex bias

In paragraph 12 of our staff working paper,¹ we define ‘capex bias’ as arising where the regulatory approach to setting price-quality paths financially incentivises investment in assets (capex) over alternatives such as demand response (opex), where those alternatives are more efficient. We do not use the term ‘capex bias’ to refer to situations where favouring a traditional network solution over a non-network alternative results in greater net benefits to consumers.

A1. Do you consider that we have accurately described the general problem of capex bias? If not, please provide further description.

Answer: We consider the Commission’s description of capex bias (“*arising where the regulatory approach to setting price-quality paths financially incentivises investment in assets (capex) over alternatives such as demand response (opex), where those alternatives are more efficient. We do not use the term ‘capex bias’ to refer to situations where favouring a traditional network solution over a nonnetwork alternative results in greater net benefits to consumers.*”) is appropriate.

We agree situations where a traditional network solution is more efficient than a non-network solution should not be considered ‘capex bias.’

However, as described in our submission, we consider the key issue is the need for greater flexibility between opex and capex allowances rather than ‘capex bias.’

A2. Do you consider we have accurately described the potential issue with regulatory financial incentives resulting in or reinforcing capex bias? If not, please provide further description.

Answer: In our view, the issue not ‘capex bias’ but that allowances between capex and opex are not substitutable. The regime should incentivize the most efficient expenditure regardless of whether it is capex or opex (or a combination).

A3. If relevant, we would welcome examples of capex bias from your business. Please explain the source(s) of the capex bias.

Answer: As above, a greater issue is that allowances between capex and opex are not substitutable.

For example, if an EDB is close to overspending its opex allowance but not its capex allowance it would be incentivized to opt for a capex solution to avoid incurring an IRIS penalty (and vice versa).

¹ https://comcom.govt.nz/_data/assets/pdf_file/0025/296233/Staff-paper-for-Workshop-Forecasting-and-incentivising-efficient-expenditure-for-EDBs-1-November-2022.pdf

A4. In your view, do regulatory financial incentives under Part 4 DPP/CPD regulation (RAB-based building blocks approach with WACC uplift, with opex and capex IRIS) contribute to capex bias (if any) in your business?

Answer: See our comments in relation to the IRIS equivalence model.

Related to opex performance uncertainty, there can be transaction costs entering into opex solutions (for example, the tendering process) that do not occur for capex solutions. Furthermore, suppliers may have less control over future costs for opex solutions (for example, charges and fees related to the opex solution could increase in future).

Related to the asymmetry in regulatory expenditure scrutiny, current uncertainty mechanisms in the IMs risk deterring efficient opex spend given re-openers are limited to capex solutions. We consider all uncertainty mechanisms should be neutral as to whether capex or opex (or a combination of both) are used.

The lack of guidance and uncertainty around opex step changes has also discouraged efficient opex spend. For example, Vector's step change request for smart meter data was not allowed in DPP3. Providing more guidance on the criteria and level of detail expected in a step change request would assist in alleviating this issue.

A5. How important are regulatory financial considerations to your business when choosing between different solutions? We would welcome specific examples (reflecting information from actual business decisions) that illustrate how regulatory financial considerations have been considered.

Answer: The regime is designed to use financial incentives to influence EDB decision making. EDBs must deliver the regulated service in line with legal and regulatory requirements and customer expectations. Financial considerations are important as EDBs must be able to fund investment in line with these expectations.

The current environment of constrained cashflows (e.g. arising from the regulatory treatment of inflation indexation) is a significant concern as it risks EDBs being unable to invest in solutions (whether capex or opex) that could lead to greater efficiency overtime.

A6. To help us understand the overall size of the problem of capex bias, we would appreciate your assessment of *current* opportunities where opex solutions would be more efficient – for example, from your most recent asset management plan. We are also interested in your expectation of how (quantitatively or directionally) the opportunities might change over the *next decade*, for example, due to emerging technologies.

Could you please advise or estimate:

- the aggregate size of the pool of expenditure (capex and opex) where interchangeable capex and opex solutions are currently available
 - of that overall pool of expenditure, the total value of opex solutions chosen.
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If you expect this to change in the future, please estimate the future values.

Answer: We have set out some examples of capex and opex considerations below.

In January 2022, Vector sought registrations of interest for non wire alternatives in the Warkworth region. This experience suggests the majority of non-wire alternative/flexibility solutions are currently capex solutions (based on responses received to the RFI).

In the Hot Water Load Control space, Vector intends to harness the smart load control relay internal to the smart meter which would likely translate into an opex solution.

Vector's AMP describes our Symphony Strategy which involves leveraging new energy solutions including greater use of data analytics and technology to meet customer needs. This will see the traditional network of poles and wires transformed into an intelligent network that provides customers with choice and control.

We expect the opportunities presented by data and digitalisation will grow significantly over time. In particular, as DER increase on the network digital integration will be critical for network management to reduce costs. Accordingly, alongside significant opportunities there is significant downside risk if appropriate expenditure is not undertaken.

B. Questions relating to a potential solution to capex bias: totex approach

B1. Should we consider introducing a totex approach for EDBs as a solution to capex bias and/or simplification of financial incentive mechanisms? Should we introduce a totex approach for other regulated services? Please provide your reasons.

Answer: We have not had sufficient time to come to a position on this. The challenge will be finding an appropriate solution that resolves the issue while imposing as little additional complexity and cost in changing approach as possible.

We recommend the Commission also consider the possibility of a simplified 'totex-light' type approach could avoid the complexity and cost involved in changing to a totex approach.

B2. If you consider we should adopt a totex approach, do you agree with the approach described in the staff working paper? If not, please explain why not and what you would change.

Answer: We need further time to consider the implications of the approach in the staff working paper.

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- B3. If you consider we should adopt a totex approach, please provide your views on:**
- **expected benefits for your business (relative to the current RAB-based building blocks approach with WACC uplift, opex and capex IRIS)**
 - **expected implementation costs and timelines for your business**
 - **any other considerations**
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Answer: As above, we need further time to consider the implications of a totex approach.

C. Questions relating to current expenditure incentive mechanisms²

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- C1. The model and paper published with these questions are intended to demonstrate the effects of the capex and opex IRIS incentives on investment choices. With this information now available, do you consider that there is broadly financial equivalence between the incentives on opex and capex?**
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Answer: As described in more detail in our submission, we do not consider firm conclusions can be drawn from the model.

- C2. Some suppliers submitted to us that expenditure allowances are not currently substitutable between capex and opex (i.e., the incentives are not financially neutral).³ However, with equalised incentive rates, the effect (over the relevant period of the saving or overspend) should make suppliers financially indifferent to substituting between opex and capex solutions.**

If you consider capex and opex are not substitutable under the current IRIS settings, please provide some examples from your business demonstrating why you were not financially indifferent in choosing between opex and capex solutions.

Answer: We consider capex and opex are not substitutable.

Regardless of the equalized incentive rates, an EDBs actual spend on opex and capex in a particular year will have an impact. If an EDB is close to overspending its opex allowance and has more room in its capex allowance it will be incentivized to choose a capex solution to avoid an IRIS penalty.

- C3. How important is the fact that IRIS does not capture the impact of savings that extend beyond the IRIS horizon (i.e., the carry-forward term of five years)? Can you provide us with examples of projects where future savings are not included within the IRIS horizon? Could you propose potential solutions to this problem (including through the IRIS mechanisms)?**
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² See "IRIS equivalence staff paper"

³ We set a revenue cap for each non-exempt EDB within which they may choose opex and capex as they see fit. We have separate incentive mechanisms for opex and capex, so the EDBs choice affects the incentive amount they receive. If incentive amounts for opex and capex are equivalent, then these EDBs should be financially indifferent between opex and capex.

Answer: We consider this is a significant issue and recommend the Commission and stakeholders continue to investigate solutions. The impact of this issue may become greater overtime given opportunities presented by, for example, digitalisation to create significant future cost savings. It is critical that incentive mechanisms do not inadvertently discourage this kind of expenditure

C4. Do you consider IRIS in your business decision-making processes? If so, which stage(s) of your decision-making processes consider IRIS when contemplating substitutable solutions (whether opex or capex)?

Answer: IRIS is necessary to consider in business decisions as it impacts the EDBs financial performance and therefore the EDBs ability to fund its investment programme.

However, a further issue with the current IRIS mechanism is its potential to penalise EDBs for overspend, or reward EDBs for savings, related to factors entirely outside the control of the EDB. For example, the recent IFRS interpretations committee decision on the categorisation of SaaS costs will have an impact on IRIS outcomes despite being outside EDB control.

C5. Suppliers have noted that the complexity of the current incentive mechanisms is a problem in the regulatory regime. How could the incentive mechanisms be simplified while still achieving the desired outcomes?⁴

Answer: We accept that a level of complexity is likely inevitable for the mechanism to achieve desired outcomes (and improving the IRIS to e.g. allow better substitution between opex and capex may add further complexity). However, we support the Commission and stakeholders investigating ways to simplify the IRIS while still achieving desired outcomes. We don't consider simplicity should be prioritized over delivering better outcomes for consumers and stakeholders.

We recommend the Commission publish guidance and working models on the IRIS mechanism to assist stakeholders understand the impact of IRIS on their decision making.

C6. Changing the current IRIS mechanisms to apply different incentive rates to different types of expenditure (such as connection capex) would likely increase the complexity of the incentive schemes. Would the benefits of this change outweigh the increased complexity?

Answer: It is difficult to comment without knowing exactly how this would be implemented (and around what type of expenditure). However, in principle, additional complexity could be justified if this produced the desired outcomes of incentivizing appropriate expenditure and avoiding penalties for expenditure that is outside the control of the EDB.

⁴ The desired outcomes are set out in Section 52A (1) (a)–(d) of Part 4 of the Commerce Act 1986.

C7. If we were to remove or make significant changes to IRIS, what would an appropriate alternative approach be that would better promote one or more of the overarching objectives of our IM Review?⁵

Answer: We need more time to come to a view on this.

C8. If we were to move to a totex approach, we would need an amended incentive mechanism. What could an incentive mechanism look like? One example is Ofgem’s totex incentive mechanism (TIM).⁶

Answer: We need more time to come to a view on this.

C9. For Transpower’s IPP, we understand from stakeholders that the determination of the ‘baseline adjustment term’ has introduced significant complexity and uncertainty, potentially undermining incentives to achieve efficiency savings. If we were to remove this adjustment term, what other adjustments to the IPP IRIS mechanism do you consider would be necessary to achieve its purpose?

Answer: We need more time to come to a view on this.

D. Questions relating to innovation and sandboxing⁷

D1. Currently, the implementation details of the innovation project allowance and the size of the allowance paid out following successful projects are determined as part of the DPP reset rather than in the IMs. Are there any changes to the IMs⁸ we should consider to better enable innovation?

Answer: Our submission has provided comments on issues with the implementation and size of the Innovation Project Allowance.

A further issue is the regulatory framework does not provide a pathway to advance an innovation completed under the Innovation Project Allowance (i.e. if a pilot is successful under the Innovation Project Allowance the EDB may be unable to advance it further due other existing barriers). The Commission should consider how the IMs could better promote a pipeline for innovation projects to be advanced.

⁵ The three overarching objectives for the IM Review are set out at para X20 of the [Part 4 Input Methodologies Review 2023 decision-making framework paper](#), which we published on 13 October 2022.

⁶ See section 10 of Ofgem’s Decision – RIIO-2 Final Determinations – Core Document https://www.ofgem.gov.uk/sites/default/files/docs/2020/12/final_determinations_-_core_document.pdf.

⁷ See “Forecasting and incentivising efficient expenditure for EDBs” slides 54-59: https://comcom.govt.nz/_data/assets/pdf_file/0029/298055/Forecasting-and-incentivising-efficient-expenditure-for-EDBs-Full-slide-deck-07-November-2022.pdf

⁸ See clause 3.1.3(1)(x) and the definitions of ‘innovation project’ and ‘innovation project allowance’ under clause 1.1.4(2) of the Electricity Distribution Services Input Methodologies Determination 2012: https://comcom.govt.nz/_data/assets/pdf_file/0017/60542/Electricity-distribution-services-input-methodologies-determination-2012-consolidated-20-May-2020-20-May-2020.pdf

We also recommend the Commission should consider implementing additional mechanisms to promote innovation such as ‘use it or lose it’ allowances through the IMs.

D2. Are there innovative projects or initiatives in the supply of electricity distribution services that you consider the current IM and DPP settings prevent you from doing? If so, it would be helpful if you could give examples of business cases you did not take forward or that you consider would not be possible under the current regime.

Answer: It can be difficult to provide specific examples of innovation projects that are prevented under the current settings as – in the absence of appropriate incentives – these projects may not develop.

However, an example is the Commission declining to implement an opex step change for the cost of smart meter data. If Vector had access to this data it could have considered various innovative initiatives that could not occur without access to data.

D3. Innovative activities and projects can be riskier than business-as-usual activities and projects. Can you describe the downside risks associated with innovation under the current regulatory rules, and if possible, quantify those risks?

Answer: The key downside risk associated with innovation (and the lack of incentives for innovation in the current regulatory framework) is the risk that EDBs do not innovate and therefore the cost of the regulated service is higher than it otherwise would have been (i.e. that the regulatory framework does not promote dynamic efficiency in the sector).

D4. Given that innovation is risky, who do you consider is better suited to bear the downside risk under Part 4 regulation – suppliers or consumers? What is your rationale for this?

Answer: We need more time to consider appropriate allocation of risk. At a high level we note greater dynamic efficiency in the sector will produce significant benefits to consumers. These have significant potential upside relative to the risk of innovation projects failing.

D5. What should compensation look like for the downside risk retained by suppliers? What level of compensation is required to enable efficient innovation considering these downside risks?

Answer: We would need more time to quantify an appropriate level of compensation.

D6. What are they key ingredients of an effective regulatory sandbox? What aspects of the regulatory sandboxes implemented by the AER⁹, OEB¹⁰ and Ofgem¹¹ do you consider should be implemented under Part 4 regulation and why are these elements important for your business?

Answer: We consider the AER, OEB and Ofgem approaches may provide a useful starting point to design a regulatory sandbox for Part 4.

We recommend the regulatory sandbox consider costs and impacts at a whole system level.

D7. To what extent should a regulatory sandbox regime under Part 4 focus on each of the following: advice, rule exemptions, trial rule changes and financial incentives?

Answer: We consider advice, rule exemptions, trial rule changes and financial incentives should all feature in a regulatory sandbox.

D8. What projects do you have planned that would benefit from the implementation of a regulatory sandbox?

Answer: We would need more details on the design of the regulatory sandbox to consider its applicability to potential projects.

⁹ Regulatory Sandboxing – Energy Innovation Toolkit: <https://www.aer.gov.au/networks-pipelines/regulatory-sandboxing-%E2%80%93-energy-innovation-toolkit#:~:text=Regulatory%20sandboxing%20aims%20to%20help,cheaper%20energy%20options%20for%20consumers>

¹⁰ OEB Innovation Sandbox: <https://www.oeb.ca/html/sandbox/index.php>

¹¹ Ofgem – What is a regulatory sandbox?: <https://www.ofgem.gov.uk/publications/what-regulatory-sandbox>