

Attachment D Innovation and section 54Q incentives

Purpose of the attachment

- D1 This attachment outlines and explains the rationale for our final decisions to help incentivise innovation and the uptake of non-traditional solutions under DPP4.
- D2 This attachment covers the following:
 - D2.1 **decision I1** to set the Capex retention factor at 32.16%;
 - D2.2 **decision U1** to introduce an Innovation and non-traditional solutions allowance (INTSA) scheme, capped at 0.8% of DPP4 maximum allowable revenue (MAR);¹
 - D2.3 **decision U2** to incentivise energy efficiency and demand side management incentives through the INTSA; and
 - D2.4 **decision U3** to incentivise the reduction of energy losses through the INTSA.

High level approach to the workstream

D3 Electricity distribution businesses (EDBs) are forecasting significantly higher expenditure to support the energy transition while continuing to provide services at a quality that reflects consumers' demands. In addition, the effects of climate change are likely to continue to intensify, increasing the frequency of extreme weather events which elevate the importance of the resilience of electricity networks to these events.² These realities create a need, and expand the opportunity, for innovative approaches to meet these challenges.

¹ See Table D2 for each non-exempt EDB's INTSA value, and note that 25% of this value may only be recovered in respect of projects or programmes for which the non-exempt EDB worked together with 1 or more other EDBs.

² See 'The challenges the final decisions aim to address', for further discussion of resilience and meeting consumer demands.

- On the technology front, the cost and performance of relevant technology is likely to continue to fall and improve, respectively.³ Technologies include solar photovoltaic (PV), batteries, electric vehicles and other smart grid-related technologies such as control software and sensors. These technologies offer the opportunity to improve the productivity and efficiency of electricity lines services.
- Innovation and non-traditional solutions (NTS) are incentivised within the DPP regime, consistent with our obligation under s 52A(1)(a) of the Commerce Act (the Act) to promote incentives to innovate. The primary means for this are within the baseline settings where the regime provides incentives for innovation or NTS that have the potential to result:
 - D5.1 in a cost saving which is rewarded via the incremental rolling incentive scheme (IRIS); or
 - D5.2 in an improvement to quality performance which is rewarded via the quality incentive scheme (QIS).⁴
- More specifically, EDBs have flexibility and are incentivised to substitute between capital expenditure (capex) and operational expenditure (opex) solutions where it results in a cost saving. They therefore can prioritise their expenditure for innovative or NTS projects where these projects result in a cost saving. **Decision I1** in this attachment demonstrates an example of the regime's baseline incentives that encourage EDBs to innovate and invest in solutions that reduce the overall cost to consumers.
- D7 However, we recognise that in some instances, non-exempt EDBs may still lack strong enough incentives to innovate or implement NTS.⁵ To address this, we are introducing the INTSA as an additional incentive to those already provided for in the DPP baseline settings. As such, the INTSA would not be the sole source of funding for innovative or NTS projects that an EDB may wish to undertake; these can still be funded through approved expenditure allowances.

³ For recent analysis, see for eg, Rewiring Aotearoa "Electric homes report" (March 2024).

⁴ For a list of ways in which the regime incentivises innovation, see <u>Commerce Commission "Input</u> methodologies review 2023 - Final decision - Financing and incentivising efficient expenditure during the <u>energy transition topic paper" (13 December 2023)</u>, paragraph 6.6.

⁵ See paragraphs D41-D44 for further expansion of our view for the scope of when existing incentives may not be sufficient.

- Our intention for the INTSA is to provide EDBs with a specific incentive to trial new solutions through the DPP4 period to find alternative ways to adapt their networks to decarbonisation trends, resilience expectations and changing consumer preferences. The total value of the INTSA is a significant increase from what was offered by the Innovation Project Allowance (IPA) in DPP3. However, this increase has been limited following careful consideration of the impact on consumer bills within the DPP4 period.
- Innovative and NTS projects are by nature uncertain, which may mean that some projects undertaken by EDBs through an INTSA will be unsuccessful in achieving their desired outcomes. Despite this, by requiring EDBs to provide us with a closeout report that we will publish for all completed projects regardless of their level of success there will be valuable lessons to be learned.
- D10 Furthermore, we consider that there are benefits in EDBs collaborating with one another (as well as with others) to share learning and practice among the sector. As such, our final decision ring-fences a portion of this allowance for projects that involve a non-exempt EDB working together with one or more other EDBs.
- D11 We expect the sector, consumers, other electricity market participants and regulators will be able to use these lessons from a greater number of completed innovative and NTS projects over the course of the DPP4. This growing body of shared learnings should help to inform our process when reviewing the innovation incentives in future DPP resets. Additionally, our expectation is that towards the end of the period, if EDBs are able to deliver NTS as part of business as usual (BAU), this may result in expenditure allowances for DPP5 being adapted to account for this shift.
- D12 The INTSA scheme interacts with multiple other decisions and areas of the regime:
 - D12.1 In terms of opex allowances, the final decision is for low voltage data to be approved as a step change for DPP4 for all EDBs. 6 We expect this to be particularly useful for testing and implementing NTS and may aid other INTSA projects.
 - D12.2 We expect some EDBs to use an INTSA to trial innovative and/or NTS projects (especially flexibility services) that would, if successful, enable capex to be deferred or permanently replaced with a more efficient opex solution.

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⁶ See Attachment C, decision O3.3.

- D12.3 Our final decision is to allow EDBs to exclude the calculation of SAIDI and SAIFI assessed values directly associated with an INTSA project, up to a cap. See **Attachment E** (**decision RP7**) for this decision, and paragraphs D145-146 of this attachment for discussion of how this is proposed to be implemented from the INTSA perspective.
- D13 We also note that there are further interactions that an INTSA may have with factors outside of the regime. For example, the charging and connection standards for electric vehicles led by Energy Efficiency and Conservation Authority (EECA). Additionally, industry codes, standards and guidance led by the Electricity Authority (EA) or their newly introduced Power Innovation Pathway.⁷
- D14 Lastly, we acknowledge that EDBs are regionally and operationally diverse, with the 16 non-exempt EDBs each on their own path of innovation and readiness to trial/implement NTS. The INTSA has been designed with this in mind to promote the long-term benefit of consumers across Aotearoa New Zealand.

Decisions for innovation and section 54Q incentives

- Section 52A(1)(a) of the Act requires us to ensure suppliers of regulated goods and services have incentives to innovate and invest, including in replacement, upgraded, and new assets. The Act also states, under s 54Q, that we must promote incentives, and avoid imposing disincentives, for suppliers of electricity lines services to invest in energy efficiency and demand side management as well as to reduce energy losses. The Act restricts us to providing these incentives to the supply of electricity lines services, with the overarching objective of serving the long-term benefit of consumers under s 52A.
- D16 We consider that **decision U1**, to introduce an INTSA, and **decision I1**, to set the Capex retention factor, should further promote s 52A(1)(a) and provide the relevant incentives under s 54Q. As such, **decisions U2** and **U3**, which are focussed on incentives for demand side management, energy efficiency and to reduce energy losses, state that those incentives are provided by the INTSA (**decision U1**).

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⁷ For eg, distribution pricing, including capital contributions. See <u>Electricity Authority "Distribution pricing"</u> webpage, accessed 12 April 2024; or <u>Electricity Authority "Power Innovation Pathway"</u> webpage, accessed 22 October 2024.

Decision I1 Set Capex retention factor at 32.16%

- D17 Our final decision is to set the capex incentive rate at 32.16%.⁸. This maintains a capex incentive rate set equivalent to the opex incentive rate (which is a function of the WACC and the length of the regulatory period). This confirms the draft decision.
- D18 We consider that equivalence between opex IRIS and capex IRIS is a core tool in ensuring EDBs have incentives to innovate and invest in solutions that reduce the overall cost to consumers, in line with the s 52A(1)(a) limb of the Part 4 purpose.

Nature of the decision

- D19 At DPP3, we set the retention factor for the capex incentive scheme equivalent to the retention factor of opex IRIS. We set these rates equivalent to ensure that EDBs had incentives to find the most efficient solution regardless of expenditure category.⁹
- D20 The DPP3 decision to set the rates equivalent was also expected to remove barriers to innovation by making suppliers financially indifferent between opex and capex solutions, allowing suppliers to use flexibility services, or other such opex solutions, where they were cheaper than traditional poles-and-wire solutions.
- D21 The topic of equivalence between capex and opex IRIS was again covered in the 2023 IM Review. Some stakeholders had expressed doubt that setting the retention factor equivalent had equalised the incentives between opex and capex. They considered equivalence important as opportunities to substitute traditional capex solutions with opex solutions, such as flexibility services, were widely expected to increase.

⁸ We note that the value of the capex retention rate has changed for the final decision in line with changes to the WACC between draft and final to retain equivalence with the opex incentive rate.

⁹ Commerce Commission "Default price-quality paths for electricity distribution businesses from 1 April 2020 – Final decision reasons paper" (27 November 2019), paragraphs 6.42-6.45.

- D22 As part of the IM Review, we released a staff paper demonstrating equivalence between the two incentive schemes. ¹⁰ The staff paper accompanied the EDB workshop held in November 2022. Submissions following the workshop indicated that there was growing acceptance of equivalence between the two expenditure incentives. By the conclusion of the IM Review, there was widespread acceptance of equivalence between the two expenditure incentives in most circumstances. ¹¹
- D23 In the DPP4 issues paper, we indicated that our starting position was to retain the equivalence between the two retention factors, to ensure that EDBs were financially neutral between opex and capex solutions.¹²

What we heard from stakeholders

D24 Submitters such as Alpine Energy and Wellington Electricity agreed with the approach laid out in the DPP4 issues paper to maintain the equivalence between the capex and opex IRIS.¹³ Wellington Electricity submitted:¹⁴

We agree that it is important not to incentivise a preference for opex or capex. It is also important to allow EDBs to substitute capex and opex allowances if they find it is more efficient to swap what allowance expenditure is funded from. We support the approach of the opex and capex retention rates being the same. The ability to substitute capex and opex allowances will become more important as EDBs consider non-traditional solutions to building new capacity.

D25 Not all submitters agreed with the starting position laid out in the DPP4 issues paper. Network Tasman, for instance, considered that the uncertainty surrounding forecasting warranted reducing the incentive rate experienced by EDBs.¹⁵

¹⁰ Commerce Commission "Incremental rolling incentive schemes equivalence staff discussion paper" (22 November 2022).

¹¹ There are specific circumstances where this equivalence does not hold, namely when opex is spent in the current regulatory period to defer capex in a future regulatory period. The new INTSA scheme is intended to be able to incentivise projects for these such circumstances - by providing for up to 100% of costs that are recoverable.

¹² Commerce Commission "Default price-quality path for electricity distribution businesses from 1 April 2025 – Issues paper" (2 November 2023), paragraphs E103-E114.

¹³ <u>Alpine Energy "DPP4 Issues paper submission" (19 December 2023)</u>, paragraph 17; and <u>Wellington Electricity</u> "DPP4 Issues paper submission" (19 December 2023), p. 26.

¹⁴ Wellington Electricity "DPP4 Issues paper submission" (19 December 2023), p. 26.

¹⁵ Network Tasman "DPP4 Issues paper submission" (19 December 2023), p. 3.

- In submissions on the DPP4 draft decision, submitters, representing both suppliers and retailers, agreed that maintaining the equivalence rate between capex and opex is important. For instance, Mercury submitted "We strongly support the Commission enabling the smart system through focusing on removing the regulatory barriers. For example, we support equalizing EDB's financial incentives between opex and capex solutions..."

 16 and Wellington Electricity submitted "We support the Draft Decision to maintain equal IRIS incentive rates between capex and opex, to provide financial neutrality for spending decisions."

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- D27 Multiple submitters considered that consumer connections should be excluded from IRIS as they considered that consumer connections expenditure is largely outside the control of the EDB. For instance, Vector submitted that "it is not appropriate to apply the IRIS to expenditures over which EDBs have no control over either the timing or scale. Consumer Connections capex is a prime example of this type of expenditure".¹⁸

Analysis conducted

- D28 As noted at D21, the decision to set equivalent retention rates was covered in depth as part of the IM Review.
- D29 Making suppliers indifferent between capex and opex solutions is in the long-term best interest of consumers. Without this financial indifference we risk crowding out opex solutions that may otherwise reduce the overall cost of electricity distribution.
- D30 Many submissions on the IM Review and draft decision supported this approach. Submissions cited the importance of equivalence in encouraging EDBs to consider the best available option regardless of spend category. Opportunities for such substitutions are expected to increase as flexibility services become more prevalent.
- D31 EDBs such as Aurora, Powerco, and Orion are beginning to trial the use of flexibility services to defer capex and we expect the number of EDBs investigating flexibility services to increase over the upcoming regulatory period.¹⁹

¹⁶ Mercury "Submission on EDB DPP4 draft decisions" (12 July 2024), p. 2.

¹⁷ Wellington Electricity "Submission on EDB DPP4 draft decisions" (12 July 2024), p. 50-51.

¹⁸ Vector "Submission on EDB DPP4 draft decisions" (12 July 2024), paragraph 124.

¹⁹ See Orion "Energy flexibility project a first for Canterbury" (19 October 2023).

- D32 Network Tasman suggested that we reduce the IRIS incentive rates to protect EDBs and consumers from uncertainties in forecasting for DPP4.²⁰ In the context of large increases in expenditure, we consider it is important that EDBs face incentives to spend efficiently and to investigate innovative solutions that lower the overall cost of the energy transition.
- D33 We consider that reopeners are a more appropriate tool for managing uncertainty than lowering the incentives faced by EDBs. While there is inherently some uncertainty regarding EDB expenditure forecasts, we consider that EDBs should face consistent incentives to outperform their ex ante allowances. For expenditure that is genuinely uncertain at the time of the reset, we consider that reopeners are appropriate once uncertainties around the timing, cost or need of a project are resolved.
- D34 Reducing the incentive strength on capex while the opex incentive rate remains fixed would encourage EDBs to, where possible, spend capex instead of opex.²¹ This behaviour would discourage EDBs from innovating with opex solutions and would place further burdens on consumers in a period where supplier revenues are expected to increase significantly.
- D35 As noted, some submitters raised the idea that consumer connections should be excluded from IRIS due to the limited ability for EDBs to influence the "timing or scale" of expenditure.²² The decision on whether to exclude categories of expenditure from incentive allowances is an IM decision and was considered in depth as part of the 2023 IM Review.²³

²⁰ Network Tasman "DPP4 Issues paper submission" (19 December 2023), p. 3.

²¹ The opex incentive rate is a function of the WACC and retention period, both of which are set in the IMs. In the recently concluded 2023 IM Review we concluded that the opex IRIS and the method for determining the opex retention factor were fit for purpose. See <a href="Commerce Commission" Input methodologies review 2023 - Final decision - Financing and incentivising efficient expenditure during the energy transition topic paper" (13 December 2023), Chapter 5d.

²² Vector "Submission on EDB DPP4 draft decisions" (12 July 2024), paragraph 124.

²³ Commerce Commission "Input methodologies review 2023 - Final decision - Financing and incentivising efficient expenditure during the energy transition topic paper" (13 December 2023), Chapter 5e.

Conclusions

Our final decision is to set the capex incentive rate at 32.16%, which is equivalent to the opex incentive rate. In line with promoting the s 52A(1)(b) limb of the Part 4 purpose, we continue to consider that financial indifference between capex and opex solutions is a key factor in ensuring EDBs are incentivised to choose the most efficient solution regardless of which category of expenditure it falls under. We also consider equivalence important in incentivising EDBs to innovate and find solutions that reduce the overall cost of the energy transition, regardless of expenditure type, in line with s 52A(1)(a).

Decision U1: Introduce an innovation and non-traditional solutions allowance, capped at 0.8% of DPP4 MAR

Problem definition

- D37 EDBs are natural monopolies, which means we cannot rely on competition to provide incentives for them to seek efficiencies through innovation.²⁴ As such, the DPP's baseline settings are designed to incentivise EDBs to find more efficient ways of doing things that result in cost savings or improvements to the quality of service provided. Similarly, EDBs have the flexibility to reprioritise expenditure into projects that might produce one of these outcomes, as they see fit. Decision I1 ensures there are no barriers to considering opex solutions.
- D38 We introduced the IPA at the DPP3 reset with the rationale that the existing baseline incentives for innovation may be insufficient to drive more EDB-led innovation using a relatively low-cost mechanism.²⁵ We considered that on balance, more EDB expenditure on innovative practices would likely be in the long-term interest of consumers.²⁶

²⁴ R Poudineh, D Peng and S R Mirnezami "Innovation in regulated electricity networks: Incentivising tasks with highly uncertain outcomes" (2020) Competition and Regulation in Network Industries, 21.

²⁵ Commerce Commission "Default price-quality paths for electricity distribution businesses from 1 April 2020 – Final decision Reasons paper" (27 November 2019), paragraph 4.56.

²⁶ Ibid., paragraph 4.56.

- D39 In November 2023 we amended the IPA approval criteria to remove the requirement for an engineer/specialist report to be received prior to commencing an IPA funded project. We have since had five successful IPA applications from Vector, Wellington Electricity, Orion and Powerco, one of which involved two EDBs collaborating together.²⁷
- D40 In December 2023, the Input Methodologies (IMs) Review final decision was for the IPA to be renamed and broadened to include applications by EDBs for innovative, as well as NTS projects.²⁸ This has given more scope and flexibility to design a wider range of schemes for innovation and NTS as part of a DPP.
- D41 When considering how to apply the IMs to design and implement an INTSA, including whether we should implement an INTSA at all, we first had to determine the scope for what an INTSA should aim to achieve. We have surmised that an INTSA as a recoverable cost provides for additional funding for projects:
 - D41.1 where the benefits of the project are sufficiently uncertain such that the project would not otherwise occur if the EDB could not recover some or all of the forecast costs of the project from the EDB's INTSA allowance. This may be because some innovation projects and non-traditional solutions involve higher risk than business-as-usual solutions.
 - D41.2 where the project is unlikely to otherwise result in any financial benefits for the EDB in the five disclosure years after it expects its project will be completed. This might be because there are no explicit financial incentives for EDBs if the benefits accrue entirely to third parties or are not realised because of a change in regulatory period.

²⁷ See <u>Commerce Commission 2020-2025 electricity default price-quality path webpage</u>, for a full list of IPA projects and correspondence. Note that Wellington Electricity participated in the collaborative project as well as undertaking their own individual project too.

²⁸ Commerce Commission "Input methodologies review 2023 - Final decision - Financing and incentivising efficient expenditure during the energy transition topic paper" (13 December 2023), Chapter 6b.

- D42 We consider these criteria would accommodate projects for which there are no incentives in the regime for EDBs to undertake if additional costs are incurred, because those costs are not offset by explicit financial benefits (at least until five years after the expected project delivery date). This may be because those benefits are not realised until a later regulatory period when they are entirely captured by consumers, or they accrue entirely to third parties. In these instances, the EDB would not share in potential efficiency gains, but there may be potential benefits to consumers, and therefore it may be in consumers' interests that these projects take place.
- D43 Some innovation and NTS are likely to involve higher risk than BAU network solutions. If a new approach is not successful, the EDB might need to fall back to a BAU solution to address the network issue. This could result in an overspend against an EDB's DPP allowances, or a worsening quality performance against the quality standards and incentives. In this context, we have heard from EDBs that a key barrier to them progressing projects is internal inertia driven by these risks/concerns.
- D44 Wellington Electricity highlighted an example of this problem in detail in its submission to the IM Review process and issues paper. They provided an example where opex (for flexibility services) is substituted for capex spend that is deferred in the next regulatory period. Wellington Electricity considered the EDB is penalised by the regime for the opex overspend but not rewarded for the capex saving because a DPP reset occurs. We note that IRIS does not penalise (or not provide incentives) for all inter-regulatory period expenditure. In most instances EDBs are rewarded for making efficiency gains or cost savings.

Final decision

D45 Our final decision is to introduce an INTSA, capped at 0.8% of DPP4 MAR and with the following design characteristics:

Wellington Electricity "Submission on IM Review Process and issues paper and draft Framework paper" (11 July 2022), p. 14.

Table D1 DPP4 INTSA characteristics

Criteria type	INTSA policy criteria	
Project type – what the project is for	An innovative or non-traditional solutions project that fits within the three eligibility criteria: relates to the supply of electricity lines services; promotes the Part 4 purpose of the Act; and one or both of the following applies: (i) is unlikely to otherwise result in any financial benefits to the EDB in the five disclosure years after the date by which it indicates that it expects it will complete its project: (ii) the benefits of the project are sufficiently uncertain that the EDB would not carry out the project if it could not recover some or all of the forecast costs of the project from its INTSA.	
Approval timing	Ex ante	
Expenditure approved	Forecast	
Share of expenditure approved (%)	Up to 100% for a project that meets the criterion of being unlikely to otherwise result in any financial benefits to the EDB in the five disclosure years after the date by which it indicates that it expects it will complete its project. Up to 75% for a project that does not meet the criterion referred to immediately above.	
When and on what conditions approved expenditure is received	Expenditure may be recovered upon completion of project - when all the INTSA project outputs have been delivered.	
Maximum allowance	0.8% of each EDB's DPP4 maximum allowable revenue (MAR) over the regulatory period for one or more projects, of which 0.2% of DPP4 MAR can only be used for projects that involve the EDB working together with one or more other EDBs.	
Supporting evidence	Project specific information	
Sharing learning	Closeout report must be sent to the Commission within 50 days of project completion, unless otherwise approved	
Penalty/reward mechanism	None ³⁰	

D46 The maximum INTSA allowance for each EDB (set at 0.8% of the EDB's DPP4 MAR) is set out in Table D2 below.

This is with respect to an explicit penalty/reward mechanism specified as a part of the INTSA. Costs incurred undertaking an eligible INTSA project would still be subject to IRIS. See Commerce Commission "Input
Methodologies Review 2023 - Final decision - Financing and incentivising efficient expenditure during the energy transition topic paper" (13 December 2023), topic 5e.

- D47 Our final decision is to ring-fence 0.2% of each EDB's maximum INTSA allowance for projects that involve collaboration between the non-exempt EDB and one or more EDBs. We consider that this is an important aspect of the scheme as it should encourage shared learning and practice amongst the sector.
- D48 Our final decision is that interruptions directly associated with an approved INTSA project may be excluded from the calculation of SAIDI and SAIFI assessed values up to a cap of 1% of the respective SAIDI and SAIFI limits.

Table D2 DPP4 INTSA values (\$m)

EDB	DPP4 MAR	INTSA value
Alpine Energy	384,699	2.3
Aurora Energy ³¹	818,724	4.9
EA Networks	301,132	1.8
Electricity Invercargill	108,106	0.6
FirstLight Network	230,693	1.4
Horizon Energy	191,151	1.1
Nelson Electricity	42,452	0.3
Network Tasman	233,311	1.4
Orion NZ	1,487,457	8.9
OtagoNet	244,148	1.5
Powerco	2,529,715	15.2
The Lines Company	289,054	1.7
Top Energy	362,572	2.2
Unison Networks	929,757	5.6
Vector Lines	3,588,280	21.5
Wellington Electricity	768,258	4.6
Total	12,509,509	75.4

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³¹ Figures for Aurora Energy are indicative only. They will be finalised if Aurora Energy transitions from their CPP to the DPP in 2026.

- D49 Our intention for the INTSA has been to design a simple scheme and publish guidance to help minimise the administrative burden of the application and approval process. As part of this guidance, we intend to publish a voluntary 'Project Eligibility Assessment' (PEA) template which EDBs can choose to fill out (or use their own form) in submitting an INTSA proposal to us.
- D50 An example of how this process is intended to operate is set out below:
 - D50.1 An EDB identifies a project that it considers may fit the three INTSA eligibility criteria. It then completes a PEA template, or similar document.³² As part of this process, the EDB will:
 - D50.1.1 specify the proportion of the forecast costs of the project or programme that the EDB seeks to recover (either up to 75% or up to 100%);
 - D50.1.2 set out the purpose of the project and the steps the EDB intends to take to achieve that purpose;
 - D50.1.3 set out the outputs and expected benefits for consumers of the project for each disclosure year the EDB intends for the project to take place until it has been completed (ie, project outputs delivered);
 - D50.1.4 set out the forecast costs for each year until the project has been completed (ie, project outputs delivered);
 - D50.1.5 provide sufficient information to enable us to assess whether the EDB's project will meet the eligibility criteria;
 - D50.1.6 set out whether the non-exempt EDB intends to work together with one or more other EDBs, and if so, how, to carry out the project or programme for the INTSA proposal;
 - D50.1.7 explain whether the EDB anticipates applying an automatic quality standards exclusion and, if so, what the cause or causes of the interruptions are;³³ and

³² The PEA will not be mandatory, it will be published as an optional guidance template. EDBs will be welcome to use an alternative method of demonstrating their project's eligibility.

³³ See paragraphs D145-146 for further discussion of our decision to include an automatic quality exclusion.

- D50.1.8 any steps that the non-exempt EDB has taken, or proposes to take, to reduce the likelihood or impact on consumers of any interruptions.
- D50.2 The EDB will submit this PEA, or other document, as part of its 'INTSA proposal' to us for approval, and we will publish the proposal on our website. The EDB may likewise publish its proposal on its own website.³⁴
- D50.3 We will assess the EDB's INTSA proposal and decide whether the proposal meets the eligibility criteria. We may determine if more information is needed, such as when applicants may not have provided sufficient information for us to make an assessment. For some projects, EDBs may choose to submit an independent expert report to supplement the proposal, although this is not a strict requirement.³⁵
- D50.4 The EDB may recover up to 100% of the forecast costs of the project or programme if the project or programme that meets the eligibility criterion of being unlikely to otherwise result in any financial benefits to the EDB in the five disclosure years after the date by which it indicates that it expects it will complete its project. If the EDB does not meet this criterion, but meets the other eligibility criteria, it may recover up to 75% of the forecast costs of the project or programme. We will inform the EDB in writing if the project is approved. We will publish our response and the EDB's approved proposal on our website.
- D50.5 With approval granted, the EDB can undertake the project as specified in its proposal, confident that it can recover the forecast costs upon completion of the project, ie, on delivery of the outputs for the relevant project.
- D50.6 EDBs can also request to us to change the project's outputs and/or forecast costs after the project has been approved. This could be used if, for example, it has been identified that the project can deliver the intended purpose and benefits but be completed early, with fewer outputs delivered at a reduced cost to consumers. We will make an assessment, taking into account any information/evidence already considered for the project, and inform the EDB of our decision in writing, and publish our decision on our website.

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³⁴ Our decision is not to make this a legal requirement, although we encourage EDBs to publish their proposals on their websites when they submit them to the Commission.

³⁵ Our intention is that this is an exception at the EDB's discretion, and not a rule. The PEA/guidance is intended to help streamline applications for approval in a standardised form.

- D50.7 When the project has been completed, the approved forecast costs become available for recovery in one of two ways: ³⁶
 - D50.7.1 if the EDB included the project in its forecast recoverable costs when setting its prices for the year it recovers the revenue via prices;³⁷ or
 - D50.7.2 if the EDB has not included the project in its forecast recoverable costs when setting its prices for the year, the forecast costs enter the revenue washup and are available to be recovered when available from the washup.
- D51 Within 50 working days of completing a project, or an extended timeframe approved by us, the EDB must complete a closeout report. Our expectation is that the closeout report is comprehensive and captures the extent to which the project's purpose and expected benefits were achieved (and if not, why not), and general lessons learned such that the report supports the implementation of similar projects by other EDBs or third parties. For example, an EDB could share all relevant data (eg, open-source data) from fully funded projects that are not confidential. If the project did not achieve its expected outputs, benefits, or purpose, the closeout report should explain the EDB's view on why that is the case. The EDB will send its closeout report to us and we will publish these on our website.³⁸

³⁶ We intend that INTSA can be used to fund projects that are due to be completed in following regulatory periods. However, due to the way recoverable costs interact with the price path, during the DPP4 reset process we are unable to specify how amounts, relating to approved INTSA proposals that are not forecast to be recovered in DPP4, may be recovered in DPP5 (or a CPP). We propose to consider how to implement recovery of such amounts as part of the DPP5 reset process.

³⁷ In the case that an EDB forecasts completion of an INTSA project in its price setting statement and does not complete the project, the EDB accrues a negative washup balance and this is returned to consumers via the washup.

³⁸ Similar to when the EDB submits its proposal to the Commission, we encourage the EDB to publish its closeout report on its own website, although this will not be a legal requirement.

How the decision is aligned to the decision-making framework for the DPP³⁹

- D52 This decision aligns to the decision-making framework for the DPP, specifically to better promote the purpose of Part 4. For the reasons outlined at paragraphs D41 D44, our final INTSA scheme should better promote the s 52A(1)(a) to (c) limbs of the purpose of Part 4. This should occur by providing further incentives to innovate and invest, improve efficiency and provide services at a quality that reflects consumer demands, and share with consumers the benefits of efficiency gains.
- D53 This decision should also better promote s 54Q by providing an INTSA scheme that better incentivises demand-side management, energy efficiency, and reduction of energy losses projects that meet the INTSA project criteria.

What we heard from Stakeholders

There have been four consultation opportunities for stakeholders to provide input into our processes for designing an INTSA scheme. These are through submissions (and cross submissions) on the DPP4 issues paper and draft decision, and on each of our two innovation and non-traditional solutions workshops, including via submission on the workshop presentations and materials. One of the materials for our second workshop was the PEA, which we will work with stakeholders to improve before releasing it prior to the start of DPP4.

DPP4 issues paper

- D55 In the DPP4 issues paper we asked stakeholders to submit feedback on two key consultation areas:
 - D55.1 whether the regimes baseline incentives may be insufficient to support innovation (such that an innovation scheme was necessary);⁴⁰ and
 - D55.2 on our proposed principles and characteristics that we considered should provide the fundamental basis for any INTSA scheme.⁴¹

³⁹ For the decision-making framework, see <u>Commerce Commission "Default price- quality paths for electricity</u> distribution businesses from 1 April 2025 – Issues paper" (2 November 2023), Attachment A.

⁴⁰ Commerce Commission "Default price-quality path for electricity distribution businesses from 1 April 2025 – Issues paper" (2 November 2023), see consultation question 22, p. 224.

⁴¹ Ibid., consultation question 23, p. 224.

- In addition to responses for these two consultation areas, feedback from submitters also focused on the IPA and flexibility services, which we provide our response to in **decision U2**. We also asked for feedback on our proposals for energy efficiency and demand side management, and for reduction of energy losses (s 54Q), which will be discussed in **decisions U2** and **U3** in this attachment.
- D57 Many submitters to the DPP4 issues paper confirmed that the baseline incentives in the DPP may not be sufficient for innovation where the benefits go to third parties or are not likely to be realised by the EDB in future regulatory periods. For instance, Horizon Networks submitted:⁴²

Horizon Networks agrees that the baseline incentives are insufficient to support innovation and there is a need for an innovation scheme to enable EDBs to explore opportunities and try new ways of doing things. The existing innovation scheme is not doing enough to incentivise EDBs to try new things, as EDBs are only rewarded under limited circumstances and when the innovation is a success.

D58 Wellington Electricity submitted on how in some instances, innovation may not be incentivised:⁴³

Where the primary benefit of the innovation is the customers and EDBs do not expect to recover their share of the innovation costs via the IRIS or quality incentives. The current IRIS issue of not being able to substitute opex and capex across regulatory periods exacerbates this.

- D59 We recognise that there should be further incentives for innovative or NTS projects for DPP4, which is why we have designed the INTSA as such. Part of our final decision is to allow some projects a 100% share of project costs that are recoverable. This should help support projects that mitigate the problem as outlined above by Wellington Electricity.
- Of those who provided suggestions for the scheme characteristics, many could already be accommodated under the characteristics that we proposed in the DPP4 issues paper. However, some stakeholders submitted that a requirement for an INTSA be to share the learning from projects.⁴⁴ We agree and have introduced a new characteristic 'sharing learning' which is a core feature of the INTSA. Our final decision amends this characteristic slightly, which we outline at paragraphs D147-148.

⁴² Horizon Networks "DPP4 Issues paper submission" (19 December 2023), p. 18.

⁴³ Wellington Electricity "DPP4 Issues paper submission" (19 December 2023), p. 67.

⁴⁴ Ibid., p. 68.

D61 Some stakeholders also suggested that we should provide a process or guide for how to make an INTSA application. Both Electra and Wellington Electricity submitted on this idea, with Electra submitting:⁴⁵

We encourage the Commission to release an innovations and non-traditional solutions allowance process or a guide as part of the DPP4 reset. The lack of an understood process makes it uncertain when non-exempt EDBs will recover the innovating costs and when not. Over time, the Commission's views will be established as non-exempt EDBs apply for the allowance, and their projects are accepted or rejected, as the case may be, but this precedent will take time.

D62 Wellington Electricity submitted:46

Providing guidelines and examples to support the application of the final scheme. We are applying for allowances for two innovation projects under the current scheme and we found the Vector example and feedback from the Commission on our interpretation of the process very useful. We believe that robust guidelines and examples would reduce/eliminate the risks associated with expost applications and reduce application timelines and costs.

- D63 We have taken this feedback into consideration in our implementation of the INTSA scheme for DPP4. We will release guidance on how to apply for the INTSA scheme, including a PEA template before the DPP4 period begins. We intend to work with EDBs on this guidance, to ensure the guidance is helpful and assists EDBs in applying for projects.⁴⁷
- D64 Aside from the two key consultation areas, much of the feedback we received from the DPP4 issues paper was based around perceptions of the IPA that prevented it from being used to greater effect by EDBs.⁴⁸ These included:
 - D64.1 the value of the total allowance was too small;⁴⁹
 - D64.2 the long lag time between incurring costs and cost recovery;
 - D64.3 the time of project approval after project completion meant that EDBs had to fund projects at their own risk and that uncertainty around cost recovery was a deterrent; and

⁴⁵ Electra "DPP4 Issues paper submission" (19 December 2023), p. 4.

⁴⁶ Wellington Electricity "DPP4 Issues paper submission" (19 December 2023), p. 70.

⁴⁷ Please see paragraphs D143-144 for further discussion of guidance we intend to release.

⁴⁸ For eg, see Powernet "DPP4 Issues paper submission" (19 December 2023), p. 14.

⁴⁹ For eg, see Vector "DPP4 Issues paper submission" (19 December 2023), paragraph 174 (b).

- D64.4 the requirement for an independent expert report for every project regardless of its value/scale was disproportionate.
- D65 Wellington Electricity submitted more favourably on the IPA, and said:50

We think the general structure of the IPA is easy to use and is low cost. We have commissioned two expert reports verifying the projects met the innovation definition. The cost to do this was modest and our experts were able to produce them quickly. The recent changes made to the timing of when the report is needed was a significant improvement.

- This feedback on the determination amendment that changed the timing of when the independent expert report is required, was helpful for our INTSA design process. While we are not making an independent expert report a mandatory requirement for the INTSA, we consider that one could be used voluntarily to supplement the applications from EDBs for projects that are higher value or complex.
- Overall, the IPA has not been received by EDBs as we would have hoped when it was introduced. We have taken this feedback onboard, and it has influenced the design of the final INTSA.

First INTSA workshop

- In our first 'Innovation and non-traditional solutions' workshop, held on 4 March 2024, we discussed some relatively high-level, conceptual designs for the INTSA to gauge stakeholder's general aspirations for the scheme. We consider that the workshop was helpful, particularly as there was a significant level of engagement.
- In response to the workshop, requiring the dissemination of learning as a part of an INTSA scheme was reinforced by some stakeholders. We agreed with this sentiment and included it as a new characteristic called 'sharing learning' in our draft INTSA design. We have opted to retain this characteristic, albeit slightly amended for our final decision, which we discuss further at paragraphs D147-148.

⁵⁰ Wellington Electricity "DPP4 Issues paper submission" (19 December 2023), p. 65.

D70 Collaboration was mentioned in feedback to the DPP4 issues paper, and also featured heavily in submissions to the first workshop. Aside from Unison, all those who submitted on the first workshop suggested in some way that we should consider how collaboration could feature in an INTSA. For instance, Powerco submitted:51

We would be keen to further explore opportunities for formally pooling resources for innovation projects across multiple EDBs. We see that this could support better resourced initiatives with increased scope from that possible at individual EDB level. Additionally, it could facilitate the execution of projects with a higher level of professionalism and enhanced governance arrangements. With such collaboration, knowledge sharing among EDBs would be far more efficient.

D71 The Lines Company (TLC) submitted something similar:52

TLC urges the Commission to encourage a collaborative and sharing approach between all parties that could contribute to an innovative and nontraditional solution project – this includes distributors working together. For example, TLC is a member of the Northern Energy Group (NEG), and it is possible that we may work with other NEG members on projects for the long-term benefit of consumers.

- D72 We have considered how collaboration could feature in the draft and final INTSA. At the draft, we stated that we encourage collaboration on INTSA projects, as long as all collaborating EDBs submit their own individual applications that set out their forecast share of the project's costs. We considered that pooling resources would be viable under the draft INTSA, as long as within that pool, individual costs are clearly divided and explained by any EDB involved, in their own INTSA application.
- D73 For the final INTSA, we have decided to increase the value of the allowance by 0.2%, with this increase ring-fenced for collaborative projects where the applicant(s) of the INTSA proposal work together on the project with one or more other EDBs. Our position on individual project costs and pooling remains the same.
- D74 In its submission to the first workshop, Orion noted two key implementation details that we consider ought to be discussed here. It submitted:⁵³

We submit that the Commission should clarify if internal resources can be charged to an allowance application or not. We submit in favour of internal costs covered where it is common practice for the business to charge across business units e.g. IT

⁵¹ Powerco "Submission on DPP4 Innovation workshop" (19 March 2024), p. 1.

⁵² The Lines Company "Submission on the Innovation and non-traditional solutions workshop" (19 March 2024), paragraph 2.

⁵³ Orion "Submission on the Innovation and non-traditional solutions workshop" (19 March 2024), p. 6.

input to a project would be an example....We submit that the Commission should clarify if contracted consultancy can be charged to an allowance application or not.

D75 While all costs recovered for an approved INTSA project must relate to electricity lines services, our final decision does not place conditions on the individual cost breakdown for INTSA projects. If we approve a project under the criteria, the EDB can recover the relevant project costs (which may include those mentioned by Orion) as forecast in the EDB's proposal, at the EDB's discretion, on delivery of the project outputs.⁵⁴

DPP4 draft decision

We considered feedback provided in response to the issues paper and the first workshop, using this to inform the decisions for the INTSA scheme that we proposed in our draft decision. ⁵⁵ We received strong support for our draft INTSA decision, with feedback focussed on a few key areas. These were primarily in relation to the maximum allowance for the INTSA; on the riskier than BAU criterion; the 'highly ambitious option' for an additional scheme with a far higher allowance and a reallocation of risk from consumers to suppliers; and several implementation or process details. Energy efficiency was also a key theme in response to the draft decision, and we address this in **decision U2**.

D77 The most prominent piece of feedback we received on the INTSA design was in response to the project eligibility criteria for INTSA projects - specifically the 'riskier than BAU' criterion. Submitters generally considered that this criterion should be substituted for 'the benefits of the project or programme are uncertain', or language to this effect.

⁵⁴ An EDB would allocate those costs according to the cost allocation IMs and ensure that costs are broken down by individual EDBs for collaborative projects.

⁵⁵ Commerce Commission "Default price-quality paths for electricity distribution businesses from 1 April 2025

– Draft Reasons paper" (29 May 2024), see Attachment D.

- This suggestion was submitted by the ENA, who suggested that the draft decision was "not well aligned with the purpose of the INTSA."⁵⁶ Others suggested that riskier than BAU was "quite subjective";⁵⁷ "ambiguous";⁵⁸ "could prevent the INTSA being used to monetise and reward the value of flexibility";⁵⁹ or otherwise supported the ENA's suggestion.
- D79 We intend to assess each proposal against the INTSA criteria with regard for the context, noting that it is possible the same technology or approach can be trialled in different scenarios across a network. Taking account of the submissions from the ENA and others, we have decided to change the riskier than BAU criterion, which we discuss in further detail at paragraphs D113-115.
- D80 Many stakeholders submitted that we should increase the cap for the INTSA. In some cases, this was as much as 5% which is a threshold we raised with respect to the 'highly ambitious option.'60 We posed the highly ambitious option to gauge whether there was interest in an INTSA scheme that provided for a far greater cap, but with far greater protections for consumers, in the form of a reallocation of risk from consumers to suppliers. We have decided not to proceed with this option for our final decision, which we discuss further at paragraphs D166-170.
- D81 Other submitters suggested that the cap should be increased to further incentivise innovation. MEUG suggested that the cap "may not be material enough to drive the change that is needed" at this reset.⁶¹

⁵⁶ Electricity Networks Aotearoa (ENA) "Submission on EDB DPP4 draft decisions" (12 July 2024), p. 13.

⁵⁷ Major Electricity Users Group (MEUG) "Submission on EDB DPP4 draft decisions" (12 July 2024), paragraph 28.

⁵⁸ Powerco "Submission on EDB DPP4 draft decisions" (12 July 2024), paragraph 86.

⁵⁹ FlexForum "Submission on EDB DPP4 draft decisions" (12 July 2024), p. 8.

⁶⁰ We explain this distinction, and our consideration of the 5% ambitious option in further detail in the *Highly ambitious option* section.

⁶¹ Major Electricity Users Group (MEUG) "Submission on EDB DPP4 draft decisions" (12 July 2024), paragraph 28.

- Powerco suggested that there was "no clear rationale" for 0.6% and advocated for a 2.5% cap to account for larger projects. ⁶² Business Energy Council said "We believe it would be beneficial for the Commission to increase the cap". ⁶³ Rewiring Aotearoa supported increasing the cap above 0.6%, although their support was conditional on consumers and/or consumer organisations being consulted on INTSA projects. ⁶⁴
- D83 We have considered this feedback to increase the cap, as well as feedback on collaboration. Our final decision is to increase the cap from 0.6% to 0.8% of EDB DPP4 MAR, but to ring-fence this increase for collaborative projects where the non-exempt EDB putting forward the INTSA proposal works together on the project with one or more other EDBs. We provide our reasoning and justification for this decision at paragraphs D135-140.
- D84 We received multiple submissions asking for clarity on the scope of projects that could be accommodated under the INTSA. For instance, Vector suggested that:⁶⁵

Given that one of the main criteria of an INTSA project is to promote the Part 4 purpose of the Act, we expect that net zero projects (i.e., projects where the "INTSA outputs" are to reduce carbon emissions) are in scope.

D85 Similarly, SolarZero submitted on INTSA scope in relation to resilience:⁶⁶

New technologies such as solar and batteries provide a new approach to resilience, as SolarZero proved during Cyclone Gabrielle. INTSA should be used to provide funding for EDB to identify new ways to increase resilience via the deployment of distributed energy resources.

D86 We have designed the INTSA specifically so that it is not prescriptive. Instead, our intention is that it is broad enough to encompass a diverse range of innovative and NTS projects – provided they meet the eligibility criteria. It follows that the scope of the INTSA could possibly include resilience or net zero projects, acknowledging that a key hurdle for such projects will be in meeting the definition of 'electricity lines services'. We expect an EDB to demonstrate how its project is eligible, but we do not hold any preconceptions about the specifics of those projects.

⁶² Powerco "Submission on EDB DPP4 draft decisions" (12 July 2024), paragraph 85.

⁶³ Business Energy Council (BEC) "Submission on EDB DPP4 draft decisions" (12 July 2024), paragraph 20.

⁶⁴ Rewiring Aotearoa "Submission on EDB DPP4 draft decisions" (12 July 2024), p. 3.

⁶⁵ Vector "Submission on EDB DPP4 draft decisions" (12 July 2024), paragraph 131.

⁶⁶ SolarZero "Submission on EDB DPP4 draft decisions" (12 July 2024), p. 11.

D87 On the INTSA scheme and innovation generally, MEUG submitted:⁶⁷

The INTSA is still described as an additional mechanism for EDBs, with EDBs having to apply for it. This reinforces the status quo practice of EDBs continuing to build more network in line with historic approaches. Innovation should not be seen as an "add on;" rather, it should be considered BAU when operating distribution networks.

- D88 In their DPP4 cross-submission, Unison disagreed with this comment, saying "non-traditional solutions will increasingly be implemented by EDBs following successful trials (some through INTSA and some otherwise absorbed into expenditure allowances). The regulatory regime, including IRIS incentivises that outcome."⁶⁸
- D89 We consider that the INTSA is additional only for certain types of projects that meet the criteria and agree with Unison that the regime's baseline settings already incentivise innovation (and NTS). We do not consider that the INTSA is the only vehicle for undertaking innovation and NTS. Furthermore, our intention is that over time, the INTSA should help encourage EDBs to incorporate successful INTSA projects into BAU practices.
- D90 Rewiring Aotearoa suggested that consumers be able to consult on INTSA projects:⁶⁹

We recommend the Commission include an opportunity for consumers and consumer organisations to comment on INTSA proposals, as an input to support the Commission's assessment of whether a proposal promotes the Part 4 purpose of the Act. We do not want EDBs to use INTSA on trophy projects that do not benefit their consumers, yet see consumers paying 100% of the project.

D91 The INTSA is designed to be a relatively low-cost mechanism, aligned with the purpose of DPP regulation under s 53K. Given this design and the administrative burden that a consultation requirement would impose on EDBs, we have decided not to adopt Rewiring Aotearoa's suggestion. However, this would not prevent an EDB from voluntarily choosing to consult consumers if it considered it appropriate. It would also be open to us to choose to consult on a draft INTSA project decision, if we considered it appropriate in the circumstances.

⁶⁷ Major Electricity Users Group (MEUG) "Submission on EDB DPP4 draft decisions" (12 July 2024), paragraph 28.

⁶⁸ Unison Networks "Cross-submission on EDB DPP4 draft decisions" (2 August 2024), p. 3.

⁶⁹ Rewiring Aotearoa "Submission on EDB DPP4 draft decisions" (12 July 2024), p. 3.

Second INTSA workshop

- D92 We held our second INTSA workshop on the 14th of August 2024, which focussed on the implementation design and application process for the scheme.⁷⁰ Our primary intention was to engage with stakeholders about changes to the INTSA that would make it easier for EDBs to use (and the Commission to process). We also provided a version of the PEA and guidance before this workshop.
- During the workshop, there was a high level of engagement. We heard feedback on our materials (including PEA and guidance), including on phasing projects and ringfencing expenditure for collaborative projects. We also received a considerable amount of engagement on the scope of projects for the INTSA, and what type of costs could be included in INTSA proposals (such as whether internal resource can be included as project costs).⁷¹
- D94 Some of the submissions we received in response to this workshop did not agree with ring-fencing collaboration. Vector questioned the need to ring-fence,⁷² the ENA considered the industry is best placed to determine levels of collaboration,⁷³ and Orion did not support this idea.⁷⁴ On the other hand, Powerco did support "an additional allowance for collaborative projects."⁷⁵ In this context, our final decision is to ring-fence 0.2% of EDBs INTSA allowances for collaborative projects, and we explain this decision at paragraphs D135-140.

⁷⁰ See the first result of this page to access the recording of this workshop.

⁷¹ See <u>Orion "Submission on EDB DPP4 Innovation 'INTSA' implementation design workshop" (27 August 2024)</u>, paragraph 16.

⁷² <u>Vector "Submission on EDB DPP4 Innovation 'INTSA' implementation design workshop" (28 August 2024),</u> paragraph 7.

⁷³ ENA "Submission on EDB DPP4 Innovation 'INTSA' implementation design workshop" (28 August 2024), p. 2.

⁷⁴ Orion "Submission on EDB DPP4 Innovation 'INTSA' implementation design workshop" (27 August 2024), paragraph 6.

⁷⁵ Powerco "Submission on EDB DPP4 Innovation 'INTSA' implementation design workshop" (28 August 2024), p. 1.

The ENA, Powerco and Vector agreed with the idea of phasing projects. The ENA and Vector submitted on the basis of being able to submit single applications and recover costs based on milestones for larger scale projects. For instance, the ENA stated "It would make sense to allow single applications to have multiple milestones to recover costs as elements of the project are completed, rather than waiting until the end of a project "78."

Our final decision does not include any amendments to the INTSA determination to formally provide for phased projects.⁷⁹ We do, however, consider that phasing some projects may be sensible, particularly where the project is complex and may evolve over time.

In practice, this is likely to mean breaking up complex applications into smaller ones based around key milestones. Upon a milestone being achieved, a new application can be made which considers the lessons learned to that point and any changes that would need to be made to the future direction of the project. Each application will still need to meet the INTSA criteria. However, we anticipate that approvals may be streamlined given they are building on previously approved milestones within the same project. We will discuss this further in the INTSA guidance that we will release in early 2025.

⁷⁶ See ENA "Submission on EDB DPP4 Innovation 'INTSA' implementation design workshop" (28 August 2024), p. 3; Powerco "Submission on EDB DPP4 Innovation 'INTSA' implementation design workshop" (28 August 2024), p. 1; and Vector "Submission on EDB DPP4 Innovation 'INTSA' implementation design workshop" (28 August 2024), paragraph 3.

⁷⁷ See ENA "Submission on EDB DPP4 Innovation 'INTSA' implementation design workshop" (28 August 2024), p. 3; and Vector "Submission on EDB DPP4 Innovation 'INTSA' implementation design workshop" (28 August 2024), paragraph 3.

⁷⁸ ENA "Submission on EDB DPP4 Innovation 'INTSA' implementation design workshop" (28 August 2024), p. 3.

⁷⁹ We note that Schedule 5.3 provides for an INTSA proposal to be a project or programme. The IMs definition of 'programme' as it applies here is "means a group of related projects with a common purpose".

Therefore, while we consider phasing projects may be useful, EDBs can still submit an INTSA proposal for a programme.

Multiple submitters also provided feedback on publication of applications and sharing learning for INTSA projects. This included on timeframes for the closeout report as well as confidential/commercially sensitive information. We explain our decision for sharing learning at paragraphs D147-148. Unison and Orion both submitted that third parties could be affected by publishing applications as soon as we receive them.⁸⁰ Orion also said:⁸¹

First, applications may contain commercially sensitive information that should not be disclosed. It would be inappropriate for commercially sensitive information, including about the nature of the proposal, to be publicly released, particularly before the project had funding and is confirmed to be going ahead.

D99 We consider that the DPP4 determination's INTSA provisions for confidential information already provide for such considerations by enabling the EDB to request that information not be published. We have not adopted the suggestion to change when we publish applications, as it ensures transparency and supports the early sharing of knowledge across the sector.

Analysis conducted

D100 Our final INTSA design has taken into consideration stakeholder feedback, the specific circumstances of the DPP4 context, international examples, and the learnings from the IPA, among other factors. We address here other suggestions or feedback for specific characteristics of the INTSA scheme design that have not already been addressed in the prior section.

D101 We have heard from submissions to the issues paper, draft decision and both workshops that innovation and NTS should be further incentivised. Our intention with the final INTSA design is to provide additional funding for EDBs to test and trial new ideas and technology, to improve efficiency for the long-term benefit of consumers. We agree that more innovation and NTS that delivers the desired outcomes is likely to better promote the long-term benefit of consumers in the current context.⁸²

⁸⁰ See Orion "Submission on EDB DPP4 Innovation 'INTSA' implementation design workshop" (27 August 2024), paragraph 32-24; Unison Networks "Submission on EDB DPP4 Innovation 'INTSA' implementation design workshop" (28 August 2024), p. 2.

⁸¹ Orion "Submission on EDB DPP4 Innovation 'INTSA' implementation design workshop" (27 August 2024), paragraph 32.

We note that none of the four outcomes under s 52A(1)(a) to (d) of the Part 4 purpose are paramount and, further, the outcomes are not separate and distinct from each other, or from s 52A(1) as a whole. Rather,

- D102 The final INTSA scheme reflects our judgment that aims to balance greater ambition for innovation and NTS with consumer protections and potential impact on consumer bills.
- D103 Lastly, we will develop a PEA and guidance, which will provide a voluntary template to assist EDBs with their INTSA applications. We will release this prior to the start of DPP4.

Comparison to the IPA and consideration of international schemes

- D104 In the process for designing the INTSA, we have considered how our draft and then final decision compares to the current IPA at DPP3, and international innovation schemes.
- D105 As noted in the 'what we heard from stakeholders' section, we received a significant amount of feedback to the DPP4 issues paper on the IPA. The feedback (which is discussed at paragraphs D64-67), can be expressed briefly as the IPA protections for consumers (ex post, independent expert report, 50% share of project expenditure recoverable) were disproportionate to the maximum value of the scheme.
- D106 We have taken this feedback into consideration in the design of the INTSA. Furthermore, since publishing the draft decision, we have received and processed four successful IPA applications, including one that involves collaboration between two EDBs. These have been useful in providing us with some further understanding for the kinds (and costs) of projects that EDBs may wish to use the INTSA for.
- D107 It is important that we retain proportionate protections for consumers. In acknowledging this, and with respect to the IPA our decision is to implement an INTSA that is an improvement in three main areas: accessibility, financial value and scrutiny.⁸³

we must balance them and must exercise judgement in doing so. When exercising this judgement, we are guided by what best promotes the long-term benefit of consumers. See Wellington International Airport Ltd and Ors v Commerce Commission [2013] NZHC 3289, at [684], and [1391]-[1492].

⁸³ See <u>Commerce Commission "Default price-quality paths for electricity distribution businesses from 1 April 2025 – Draft Reasons paper" (29 May 2024)</u>, paragraph D116 for our explanation of how we have improved these areas of the INTSA.

- D108 In the process of designing the INTSA, we have researched international innovation schemes. In particular, Ofgem's Network Innovation Allowance (NIA)⁸⁴ and the Australian Energy Regulator (AER)'s Demand Management Incentive Scheme (DMIS)⁸⁵ and Demand Management Innovation Allowance Mechanism (DMIAM).⁸⁶ These schemes and jurisdictions were among those suggested to us in feedback as providing a good basis for analysis from which to take learnings from.
- D109 We considered the NIA in our INTSA design with particular regard to their share of project expenditure that is recoverable,⁸⁷ their eligibility requirements,⁸⁸ and the PEA.⁸⁹ In terms of the application process, we have drawn on the approach of having a PEA template, as well as having eligibility requirements (the project eligibility criteria).
- D110 We have also considered the AER's DMIS and DMIAM. Each of these schemes were introduced to increase focus demand side management identified by the AER as a key area to incentivise for their context. The DMIAM is designed to test and trial new solutions, whereas the DMIS is designed to further incentivise the implementation of demand side management projects that may be more proven.
- D111 We consider that the INTSA should allow for both kinds of projects at which the DMIS and DMIAM are targeted (as well as non-demand side management projects), where the criteria are met.

INTSA characteristics

D112 Project type – our final decision is to retain the three eligibility criteria, but to amend the third. Rather than create a 'project type' definition that is overly prescriptive, the INTSA provides three criteria which any (non-exempt) EDB must meet for any INTSA project to be approved.

D113 These three criteria are:

D113.1 the project or programme relates to the supply of electricity lines services;

⁸⁴ Ofgem "RIIO-2 NIA Governance Document: Version 3" (17 February 2023).

⁸⁵ <u>Australian Energy Regulator "Demand Management Incentive Scheme" (14 December 2017)</u>.

⁸⁶ <u>Australian Energy Regulator "Demand management innovation allowance mechanism assessment 2019–20, 2020–21 and 2021–22" (2023) . (Viewed on 14 May 2024).</u>

⁸⁷ The NIA offers 90% share of project expenditure that is recoverable for its Distribution licensees.

⁸⁸ Ofgem "RIIO-2 NIA Governance Document: Version 3" (17 February 2023), p. 17-19.

⁸⁹ Ofgem "RIIO-2 NIA Governance Document: Version 3" (17 February 2023), paragraph 3.19.

- D113.2 the project or programme promotes the Part 4 purpose of the Act; and D113.3 one or both of the following applies:
 - D113.3.1 the project or programme is unlikely to otherwise result in any financial benefits to the EDB in the five disclosure years after the date by which it indicates that it expects it will complete its project:
 - D113.3.2 the benefits of the project or programme are sufficiently uncertain that the EDB would not carry out the project or programme if it could not recover some or all of the forecast costs of the project from its INTSA.
- D114 Our final decision amends the eligibility criteria to refer to uncertain financial benefits, replacing language in the draft referring to riskier than BAU. We note this change at paragraphs D77-79, where submissions prompted us to reconsider how 'riskier than BAU' may be assessed in practice. We intend to assess each INTSA proposal against the eligibility criteria, taking account of the context and nature of the proposed project. In this respect, we note that the riskier than BAU criterion may have created confusion around what type of projects would be eligible.
- D115 We have drawn on the ENA (and others) suggestions to focus on 'uncertain financial benefits', although widening this scope to include all benefits (rather than just financial). We consider this is appropriate given that focussing entirely on financial benefits could risk funding projects that might otherwise occur because other (non-financial) benefits may be more certain and incentive enough. We consider this is more likely to be in the long-term benefit of consumers by ensuring projects are not funded by the additional INTSA allowance that should be funded via baseline allowances, in line with the s 52A(1)(d) limb of the Part 4 purpose.

- Our final decision also simplifies and streamlines the INTSA criteria by moving the criterion for when EDBs wish to recover up to 100% share of project costs into the eligibility criteria (see paragraph D112.3.1 above). In line with submitter feedback at the second INTSA workshop, our final decision also adds a time limit to this criterion:⁹⁰ Where an EDB wishes to seek approval to recover an amount that is more than 75% of project costs, it must demonstrate how the project is unlikely to otherwise result in any financial benefits to the EDB within a five-year period of the EDB's expected date of project completion. We discuss our rationale for this change further down in this section.
- D117 In relation to project eligibility, some submitters advocated that a share of the INTSA should be ring-fenced for energy efficiency projects. For example, one submitter, Ecobulb, justified this suggestion to ring-fence INTSA for energy efficiency saying: "This avoids the risk of non-exempt EDBs spending all their INTSA on hightech devices and systems to aggregate load and control devices such as batteries to reduce system peaks rather than on energy efficiency." 91
- D118 Vector disagreed with this suggestion in its cross-submission:⁹²

On the other hand, there are a decent number of suggestions that a portion or full allocation of the INTSA be specifically allocated for energy efficiency schemes. While we fully agree that energy efficiency (and demand side management) should be in scope for the INTSA, we would not want it restricted in this way.

- D119 We have not adopted suggestions to ring-fence the INTSA for particular types of projects and/or technology. The DPP regime is relatively low-cost and technology agnostic, and incentivise expenditure where a technology, process, step, programme or other practice can result in a cost efficiency or improved quality of service. This includes the INTSA, and as such, we remain agnostic to the method in which these results may be achieved.
- D120 We consider that the final INTSA project eligibility criteria are broad enough to accommodate a diverse range of innovative and NTS projects and avoid unintentionally excluding a project that should otherwise be appropriate for an INTSA.

⁹⁰ During the second INTSA workshop, Orion asked whether there was a time period for when 100% of project costs could be recovered. See the first result of <u>this page</u> to access the recording of this workshop.

⁹¹ EcoBulb "Submission on EDB DPP4 draft decisions" (2 July 2024), p. 4.

⁹² Vector "Cross-submission on EDB DPP4 draft decisions" (2 August 2024), paragraph 86.

- D121 **Approval timing** our final decision is to retain ex ante approval timing, unchanged from our draft decision. The trade-off between ex ante and ex post approval timing balances project risk between consumers and EDBs. Ex post approval protects consumers from funding projects that may not succeed but exposes them to the risk of paying for actual project costs that have not been incentivised to find savings. In contrast, ex ante approval gives EDBs confidence to proceed with approved projects. However, ex ante approval can take time to process which can delay when a project is able to commence.
- D122 We received support for our decision to make the draft INTSA ex ante from Wellington Electricity, Vector and Orion. Orion said that the change to ex ante (from ex post for the IPA) was "beneficial" and Wellington Electricity said, "we think ex ante approval makes sense". 94
- D123 FlexForum suggested that we change approval timing to ex post contingent on projects valuing under \$50,000, to reduce the administrative burden for smaller INTSA projects. 95 We consider such a measure, while it may reduce administrative burden for some projects, would add further complexity to the INTSA, and unlikely to be aligned to the requirement for a relatively low-cost DPP. 96 As such, our final decision, unchanged from the draft, is to proceed with ex ante approval timing to give clarity to EDBs applying for an INTSA.
- D124 **Expenditure approved** our final decision is to retain the expenditure approved as forecast, which is unchanged from our draft decision. An alternative to approving forecast project costs that we considered was approving the actual costs of the project (after the project occurs). Given that projects approval is ex ante, it is consistent to approve costs as known at that time as well. We also consider that approval of forecast costs creates an efficiency incentive for EDBs to control costs once the forecast is approved, consistent with s 52A(1)(b) of the Act.

⁹³ Orion "Submission on EDB DPP4 draft decisions" (11 July 2024), p. 11.

⁹⁴ Wellington Electricity "Submission on EDB DPP4 draft decisions" (12 July 2024), p. 37.

⁹⁵ FlexForum "Submission on EDB DPP4 draft decisions" (12 July 2024), p. 6.

⁹⁶ See s 53K of the Commerce Act.

- D125 In response to the second workshop, the ENA suggested that forecast costs are approved with allowable recovery of actual costs for INTSA projects.⁹⁷ Vector suggested something similar: actual recovery but with an over/under of 20% of costs forecasted.⁹⁸ We consider that the ENA's suggestion, and to a lesser extent Vector's, reduces the incentive for EDBs to control costs and is therefore less likely to be in consumers interests.
- D126 While Vector's suggestion might result in some project costs being adjusted downward, benefiting consumers, we are unsure whether this would be likely to occur often in practice. Based on our experience, we consider that cost overruns are more likely, and on balance consider that approving forecast costs is appropriate and more consistent with an ex ante incentive regime. However, given the intention of the INTSA is to trial riskier than BAU solutions, we have introduced a mechanism to amend projects so that consumers may benefit by projects being adapted as they progress and new information is obtained (see paragraphs D151-152).
- D127 Share of project costs that are recoverable our final decision is to retain up to 75% or up to 100% share or project expenditure that is recoverable for INTSA projects. 99 However, for 100% share of project costs that are recoverable, our final decision is to:
 - D127.1 make this requirement part of the project eligibility criteria; and
 - D127.2 add a time limit of five years from the EDB's expected date of project completion, which we discuss below.

⁹⁷ ENA "Submission on EDB DPP4 Innovation 'INTSA' implementation design workshop" (28 August 2024), p. 3.

⁹⁸ <u>Vector "Submission on EDB DPP4 Innovation 'INTSA' implementation design workshop" (28 August 2024),</u> paragraph 3.

⁹⁹ Note that EDBs could propose projects and claim a lower share of project expenditure that is recoverable (for eg, if they have a limited amount remaining in their total INTSA allowance for the DPP4 period).

D128 Our approach in the draft decision of setting the share of project expenditure that is recoverable at up to 75% or up to 100% of project costs was relatively well received. Some stakeholders suggested that we provide up to 100% share of project expenditure that is recoverable for all projects, or for energy efficiency projects. Tor instance, Consumer New Zealand submitted: 102

To ensure EDBs are encouraged to invest in non-lines alternatives, 100% of project expenditure should be recoverable for INTSA projects. This includes investment in strategic distributed generation systems, in energy efficiency devices in homes and businesses, and in replacing less efficient devices, for the purpose of deferring lines spending.

- D129 Part of our approach for the INTSA is to encourage EDBs to invest in NTS, but we consider that making every project eligible for recovery of up to 100% of costs recoverable is not aligned to the overall policy intent. Our intent with the INTSA is to provide further incentive for EDBs to invest in innovation and NTS, in effect to partially financially de-risk these projects. We consider that for most INTSA projects, EDBs should have some 'skin in the game' and should contribute to some of the project's costs. This should help to incentivise EDBs to take reasonable care in their forecast project costs, as well as when conducting the project itself to take the necessary steps to promote its success.
- D130 We do envisage circumstances where it would be appropriate for EDBs to recover 100% of project costs from INTSA projects, specifically where they are unlikely to otherwise receive any financial benefits within five years of the EDB's expected date of project completion. Our final decision makes the eligibility for these projects as a feature of the three eligibility criteria. We have made this change in conjunction with changing to the 'sufficiently uncertain benefits' criterion (for when EDBs wish to recover up to 75% of project costs). We consider that this is appropriate because for projects that are eligible to recover up to 100% of costs, these benefits may not be uncertain.

¹⁰⁰ For eg, see Wellington Electricity "Submission on EDB DPP4 draft decisions" (12 July 2024), p. 37, who supported the approach.

¹⁰¹ Ecobulb suggested that up to 100% of project expenditure be recoverable for energy efficiency projects. See EcoBulb "Submission on EDB DPP4 draft decisions" (2 July 2024), p. 4.

¹⁰² Powerswitch - Consumer NZ "Submission on EDB DPP4 draft decisions" (12 July 2024), p. 5.

- D131 Our final decision is to add a five-year time limit to the criterion for recovering 100% of project costs. This addition reflects our consideration of a point Orion raised during the second INTSA workshop on the approach to this criterion in the draft decision, which had no time limit. 103 Upon further consideration, we consider that the requirement in the draft decision to determine whether any financial benefits will ever result from a project may be challenging for EDBs to meet and for us to assess.
- D132 We consider that a five-year time limit will still likely meet the policy intent as it aligns with the IRIS retention period. We consider that creating incentives for such expenditure outweighs concerns that EDBs may be able to 'double dip' on financial benefits if the project results in future financial benefits.
- D133 When and on what conditions approved expenditure is received our final decision, unchanged from the draft, is that expenditure may be recovered upon completion of the project that is when the project outputs have been delivered.
- D134 We do not consider that it would be appropriate to allow for forecast costs to be recovered before a project is completed, as this may mean we would need to implement a complex clawback mechanism if a project did not take place (or the outputs were not delivered). Wellington Electricity agreed with this approach and reasoning.¹⁰⁴
- D135 **Maximum allowance** Our final decision is to increase the maximum allowance to 0.8% of EDB DPP4 maximum allowable revenue (MAR), with 0.2% ring-fenced for collaborative projects where the applicant works together on the project with one or more other EDBs.
- D136 Our decision is that 0.8% of an EDB's MAR is an appropriate limit; this will equate to just over \$90 million in total for non-exempt EDBs. 105 This is a significant step up from what was offered by the IPA, particularly when percentage increases in baseline revenue allowances are accounted for per EDB. Factors and analysis considered before deciding on this figure, include: 106

¹⁰³ During the second INTSA workshop, Orion asked whether there was a time period for when 100% of project costs could be recovered. See the first result of <u>this page</u> to access the recording of this workshop.

¹⁰⁴ Wellington Electricity "Submission on EDB DPP4 draft decisions" (12 July 2024), p. 37

¹⁰⁵ In this context, MAR is our forecast of allowable revenue for EDBs for DPP4, net of pass through and recoverable costs, and net of any washup balance.

¹⁰⁶ See Commerce Commission "Default price-quality paths for electricity distribution businesses from 1 April 2025 – Draft Reasons paper" (29 May 2024), paragraphs D93-96 for further articulation of these points.

- D136.1 engagement with stakeholders;¹⁰⁷
- D136.2 international innovation schemes;
- D136.3 the maturity of innovation and NTS in the sector; and
- D136.4 general ambition to improve network practices and services. 108
- D137 We have applied our DPP decision making framework in arriving at this decision. In our assessment, increasing the INTSA allowance to 0.8% of EDB DPP4 MAR is a material increase and will allow EDBs to innovate and invest consistent with s 52A(1)(a) of the Act. However, we decided not to increase it further than 0.8% to balance promoting s 52A(1)(a) but without imposing undue price increases on consumers as a result of funded INTSA projects. We considered that at this time, \$100 m in aggregate for the INTSA for DPP4 is reasonable.
- D138 We received lots of engagement on the benefits of collaboration throughout the DPP4 reset process, in particular in response to the first workshop, which we discuss at paragraphs D70-73. At the second workshop, we asked for stakeholder feedback on ring-fencing collaborative projects which was mixed. Some, including the ENA, Vector and Orion did not support ring-fencing. Orion said, "Ring-fencing the funding would create additional complexity with minimal benefit for consumers". While Powerco said "an additional allowance for collaborative projects would be supported". 111

¹⁰⁷ Particularly in bilateral engagements with EDBs to discuss specific projects.

¹⁰⁸ Particularly non-EDB perspectives expressed by consumer bodies, third party market suppliers and other organisations. For instance see Rewiring Aotearoa "Cross-submission on DPP4 Issues paper" (26 January 2024), whose submission demonstrates this different perspective.

Vector "Submission on EDB DPP4 Innovation 'INTSA' implementation design workshop" (28 August 2024), paragraph 7; ENA "Submission on EDB DPP4 Innovation 'INTSA' implementation design workshop" (28 August 2024), p. 2; and Orion "Submission on EDB DPP4 Innovation 'INTSA' implementation design workshop" (27 August 2024), paragraph 6.

Orion "Submission on EDB DPP4 Innovation 'INTSA' implementation design workshop" (27 August 2024), paragraph 6.

Powerco "Submission on EDB DPP4 Innovation 'INTSA' implementation design workshop" (28 August 2024), p. 1.

- D139 We consider that the benefits to consumers of NTS may be greater where they are larger in scope, which we can encourage by incentivising collaboration. By making an additional 0.2% of the INTSA allowance contingent on collaboration with other EDBs, smaller EDBs may be particularly encouraged to collaborate, and may use the INTSA when they otherwise would not, as they will have access to greater funding. Furthermore, we have heard in submissions the benefits of collaboration, which lead us to consider that on balance this change is likely to be in the long-term benefit of consumers.
- D140 Our decision is not to place any further requirements on how EDBs must collaborate, including in relation to costs (so long as they do not exceed maximum allowances) that would be shared. EDBs and their project partners will have the ability to determine the mechanics and details of how they collaborate.
- D141 **Supporting evidence** Our final decision is to retain the approach at the draft decision and require that EDBs provide project-specific information as supporting evidence.
- D142 Schedule 5.3 of the DPP4 determination requires EDBs to submit 'sufficient information' for us to assess that the eligibility criteria have been met. It also requires EDBs provide evidence such as project purpose, outputs and forecast costs, among other information in their INTSA proposal. Our final decision requires one additional information field for an INTSA proposal, which is that the non-exempt EDB must specify whether they intend to work together on the relevant project with one or more other EDBs. 112
- D143 To assist EDBs in their applications, we intend to release both guidance for how to apply for the INTSA, as well as a PEA. The PEA will be a standardised template which EDBs can follow to help them provide us with sufficient information for us to complete the approval process. It will be primarily designed to help EDBs provide information that can demonstrate how the project meets the eligibility criteria. The guidance document will assist EDBs in their application, and we have begun the process of engaging with EDBs to ensure these documents will be useful.

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¹¹² We note that each non-exempt EDB that is working together on a collaborative project and wants to recover a share of project costs from the INTSA, must submit an INTSA proposal.

- D144 The PEA will reflect the DPP4 determination but be a voluntary template that is not part of the determination. EDBs will be able to provide other information to satisfy the requirements in the DPP4 determination. One key benefit of this approach is that it allows flexibility for us to make changes to the PEA, as we gain experience of processing applications, and with feedback from stakeholders. We intend to release the PEA before 1 April 2025 (start of DPP4).
- Lastly, part of our final decision for the supporting evidence required by the INTSA is to retain the draft decision approach and allow for the exclusion of interruptions directly associated with an approved INTSA project. These interruptions would be excluded from the calculation of the relevant quality standards and incentive scheme, up to a cap of 1% of the relevant SAIDI and SAIFI limit. We have increased the cap from 0.5% in the draft decision. Application of this exclusion is discussed further within **Attachment E**, **decision RP7**.
- D146 As the EDB may exclude interruptions directly associated with an approved INTSA project (up to the applicable 1% cap on exclusions), it is important that the EDB has appropriately considered the risk of disruption to consumers. ¹¹³ In order to understand the potential risk of interruptions associated with the project, the INTSA proposal will include:
 - D146.1 any SAIDI or SAIFI values from the interruptions directly associated with the project, which the EDB anticipates excluding up to the 1% cap. We acknowledge that dependent on the nature of the project this may be difficult to be definitive in advance. Accordingly, EDBs will be able to exclude interruptions which are not identified in the application provided they are directly associated with the approved project.
 - D146.2 the cause or causes of the relevant interruptions; and
 - D146.3 any steps which the EDB has already taken to reduce the likelihood or impact on consumers of interruptions directly associated with the project. 114

¹¹³ We note that it is up to an EDB to determine whether they wish to exclude an interruption; provided it is directly associated with the approved INTSA project and within the 1% cap.

¹¹⁴ We note that for the purposes of the DPP an interruption is only recorded where it is on a line that is capable of conveying electricity at a voltage equal to or greater than 3.3 kilovolts. INTSA projects which are undertaken on the low voltage (LV) network are unlikely to require disclosures unless there is a risk of creating upstream network issues.

- D147 Sharing learning requirement to submit a project closeout report within 50 working days of completing a project, or within an extended timeframe that we approve. Our draft decision proposed that sharing learning of INTSA projects be facilitated by a closeout report. Our final decision is to retain this closeout report, with an additional requirement that EDBs who worked together explain how they did so to carry out the project. Our final decision also introduces the ability for EDBs to request that the closeout report deadline length be extended, which we would assess and either approve or reject. We explain this rationale further at paragraphs D153-155.
- D148 The benefits of sharing learning by publishing a closeout report are clear: multiple parties, including us, consumers and other EDBs would gain visibility of projects that have occurred. This should help to promote collaboration and enable learning and knowledge sharing for the sector as a whole. This in turn can promote the s 52A(1)(a) limb of the Part 4 purpose by enabling more consumers to benefit from innovation in receiving services at a quality they demand.
- D149 **Penalty/reward mechanism** none. Our final decision is unchanged from our draft decision, which did not introduce a penalty/reward mechanism. This is primarily because we consider that a penalty/reward mechanism may be more likely to be appropriate for a CPP, due to the complexity involved.

Implementation of the INTSA and guidance for application process

D150 There are some smaller implementation changes that we have decided to make in our final decision, as a result of feedback from stakeholders. Additionally, stakeholders have generally supported our intention to publish guidance and a PEA, and in many cases have provided us with suggestions for what this guidance document/PEA should contain.

¹¹⁵ This is with respect to an explicit penalty/reward mechanism specified as a part of the INTSA. Expenditure incurred undertaking an eligible INTSA project would still be subject to IRIS. See Commerce Commission "Input methodologies review 2023 - Final decision - Financing and incentivising efficient expenditure during the energy transition topic paper" (13 December 2023), topic 5e.

- D151 Firstly, we note two key changes to Schedule 5.3 of the DPP4 determination which will affect the implementation of the INTSA. The first is that we have decided to introduce a project change request mechanism, which will allow EDBs to alter the outputs and forecast costs of their project post-approval. Orion first raised this idea in their submission to the draft decision¹¹⁶, and again in response to the workshop, alongside the ENA.¹¹⁷
- D152 We consider this is a sensible suggestion, as it would allow for flexibility with INTSA projects to account for uncertainty. Allowing for changes to be made during INTSA projects recognises the inherent dynamic nature of innovation. For example, it is possible that consumers could benefit by projects being adapted as they progress and new information is obtained.
- D153 The second implementation change is to allow for EDBs to request in their application a different project closeout report deadline from the default 50 working days. An EDB would need to justify this in its proposal, providing reasons for why it considers a change is necessary. Note that the deadline of 50 working days remains the same unless otherwise approved by us.¹¹⁸
- D154 This implementation change was supported by responses in submissions to the draft decision. Fonterra and Powerco suggested that we increase the closeout report deadline length, Fonterra to one year¹¹⁹ and Powerco to 70 working days.¹²⁰

¹¹⁶ Orion "Submission on EDB DPP4 draft decisions" (11 July 2024), p. 11.

ENA "Submission on EDB DPP4 Innovation 'INTSA' implementation design workshop" (28 August 2024), p.
 3; and Orion "Submission on EDB DPP4 Innovation 'INTSA' implementation design workshop" (27 August 2024), paragraphs 43-45.

¹¹⁸ Also note that only an extension is required to be approved by the Commission. Should an EDB wish to submit its closeout report sooner, it may do so (provided it has met all the requirements as set out in schedule 5.3 of the DPP4 determination).

¹¹⁹ Fonte<u>rra "Submission on EDB DPP4 draft decisions" (12 July 2024)</u>, p. 2.

¹²⁰ Powerco "Submission on EDB DPP4 draft decisions" (12 July 2024), paragraph 87.

- D155 In response to the second workshop, the ENA suggested that "... the approval process should include the ability to agree a variation to the close-out report timeframe and scope". We have provided ability for an EDB to seek an extension as it may lead to improved quality of closeout reports on more complex projects. This in turn should be beneficial to consumers and to the sector. However, the scope of the closeout report (with its focus on providing an opportunity for lessons learnt from projects to be shared across the sector) will not be able to be amended.
- D156 There were other suggestions for the implementation and/or application process for the INTSA to both the issues paper and the draft decision. Some of these suggestions or feedback will be provided for in the guidance document and/or PEA where they are useful for EDBs. We discuss in the following paragraphs other suggestions relating to the INTSA provisions in the draft DPP4 determination.
- D157 For instance, we received multiple submissions to the draft decision and the second workshop suggesting that director certification should not be required to confirm a projects eligibility. To be clear, we did not intend this to be a requirement, instead only as possible evidence demonstrating how a project might meet the eligibility criteria.
- D158 Similarly, some stakeholders have requested that we clarify timelines for how long an INTSA application will take to be assessed. In response to the second workshop, Orion said:123

It would be beneficial if the Commission is able to be transparent with EDBs about how long it is likely to take for an application to be assessed. This could involve reporting on the current processing times or outlining expected timeframes in the guidance material. Providing accurate estimates of processing time will enable EDBs to plan and resource projects accord

¹²¹ ENA "Submission on EDB DPP4 Innovation 'INTSA' implementation design workshop" (28 August 2024), p. 3.

¹²² For instance, see Orion "Submission on EDB DPP4 draft decisions" (11 July 2024), p. 12.

¹²³ Orion "Submission on EDB DPP4 Innovation 'INTSA' implementation design workshop" (27 August 2024), paragraph 26.

- D159 Given that the INTSA scheme is new to DPP4, we do not think it would be helpful to place requirements, either formally or informally, that restrict us to assessing applications in a given timeframe. It is our intention to process INTSA applications as quickly as possible in the circumstances, and the PEA and guidance are intended to assist with this. However, the INTSA is a new mechanism and processing applications will involve some learning by doing, and we expect to improve the speed with which we consider applications over time.
- D160 We also heard questions in submissions as to when EDBs can begin to account for costs related to INTSA projects. While this mechanism is ultimately designed to operate ex ante, the extent to which costs are spent on INTSA projects preapproval is at the discretion of EDBs given they carry the risk that the application may not be approved.
- D161 Some stakeholders voiced concern for the transition between regulatory periods, and that INTSA projects which flow into DPP5 should be allowed to have costs recovered. When a project has been completed, the approved forecast costs will enter the washup balance for that year as an actual recoverable cost. This is intended to be the case even where the project and forecast costs are approved in DPP4, but the project is completed in a subsequent DPP regulatory period (or under a CPP). However, due to the way recoverable costs interact with the price path, during the DPP4 reset process we are unable to specify how amounts, relating to approved INTSA proposals that are not forecast to be recovered in DPP4, may be recovered in DPP5. We propose to consider how to implement recovery of such amounts as part of the DPP5 reset process.

Alternatives considered

D162 We have considered alternatives in the process of designing the INTSA, including not setting a scheme, and setting a more ambitious scheme with significantly more funding available and greater protections for consumers.

No scheme option

D163 We considered the option of not introducing an INTSA scheme in DPP4. The main advantage of this option is that consumers would not be exposed to the risks of inefficient expenditure by EDBs on an INTSA project and the possibility that an INTSA scheme results in net costs to consumers overall. The main disadvantage of this option is that significant opportunities could be missed in the DPP4 period to unlock the potential of innovation and NTS for the long-term benefit of consumers.

- D164 There is limited research and analysis about the efficacy of innovation schemes by EDBs in Aotearoa New Zealand. However, an independent report for Ofgem on their low carbon network fund (LCNF) concluded that 'potential future net-benefit' was estimated at 4.5 to 6.5 times the cost of the scheme.¹²⁴
- D165 In line with promoting the s 52A(1)(a) and (b) limbs of the Part 4 purpose, it is important that EDBs innovate and adopt NTS to improve the efficiency of delivering the level of network reliability and resilience that consumers demand. While EDBs have an incentive and flexibility within the baseline DPP settings to undertake innovation or NTS, there are some circumstances where these incentives may not be enough (see 'Problem definition'). This could pose a risk that consumers miss out on some long-term benefits unless further incentives are provided by an INTSA.

Highly ambitious option

- D166 At the draft decision, we suggested that there could be an alternative INTSA option which could be provided as a complement to the draft INTSA. We considered that this option, which we called the 'highly ambitious option', could support more ambitious or transformational activities.
- D167 The essence of this more ambitious option was that it would offer a significant step change in maximum allowance together with a reallocation of risk from consumers towards EDBs (and any project partner) it would align reward with risk. 125
- D168 There was widespread support for the highly ambitious option in response to the draft decision. However, many of the responses to the option focussed on the maximum value of the option, rather than with the whole scheme design.

 Wellington Electricity engaged with the idea of reallocating risk from consumers to EDBs and with it being unlikely to be fit for a CPP, saying: 126

We support the proposed risk-sharing approach in theory and agree that there needs to be flexibility to account for the range of benefits and value streams... There will also need to be an understanding that if an EDB takes on more of the risk, they should expect a greater potential return. We also agree that this shouldn't be limited to a CPP. That would limit this type of bold development to a handful of networks that are already applying for a CPP. As highlighted in the

¹²⁴ Ofgem "An Independent evaluation of the LCNF" (October 2016).

¹²⁵ See Commerce Commission "Default price-quality paths for electricity distribution businesses from 1 April 2025 – Draft Reasons paper" (29 May 2024), paragraph 126, to see an outline of the design for this option.

¹²⁶ Wellington Electricity "Submission on EDB DPP4 draft decisions" (12 July 2024), p. 38.

paper, a network would not apply for a CPP just for these types of innovation projects.

- D169 There may be a small number of situations where EDBs are not incentivised by either the INTSA or a CPP to invest in transformational innovation or NTS initiatives that this option would include. However, we did not receive any such examples in response to the draft decision, or compelling feedback to suggest that EDBs are or will soon be considering such projects.¹²⁷
- D170 We have decided that it is appropriate to first implement the INTSA as outlined in this section and understand the impact that it has. We would then be better placed to potentially further consider the opportunity for a more ambitious scheme, which would likely add more complexity at a future reset, taking account of the relatively low-cost purpose of DPP regulation under s 53K of the Act.

Conclusions

- D171 We consider that **decision U1** to introduce an INTSA in DPP4 promotes the s 52A(1)(a) and (d) limbs of the Part 4 purpose by striking the right balance between providing further incentives to EDBs to innovate while managing further pressure on consumer bills.
- D172 Additionally, the INTSA is broad enough to encompass different types of projects, including those involving demand side management, energy efficiency and reducing energy losses, consistent with s 54Q of the Act. We discuss this further below.

Decision U2: incentivise energy efficiency and demand side management incentives through the INTSA

Nature of the decision

D173 Section 54Q of the Act states that we must provide incentives and avoid imposing disincentives for suppliers of electricity lines services to invest in energy efficiency and demand side management, and to reduce energy losses.

¹²⁷ We note that part of the objective of the ambitious INTSA option would be to significantly change mindsets and capabilities within EDBs. It follows that we would not necessarily expect to receive examples of highly ambitious projects before those mindsets and capabilities have changed.

D174 The change from a weighted average price cap to a revenue cap in advance of DPP3 was intended to better promote s 54Q, and we consider that EDBs are incentivised by the regime's baseline settings to invest in projects in these areas, which we discuss at paragraphs D5-6. In addition, we consider these types of projects would also be eligible for funding through the INTSA where they meet the criteria.

Final decision

D175 Our final decision is to retain our draft decision on the INTSA on the basis that it adds to the core regime incentives for EDBs to undertake projects relating to energy efficiency and demand side management, consistent with promoting s 54Q.

What we heard from stakeholders

D176 We received significant feedback on our draft decision, primarily targeted at flexibility services and energy efficiency initiatives. ¹²⁸ As such, we break up this section under the following two subheadings.

Demand side management - flexibility services

- D177 In the DPP4 issues paper, we consulted on an initial decision not to introduce a separate s 54Q incentive for demand side management and energy efficiency, or to introduce a quality incentive scheme for reduction of energy losses. This was met with disagreement through submissions, largely due to stakeholder concern about support for flexibility services. 129
- D178 The CAC disagreed with our initial stance, saying: "... If the long-term interests of consumers are to be met, the Council considers demand management and reshaping the demand side of our electricity system must be given at least the same importance as investment in network infrastructure." 130

¹²⁸ We note that the focus for these two areas has not always been equal; there was greater focus for flexibility services at the Issues paper stage and greater focus on energy efficiency in response to the draft decision.

¹²⁹ See *What we heard from stakeholders - DPP4 issues paper*, for discussion of submissions related to flexibility services.

¹³⁰ Consumer Advocacy Council (CAC) "DPP4 Issues paper submission" (19 December 2023), paragraphs 13; 15 and 16.

- D179 However, the ENA agreed with our initial proposal at the DPP4 issues paper saying that "There is no evidence of the need to support the establishment of new energy efficiency, demand-side management, and reduction of energy losses incentive schemes." 131
- D180 We received multiple suggestions that a specific demand-side management fund or allowance could be introduced at DPP4 to incentivise flexibility services projects. For instance, Vector submitted:¹³²

We recommend that the Commission considers a targeted innovation fund for EDBs to access expenditure related to flexibility services and/or when that payment is to a particular flexibility provider the Commission should consider this as a pass-through cost. We do not consider that the IPA or INTSA would accommodate these funds in a timely manner. Instead, the expenditures would need to be qualified as related to flexibility services or paid to a flexibility provider by an auditor through the annual information disclosure process.

- D181 In the DPP, the only tool that we have available for providing for such a fund as Vector suggests is the INTSA mechanism (ie, if we deemed it appropriate there could be multiple INTSAs). Regardless of this, we do not consider that flexibility payments meet the criteria for a pass-through cost, as they are a cost that an EDB can control.
- D182 In a similar vein, the CAC submitted that "However, we consider there should be a greater focus on demand management and that this must be integral to EDBs forecasting." 133
- D183 In its cross submission to the CAC, Unison submitted: 134

...the difficulty with the emerging flexibility market is forecasting will be inherently inaccurate as costs are not yet well understood against traditional solutions. We consider the regime can create the greater focus by genuinely strong incentives to invest in flexibility and resolving existing disincentives. This could be supported through the innovation allowance or uncertainty mechanisms.

¹³¹ Electricity Networks Aotearoa (ENA) "DPP4 Issues paper submission" (19 December 2023), paragraph 8.1.

¹³² Vector "DPP4 Issues paper submission" (19 December 2023), paragraph 127.

¹³³ Consumer Advocacy Council (CAC) "DPP4 Issues paper submission" (19 December 2023), paragraph 10.

¹³⁴ Unison "Cross-submission on DPP4 Issues paper" (26 January 2024), p. 11.

- D184 We agree with aspects from both the CAC and Unison submissions. That is, we consider that the final INTSA is likely to create stronger incentives for EDBs to invest in flexibility solutions, but that these are unlikely to be at the stage where they can be accurately forecasted. The INTSA should help support tests, trials, and implementation of solutions (including flexibility) to de-risk and reduce uncertainty. This should help to enable flexibility to become BAU and be able to be forecast as such.
- D185 We considered submissions to the issues paper, and other feedback on s 54Q incentives, when designing the draft INTSA scheme. We considered that INTSA projects where flexibility services are procured should be eligible for approval, provided they meet the criteria.
- D186 Despite this, in response to the draft decision we heard concern that the INTSA may be insufficient, or its settings not calibrated to incentivise procurement of flexibility services. For instance, FlexForum said:135

Consequently it is difficult to be confident that the proposed DPP settings, even with the changes to strengthen the incremental rolling incentive scheme (IRIS) mechanism and to include the innovation and non-traditional solutions allowance (INTSA) mechanism, are sufficient to encourage distributors to be ambitious and invest in difficult learning-by-doing, particularly that needed to integrate and productively use flexible resources at the pace required to maximise benefits for people.

- ... Making flexibility a routine tool for delivering distribution services will materially help to improve the affordability of the distribution service and electricity. The Commission estimates that the proposed increase to distribution and transmission costs will increase electricity bills by \$11 a month on average from April 2025. Making sure incentives to improve productivity and efficiency are stronger and give full-throated encouragement of ambitious learning-by-doing will help to ameliorate these bill impacts by accelerating the development of flexibility.
- D187 We consider that the regime's baseline settings and the INTSA provide appropriate incentives for EDBs to trial and deploy flexibility solutions. Furthermore, the DPP is not the only factor that influences flexibility services use by EDBs. As such, the INTSA mechanism, while it should help to improve learning and understanding of flexibility services, is not the only tool for increasing the use of flexibility services.

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¹³⁵ FlexForum "Submission on EDB DPP4 draft decisions" (12 July 2024), p. 2-3.

D188 In response to the second workshop, Vector suggested that the 'riskier than BAU' criterion may allow for flexibility services to be procured once per EDB. 136 Similarly, in their submission to the draft decision, Unison said: 137

Unison remains concerned that procuring flexibility services (which may optimise demand-side management in DPP4) may be available once only per EDB under the current proposed INTSA criteria. Proving the risks and benefits on the network (and on different parts of the network) may take different types of projects and programmes of work. To promote s 54Q, we support that at the very least the INTSA criteria are flexible. The outcome should be that similar projects progressed in different circumstances can qualify for funding.

D189 We do not foresee procurement of flexibility services (or any other project type) as necessarily being limited to one time per EDB. Rather, we intend to assess projects on a case-by-case basis against the criteria, which we consider are flexible enough to take account of the context and circumstances of the EDB and the project in question.¹³⁸

Energy efficiency

- D190 Energy efficiency was a key theme in response to the draft decision. Many submitters, including EDBs, consumer advocacy groups and third parties supported incentives for energy efficiency.
- D191 Some submitters to the issues paper submitted that energy efficiency should specifically feature in DPP4, such as Orion, while others noted their support for energy efficiency projects targeted at consumers facing energy hardship. Counties Energy submitted: 140

However, this improvement to the homeowner is why CEL supports energy efficiency because it does enable those in energy hardship to have a warmer drier home. There is no energy efficiency market in educating, and providing support, for those in energy hardship and to enable this market there should be an allowance for price non-exempt EDBs to have energy efficiency programmes for those EDBs wanting to support consumers in energy hardship. This should be an

¹³⁶ Vector "Submission on EDB DPP4 Innovation 'INTSA' implementation design workshop" (28 August 2024), p. 4.

¹³⁷ <u>Unison Networks "Submission on EDB DPP4 draft decisions" (12 July 2024)</u>, p. 14.

¹³⁸ That is not to say that we intend to accept exact duplicate projects, or that all flexibility projects would be accepted - we would consider the project itself, against the applicant's prior projects and evidence provided.

¹³⁹ Orion "DPP4 Issues paper submission" (19 December 2023), p. 23.

¹⁴⁰ Counties Energy "DPP4 Issues paper submission" (19 December 2023), p. 3.

allowable expenditure up to a set percent of total distribution revenue, which CEL suggests should be around 0.1%.

D192 Ecobulb said: "Ecobulb therefore believes electricity distribution businesses should be obligated and incentivised to invest in energy efficiency activities which benefit their residential and commercial customers, as this is an investment in energy efficiency." ¹⁴¹

D193 MEUG said:142

It is important that the Commission ensure sufficient focus is given to energy efficiency, as this is something that will benefit all consumers in the long-term. We need to avoid the risk of regulated EDBs spending the majority of the INTSA on high-tech devices and systems to aggregate load and control devices such as batteries, EV chargers and hot water cylinders to shift peak load (that don't reduce consumer bills) – rather than on energy efficiency (which does reduce consumer bills). The INTSA needs to be deployed for a range of options.

- In response, we consider where such initiatives relate to the supply of the regulated service and are expected to promote the long-term benefit of consumers under s 52A, then we encourage them either as an INTSA application or funded under baseline DPP allowances. In response to MEUG's concerns about EDBs adopting specific technologies over energy efficiency, we consider the DPP is technology agnostic and do not necessarily consider that there is a risk that EDBs spend their INTSA on certain technology types if these benefit consumers. Furthermore, shifting peak load can also result in lower consumer bills, either due to the avoidance of peak load charges, or where improved network utilisation defers or avoids investment.
- D195 We have given significant consideration to our approach to s 54Q incentives and in particular energy efficiency given the substantial interest in this decision and the potential to provide benefits for consumers in Aotearoa New Zealand. Such initiatives can be accommodated under the INTSA where they meet the criteria (including relating to the supply of electricity lines services). We provide some further context for this below.

¹⁴¹ EcoBulb "Submission on EDB DPP4 draft decisions" (2 July 2024), p. 3.

Major Electricity Users Group (MEUG) "Submission on EDB DPP4 draft decisions" (12 July 2024), paragraph
 28.

Energy efficiency as it relates to s 54C

- D196 A key consideration for an energy efficiency project's eligibility under the INTSA is likely to be whether such an initiative meets the first eligibility criterion: that it relates to the supply of electricity lines services (ELS).
- D197 We have previously provided guidance on the definition of ELS under s 54C of the Act. Act. As outlined in that guidance, whether asset values or operating costs fall within the scope of regulation under Part 4 depends on whether: 144
 - D197.1 the assets are used or the costs are attributable (in whole or in part) to the supply of ELS being the conveyance of electricity by line in New Zealand before the point of supply; and
 - D197.2 any of the exceptions listed in s 54C(2) apply.
- D198 Energy efficiency assets or operating costs that come within scope of regulation under s 54C can be recovered under the DPP, including under the INTSA (where the criteria are met). However, assets or operating costs that are only partly attributable to the supply of ELS must be allocated according to the Cost Allocation IMs.¹⁴⁵
- D199 Our previous guidance unpacks the application of ELS requirements in detail, including in the 2015/16 IM Review where we provided working scenarios based on batteries. As we have noted throughout this attachment, we will be publishing guidance (including the PEA) for the INTSA before the start of DPP4. This will include some further guidance for energy efficiency in this context.

¹⁴³ For eg, see "Commerce Commission Input methodologies review 2016 - emerging technology pre-workshop paper (30 November 2015)", paragraphs 57-67.

¹⁴⁴ Ibid., paragraphs 57-67.

¹⁴⁵ See "Commerce Commission Input methodologies review 2016 decisions - Topic paper 3 - the future of emerging technologies in the energy sector (20 December 2016)", paragraph 243.

¹⁴⁶ See "Commerce Commission Input methodologies review 2016 - emerging technology pre-workshop paper (30 November 2015)", p. 17-32.

Analysis and conclusions

- D200 We recognise the potential benefits for consumers in demand-side management and energy efficiency projects, but on balance we do not consider that a standalone scheme for energy efficiency or demand side management is necessary. This is because we consider such projects would be incentivised under the INTSA, where such projects meet the eligibility criteria.
- D201 Given the INTSA is designed so that it does not unduly impede s 54Q incentive projects that should otherwise be eligible (because they are beneficial to consumers), simplicity supports one core INSTA scheme rather than multiple, in line with the relatively low-cost purpose of DPP regulation under s 53K.
- D202 Providing for eligible INTSA projects that support demand side management and energy efficiency, but which might not otherwise occur under DPP baseline allowances, is consistent with s 54Q.

Decision U3: incentivise the reduction of energy losses through the INTSA.

Nature of the decision

D203 In the context of DPP4, reducing line losses in line with s 54Q has the potential to provide benefits for consumers. We consider that EDBs are incentivised by the regime's baseline settings to invest in projects in these areas (as outlined at paragraphs D5-6) however, we consider these projects could also be eligible for funding through the INTSA where they meet the criteria.

Final decision

D204 Our final decision is to provide additional incentives for projects that reduce energy losses, in line with s 54Q, as part of the INTSA where they meet the eligibility criteria.

What we heard from stakeholders

D205 At the issues paper we proposed to not introduce a specific quality incentive scheme (QIS) for reduction of energy losses for DPP4. All of the ten responses we received in submissions and cross submissions agreed with this approach. For instance, TLC responded: "a QIS for line losses would be cumbersome to measure objectively and for minimal benefit." ¹⁴⁷

¹⁴⁷ The Lines Company "DPP4 Issues paper submission" (19 December 2023), p. 15.

Our draft decision proposed to incentivise energy losses as part of the draft INTSA - which we have retained for our final decision. Of the five submitters who responded to this, all supported our draft decision. We note Wellington Electricity said with respect to energy losses projects: "Changing the 'risker than BAU' criteria to the alternative ENA criteria would make the application of the INSTA to these types of projects even clearer." We outline our changes to the eligibility criteria for the INTSA at paragraphs D112-116 and note that the criterion with which we replaced riskier than BAU draws on aspects of the ENA's suggestion.

Analysis and conclusions

D207 In the issues paper, we considered that information disclosure data for energy losses combined with improvements to the energy efficiency of distribution transformers meant that a QIS for energy losses would be unnecessary. We also noted that improved visibility of the low voltage network will assist EDBs in identifying areas where investment may reduce losses. 149 Submitters agreed. 150

D208 We consider it would be unnecessary to introduce an explicit incentive for the reduction of energy losses. This is because we have decided under **decision O3.3** to approve an opex step change for LV visibility, alongside the INTSA's breadth of scope. Submitters did not raise any concern with this approach at either the issues paper or draft decision stage.

¹⁴⁸ Wellington Electricity "Submission on EDB DPP4 draft decisions" (12 July 2024), p. 38.

¹⁴⁹ See <u>Commerce Commission "Default price-quality paths for electricity distribution businesses from 1 April 2025 – Issues paper" (2 November 2023), paragraph I36-43.</u>

¹⁵⁰ For example, see <u>Unison Networks "DPP4 Issues paper submission" (19 December 2023)</u>, p. 25.