Estimating the cost of debt

Response to AER's Pathway to 2022 Rate of Return Instrument: Draft Debt Omnibus Working Paper

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Energy Networks Australia

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Overview

Key messages

- ENA supports the AER in its use of industry debt data to better inform whether the current benchmark debt strategy (staggered issuance of 10 year debt), and the level of compensation provided to fund that strategy, remains appropriate.
- Genuine and persistent outperformance of the benchmark debt allowance by a network following the benchmark debt strategy should be shared with customers. However, it is important that the drivers of perceived outperformance are clear and understood by stakeholders, to allow a meaningful assessment of whether adjustments are required to debt compensation. Sources of perceived outperformance may include:
  - privatisations altering the financing practices of networks for a period of time,
  - temporary responses to periods of market dislocation; and/or
  - an incomplete picture of a networks' debt portfolio being included in the index (e.g. where senior debt is included, but not the sub-ordinated debt that supports the issuance of that senior debt).
- Analysis of industry data confirms that the AER's current approach for determining the benchmark efficient cost of debt remains fit for purpose – for example, it shows:
  - the AER's current benchmark debt strategy is consistent with the broad range of NSP debt strategies
  - networks following the benchmark debt strategy will have a cost of that debt is in line with the AER's compensation for the cost of debt
  - there is no evidence that NSPs are systematically 'timing' the market by issuing shorter (longer) term debt when credit spreads in the market are higher (lower).
- Transparency concerns with the construction of the AER's EICSI need to be addressed, particularly given the materiality of the AER's decision on the cost of debt and stakeholder principles of a 'high bar for change'.
- The EICSI should be constructed differently based on its use. Under the AER's proposed new approach – where the AER is seeking to compensate for industry average costs – the following key methodological decisions should be applied:
  - the sample should be tenor and value weighted to reflect their commensurate weight in networks' portfolios
  - all debt that forms part of the industry average costs should be included (including subordinated and callable debt, as well as bank debt and their associated fees).
- Maintaining a replicable benchmark debt allowance will lower the costs of managing risk, and ultimately lower costs to customers. Importantly, maintaining a replicable benchmark is not a roadblock to lowering debt compensation to networks (if evidence suggests this is necessary).

Energy Networks Australia (ENA) welcomes the opportunity to provide this submission to the AER's draft debt omnibus paper.

Energy Networks Australia is the national industry body representing Australia's electricity transmission and distribution and gas distribution networks. Our members provide more than 16 million electricity and gas connections to almost every home and business across Australia.

Consistent with good regulatory practice, the AER has begun early consultation on the interpretation of this data and its potential role in the 2022 Rate of Return Instrument (2022 RORI). ENA looks forward to further constructive engagement with the AER and other stakeholders throughout this important process.

Assessing network performance

The ENA supports the use of industry debt data as part of the AER's assessment of NSP performance. This includes assessing whether the current benchmark debt strategy (staggered issuance of 10 year debt), and the level of compensation provided to fund that strategy, remains appropriate.

Further, the ENA accepts that material and persistent outperformance of the benchmark debt allowance by a network following the benchmark debt strategy should be shared with customers. This is consistent with the outcomes of the AER's assessment in the 2018 RoRI process, and customers are now benefiting from the AER's previous investigation of industry average debt costs.

It is critical, however, that any assessment of NSP performance is properly constructed, transparent to stakeholders, and the drivers of any outperformance are well understood. This is supported by the advice provided to the AER by Dr Martin Lally, whereby he recommended the AER first decompose the drivers of perceived outperformance.

Updated debt data supports the approach in the 2018 RoRI

The ENA considers that a properly constructed, transparent and well understood assessment of NSP debt performance shows there is no compelling rationale for the AER to change either the benchmark debt strategy or benchmark compensation methodology. Specifically, the current industry data shows that:

- regulated NSPs continue to issue longer-tenor debt;
- there does not appear to be a material 'halo' effect; and
- regulated NSPs are not systematically 'timing' the market by issuing shorter (longer) term debt when credit spreads are higher (lower).

Further, there are a number of reasons why NSPs may outperform the benchmark, but many of these do not represent reasons to change the benchmark (noting that individual NSPs appropriately carry the associated risk). Such sources of actual or perceived outperformance may include:

- privatisations altering the financing practices of networks for a period of time,
- temporary responses to periods of market dislocation
- an incomplete picture of a networks' debt portfolio being included in the index (i.e. where a networks' senior debt is included, but not their sub-ordinated debt that supports the issuance of that senior debt).

As detailed in the ENA response to the AER's draft working paper on the term of the rate of return, the benchmark term of debt should only be changed if there is clear evidence that the currently adopted term no longer represents the efficient steady-state financing practice (i.e. actual debt strategies of

individual NSPs at a point in time are not evidence of what the efficient benchmark efficient debt strategy is).

Construction of the EICSI must be transparent and fit-for-purpose

The ENA considers that transparency is a fundamental principle of good regulatory practice that should only circumvented in exceptional circumstances. Transparency is particularly important where contentious methodological choices are required to be made which have a material impact on the outcome. This is the case for the AER's proposed new use of its EICSI.

The inability for stakeholders to properly critique the AER's approach, therefore, sets an unsatisfactory precedent for transparency in regulatory decision-making on a key element of the building blocks. This is especially problematic in the context of the significant number of measurement issues that remain unresolved.

The appropriate resolution of these measurement issues will vary based on the proposed objective of the EICSI – being to target compensation for the benchmark debt strategy, or for industry average costs. By way of example:

- If testing for the existence of a "halo effect" relative to third party data providers BBB+ benchmark, it makes sense to exclude bonds that are materially different to the 'standard' bonds that third party data providers are estimating the cost of debt for. On this basis, excluding callable and/or subordinated debts may be justified on the basis that these types of debts are not sufficiently similar to the debts included in the respective credit spread curves.
- However, if the objective is to use network data to arrive at an estimate of average network costs, and to set compensation based on those estimated average network costs, then all network debts should be included in the analysis – no matter how different to the 'standard' debts. This is especially true for callable and subordinated debts because the flexibility and ranking of these debts support the credit perceptions and ratings of the 'standard' debt issuances.

A further example of the measurement concerns with the EICSI is the AER's current rejection of value weighting. Higher value debt forms a higher proportion of NSP's funding costs than lower value debt, so without value weighting, the EICSI is not a meaningful measure of industry average costs.

Example of the need to value weight the EICSI

To see why value weighting is fundamental, consider a simple example:

- Let NSP's issue 90 large value ($100m) and 100 low value ($10m) instruments in a given period;
- Let the spread to the third-party data providers' BBB+ estimate be:
  - +50bp for large value instruments (i.e. 50bp above third-party data providers' BBB+ estimate)
  - -100bp for small value instruments (i.e. 100bp below third-party data providers' BBB+ estimate).
- An unweighted average will indicate "outperformance" of 0.29bp. By contrast, a weighted average will indicate "underperformance" (higher costs) by 35bp.

The ENA considers that it would be unreasonable to proceed in such a scenario with a reduction of compensation for NSPs based on the observed unweighted outperformance. This would result in compensation being lowered by 29bp even though the best evidence is that NSPs issued debt at an average of 35bp above the BBB+ benchmark.

In any event, the AER should codify its EICSI methodology in sufficient detail for it to be implemented on any future dataset without the exercise of *ad hoc* judgements. An inability to codify the AER's method would be evidence the AER's method does not satisfy its own assessment criteria.

Benefits of maintaining a replicable benchmark

To the extent that the regulatory framework can deliver compensation allowances that more closely match costs (both in terms of levels and patterns over time) then this lowers the costs of NSPs in managing risk (and hence, lowers prices for customers). The AER's existing approach, as set out in its 2018 RoRI, supported this objective – that is, it allowed for a regulated business to manage its debt portfolio to replicate the costs that it is being compensated for.

The benefits of replicability were a significant part of the AER's reasoning for adopting the trailing average, and are again referenced in the rationale for the AER's proposed shift to a capex-weighted trailing average. For example, in the debt omnibus working paper the AER states:

> *[T]he integrated system plan (ISP) developed by the Australian Energy Market Operator (AEMO) has raised the prospect of large projects being undertaken in the near future… As a result, there could be large debt raising requirements in some years beyond the 10 per cent level built into our current trailing average return on debt.* ***This in turn could create a mismatch between our return on debt and the capital requirements of the firms we regulate****.*

The importance of a viable approach was also outlined by Dr Martin Lally in his recent advice to the AER. Specifically, Lally advised the AER that the assumed efficient debt financing strategy that forms the basis of the allowed return on debt will only satisfy the NPV=0 principle if that assumed strategy is "viable".[1]

Put another way, a debt management strategy that no network could, or would, ever adopt would not be an appropriate regulatory benchmark. However, this is exactly the situation being proposed.

To illustrate, suppose by way of example, that the AER's weighting of the EICSI data meant that the average instrument was an 8-year BBB+ debt issuance. Notwithstanding that, imagine that the AER adopted a regulatory benchmark of 10-year A rated debt on the grounds that this typically resulted in a similar cost of debt as 8-year BBB+ debt. In this case, the regulatory allowance would be based on an assumed debt management strategy that is not viable – because the benchmark network could not issue A rated debt.

For the avoidance of doubt, maintaining a replicable benchmark is not a roadblock to lowering debt compensation to networks (if evidence suggests this is necessary). Similarly, changing the tenor of the trailing average is disruptive, but likely to be less disruptive than creating an unhedgeable allowance.

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[1] In this regard the ENA notes that Lally recommended the AER base its cost of debt allowance on the costs of a viable debt strategy. Lally further defined a viable debt policy as 'a viable debt policy means feasible and not so inefficient that firms would avoid it'. Lally, April 2021, *The appropriate term for the allowed cost of capital*, p. 25. Compensation that is not consistent with any debt strategy that a firm can follow (whether it be efficient or not) cannot meet Lally's criteria for viability.

Assessing network performance

The 2018 RoRI determined the cost of debt allowance based on a two stage process:

- first, it determined the benchmark debt strategy based on the observed practice of networks; and
- second, it estimated the compensation for the cost of debt to match the costs a network will incur in following the benchmark debt management strategy.

Although regulated networks employ a range of debt management strategies, the 2018 RoRI approach allows for networks performance to be compared to this benchmark.

The ENA supports the use of industry debt data as part of the AER's assessment of network performance. This includes assessing whether the current benchmark debt strategy (staggered issuance of 10 year debt), and the level of compensation provided to fund that strategy, remains appropriate.

Further, the ENA accepts that material and persistent outperformance of the benchmark debt allowance by a network following the benchmark debt strategy should be shared with customers. This is consistent with the approach taken by the AER in the 2018 RoRI process, and customers are now benefiting from the AER's previous investigation of industry average debt costs.

Previous investigation of industry average debt costs

In the 2018 RoRI review, the AER used network debt data to calibrate the weights to the third-party data providers' A and BBB curves to largely eliminate the observed 'halo' relative to the broad BBB cost of debt (increasing the weight to the A curve from zero to 33%).

The ENA notes that, since December 2018, the average difference between the 10 year BBB and A credit spreads for RBA and Bloomberg has been 70bp.[2] This means that the AER decision in the 2013 RoRI can reasonably be estimated to have lowered subsequent cost of debt estimates by around 23bp (one third of 70bp).

This is a direct example of the AER using network data to deliver to customers the benefits of NSP debt out-performance relative to the benchmark. Unsurprisingly, and as shown below, application of the same method again (with to data up to 2020) does not result in the identification of material further outperformance – primarily, because that outperformance was already removed in 2018.

It is critical, however, that any assessment of network performance is properly constructed, transparent to stakeholders, and the drivers of any outperformance are well understood. This is supported by the advice provided to the AER by Dr Martin Lally, whereby he suggested the AER decompose any observed outperformance into its respective components (including tenor and credit rating).

Accordingly, this section considers the current industry debt data against the existing benchmark and compensation method. The ENA considers that the current industry data shows the following:

- regulated networks continue to issue longer-tenor debt;
- there does not appear to be a material 'halo' effect; and

[2] The ENA does not have access to Thompson Reuters data.

» regulated networks are not systematically 'timing' the market by issuing shorter (longer) term debt when credit spreads are higher (lower).

The ENA also recognises the AER has presented its own preliminary analysis that differs from that presented below. The ENA considers that much of this difference is due to the treatment of particular debt instruments. We discuss the construction of the AER's EICSI, including issues associated with transparency, in the following chapter.

Updated network data supports the existing benchmark debt strategy

To test whether the benchmark debt management strategy remained consistent with the broad practice of networks, the AER has previously estimated a weighted average term to maturity at issuance (WATMI) of all debts currently in networks' portfolios. The ENA supports this approach.

The ENA has been advised by CEG that, depending on assumptions made about callable debt and the inclusion of NSW businesses, this results in a range of between 9 to 10 years for the WATMI. This analysis has been presented in previous ENA submissions, but is repeated below for ease of reference.

Table 1: WATMI for different sets of network data

	30 June 2018	30 June 2019	30 June 2020
Excluding subordinated debt			
All firms	8.5	8.9	8.8
NSW firms excluded	8.9	9.1	8.9
Including subordinated debt			
All firms	9.3	9.7	9.5
NSW firms excluded	10.1	10.2	10.0

Source: CEG, subordinated callable debt included at its final maturity date.

With reference to the above, the ENA notes that networks holding shorter term debt tend to be those who were recently privatised (e.g. the NSW networks, who are constrained by starting with all short-term debt) and some smaller networks. Recently privatised networks are on a pathway to their optimal debt portfolio (which will be more aligned with the benchmark), and their current portfolios should not impact the debt allowance for the entire industry – including large networks in Victoria, NSW and South Australia – that finance in a very similar way to the AER's current benchmark.

As a simple illustration, consider a hypothetical selection of 4 businesses, where 3 issue 10-year debt and the other issues 2-year debt due to its particular circumstances. In this example, the industry average tenor would be 8-years, but this does not realistically represent the efficient benchmark tenor for the broader industry (and nor should it represent a basis for change).

More generally, and consistent with the ENA's previous submission to the AER's draft working paper on the term of the rate of return, the benchmark term of debt should only be changed if there is clear evidence that the currently adopted term no longer represents the efficient steady-state financing practice. By way of contrast, there are a number of sources of perceived outperformance on tenor that do not represent reasons to change the benchmark (as the networks appropriately carry the associated risk) – for example:

- privatisations altering the financing practices of networks for a period of time,
- temporary responses to periods of market dislocation
- an incomplete picture of a networks' debt portfolio being included in the index (i.e. where senior, but not the sub-ordinated debt that supports the issuance of that senior debt).

CEG has further advised that, in terms of individual networks' WATMI:

- Half of all networks had WATMI around 8 to 10 years;[3]
- Three networks have WATMI higher and three have WATMI lower than this range;
- Only small networks have WATMI materially lower than 8 years (which drives the overall industry WATMI to be between 9 and 10 years).

The ENA considers that this information supports a conclusion that the current assumption of a 10 year tenor in the benchmark debt strategy is within the broad range of observed network practice and there is no compelling reason to change. Based on the same information, the ENA considers that any reduction to the benchmark tenor would need to remain at or above 8 years in order for it to be consistent with the relevant range of network practice.

Updated network data supports the existing benchmark compensation methodology

In the 2018 RoRI process the AER identified historical outperformance that networks achieved on instruments relative to the **matched term** broad BBB curve published by data providers. This meant that the benchmark compensation method, as then constructed, was likely over-estimating the cost of a network following the benchmark debt strategy. The AER then, acting reasonably, determined to adjust the credit rating in its compensation method to eliminate the outperformance and more accurately reflect the (lower) costs of a network following the benchmark debt strategy.

As noted above, the effect of this change has been to reduce networks' compensation by around 23bppa for averaging periods applied in regulatory determinations made since December 2018.

Application of the same matched tenor logic from the 2018 RoRI with two years of updated data suggests no need to change the benchmark compensation method further (which is unsurprising given the analysis was performed so recently).

This is illustrated in Figure 1 below where CEG has estimated the 12 month rolling average of the difference between the spread on each industry debt instrument and third party providers' estimate of

[3] Noting that the exact value for the WATMI depends on some assumptions about what debt is included, including in relation to debt raised at the time of privatisation.

the BBB+ spread on the same pricing date and for the same tenor. When we do this analysis, we see that networks on average issue very close to the BBB+ spread *at the relevant tenor*.[4]

Figure 1: "Outperformance" relative to BBB+ benchmark at the relevant tenor

Source: CEG analysis with industry debt data

Notes: Each observation is a trailing average over the previous 12 months. A positive value is associated with networks issuing at a higher than BBB+ spread (and vice versa) over the preceding 12 months. Different weighting approaches are shown but the final result is not sensitive to weighting methodology.

It can be seen that, except for FY16/17, networks have issued debt at, or above, the BBB+ benchmark when the tenors of each instrument are matched to the BBB+ curve. Indeed, at an industry level, rather than a 'halo' effect there is an observed 'horn' effect. This indicates that the outperformance the AER observes when comparing the EICSI to the 10 year BBB+ benchmark is due to a mismatch between some instruments in the EICSI and the 10 year tenor in the benchmark compensation method.

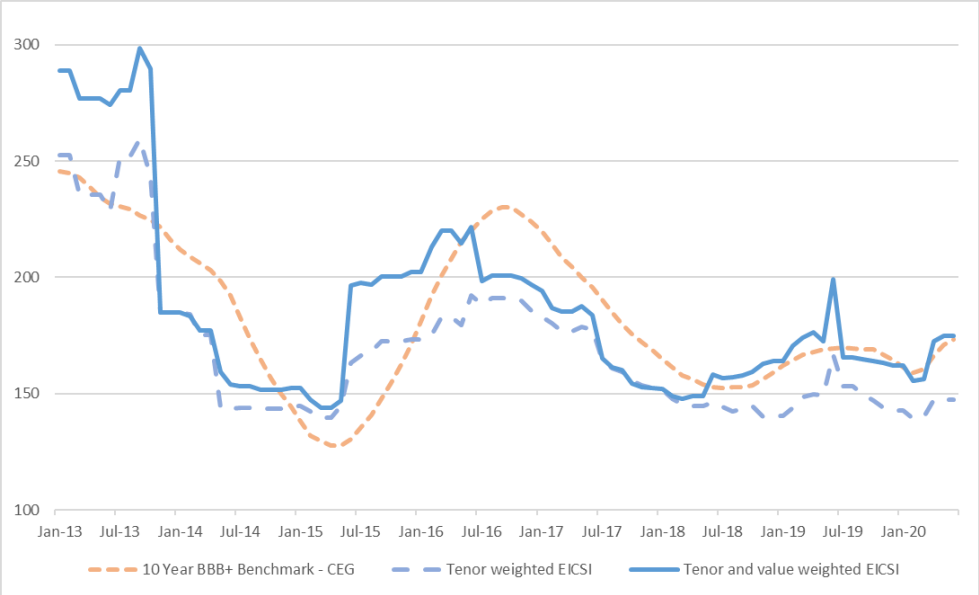
This general property of the data can be illustrated differently by only comparing issuances that reflect the AER's benchmark tenor and credit rating in the EICSI. When this is done, the apparent "outperformance" also disappears (just as it does when all instruments are included with tenor matching to the BBB+ curve).

» Figure 2 restricts EICSI **issuances** to those that are consistent with the benchmark (e.g. 7-13 year tenor, BBB to A- non-callable/subordinated debt);

4 Where available, we take an average of the Bloomberg, RBA and Reuters BBB+ spread for a particular tenor. For bonds with longer dated tenor than the longest tenor published BBB+ spread (derived from published BBB and A spreads) we use the longest tenor published BBB+ spread as the relevant BBB+ benchmark. When calculating the Bloomberg estimate at each date, we use the BVAL curve if its maximum tenor is at least 7 years, otherwise we use the BFV curve. Consistent with the AER's approach set out in Footnote 41 of its Working Paper, our RBA estimates incorporate the RBA's June 2018 revisions to its F3 statistical table.

» Figure 3 includes all tenors for instruments matching the AER's final working paper criteria but only by **issuers** that have a WATMI > 8 years. [5]

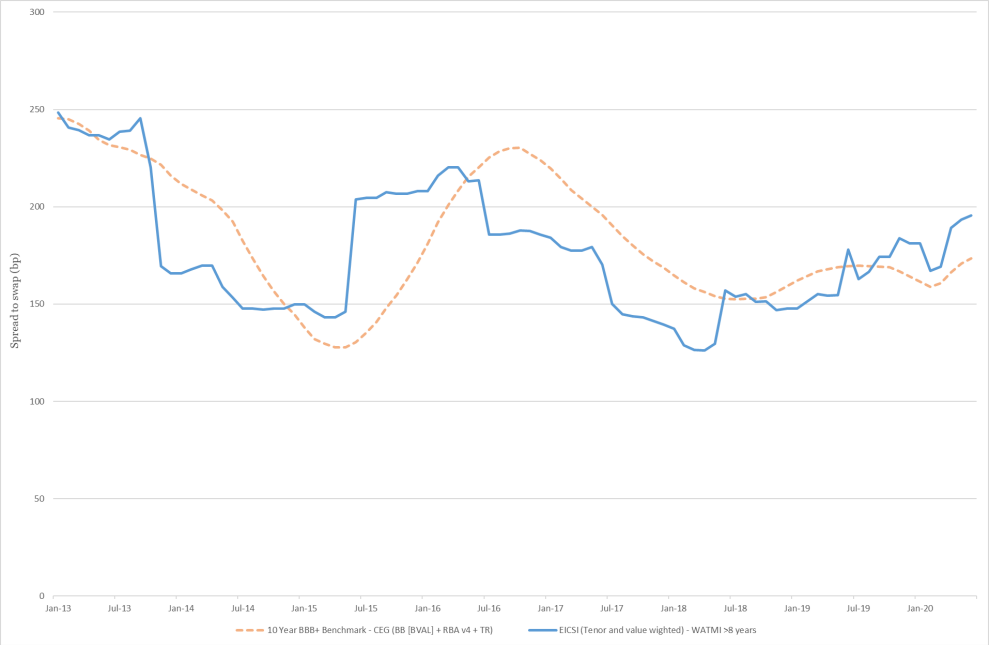
Figure 2: Only issuances consistent with 10-year benchmark in EICSI



Source: CEG analysis with industry debt data

5 CEG have calculated the WATMI for each issuer for all debt issued after 1 January 2013 (VPN, CitiPower and Powercor are treated as one entity). All issuers that had a WATMI of less than 8 years on 30 June 2019 were excluded. This is different to estimating the WATMI for each firm based on all debt because some firms have issued long term debt prior to January 2013 that is still active. Applying this latter approach would result in AGN being included and would not materially change the EICSI. However, CEG prefer the former approach because what is important is the tenor of debt issued in the period over which we are calculating the EICSI (not the existence of prior very long-term debt).

Figure 3: Only issuers that have WATMI > 8 years



Source: CEG analysis with industry debt data

In both of the above two charts, the seeming "outperformance" for the AER EICSI disappears when the EICSI is constructed to be consistent with a 10-year tenor: either on a per issuance basis (Figure 2); or a per issuer basis (Figure 3).

Consistent with the above facts, if the AER followed the same approach it applied in the 2018 RoRI there would be no basis to alter the benchmark credit rating. This is because there is no evidence that, with the 2018 RoRI weightings to A and BBB curves, networks following the benchmark debt strategy would have lower costs than compensated in the benchmark compensation method at a BBB+ credit rating.

A statistically significant relationship between tenor and credit spreads does not exist

In the debt omnibus draft working paper, the AER suggests that an inverse relationship exists between tenor and credit spreads (based on Figure 1 of the AER's paper). The AER relies on this relationship as evidence of regulated networks outperforming the cost of debt allowance: [6]

> *The (simple) average term varies across time, and is negatively correlated with our regulated return on debt. This suggests that when there are higher (lower) credit spreads in the market, networks issue shorter (longer) term debt, so that their overall spreads stay relatively constant.*

Analysis provided by CEG, however, demonstrates that a statistically significant relationship between tenor and credit spreads does not exist. That is, there is no robust evidence to suggest that regulated NSPs are systematically 'timing' the market by issuing shorter (longer) term debt when credit spreads are higher (lower).

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6 AER, Rate of return, Energy Network Debt Data, draft working paper p. 12.

Specifically, CEG made two simple changes to the AER's approach that have the effect of improving the robustness of the sample. That is, CEG:

- increased the number of independent observations by shortening the rolling average window used by the AER (from 12 months to 6 months and 3 months respectively). This is equivalent to an increase in the number of independent observations from 6 to 13 and 26 respectively.
- increased the sample period relied on by an additional 2 years.

CEG then performed regression analysis on the revised sample to test the statistical significance of any relationship. The regression analysis found the following:

- any relationship in the original sample was already low (the coefficient of determination (R^2) was only 0.23)
- starting the analysis from 2012, rather than 2014, reduces the R^2 to just 0.08
- starting the analysis from 2012, rather than 2014, and increasing the number of independent observations by using a 3 month averaging window reduces the R^2 further, to an almost non-existent 0.05.

Given the above, the ENA considers there is no rationale for the AER to conclude that regulated NSPs are systematically 'timing' the market.

Construction of the EICSI

Notwithstanding the above analysis regarding NSP performance, the AER is proposing a further reduction in compensation relative to the 2018 RoRI. Specifically, the AER is now proposing to set the benchmark compensation method to target compensation to the average credit spread of all NSPs (as estimated in the AER EICSI) which, in effect, is the cost of whatever implicit debt management strategy is associated with the AER's construction of the EICSI.[7]

The ENA considers that this approach is equivalent in all important respects to using the EICSI to set the compensation for credit risk. The ENA acknowledges that this is done indirectly by changing the credit rating so expected compensation matches the EICSI rather than just using the EICSI directly to set credit spreads. However, the ENA considers that this is a difference of form rather than substance.

In effect, what the AER is proposing is to simultaneously:

- give customer the benefits (in terms of lower prices) that come from a lower tenor than 10 years; and
- give customers the benefits (in terms of more stable prices) that come from a 10 year tenor.

The AER is proposing the exact reverse for networks.

The ENA considers that there is no compelling rationale for the AER to change either the benchmark debt strategy or the benchmark compensation method based on network industry debt data. However, to the

[7] In contrast, the AER's approach is the 2018 RoRI was to set the compensation for the cost of debt based on the cost of an NSP following the benchmark debt management strategy.

extent that the AER were to do so the ENA strongly advocates for the construction of, and assumptions underpinning, the AER's EICSI to be:

- transparent
- relevant to the proposed purpose/use of the EICSI.

The construction of the EICSI must be transparent

The ENA considers that transparency is a fundamental principle of good regulatory practice that should only circumvented in exceptional circumstances. Transparency is particularly important where contentious methodological choices are required to be made which have a material impact on the outcome.

For the construction of the EICSI, the AER must necessarily examine the debt costs of each network and the debt structure of each network. This information is highly commercially sensitive and confidential to each network. This means that no customers, nor individual network, can analyse the overall dataset themselves. This makes it extremely difficult for them to critique any methodological decisions taken by the AER.

How the ENA has attempted to overcome transparency limitations

ENA has attempted to deal with this problem by commissioning an independent consulting firm (CEG) to analyse the industry data for us. CEG has been bound by confidentiality undertakings in this context. We have been able to do this because individual networks have contractual assurance that their data will be kept confidential, including from each other. Putting these arrangements in place was not easy and it is not certain that such agreement can be relied on into the future.

No other stakeholders (individual networks, individual customers or groups of customers) could replicate the arrangements made by ENA. This means that only two parties will be able to perform any analysis on the industry debt data (the AER and ENA via CEG).

Moreover, even ENA's ability to interrogate and understand the data is limited. While CEG has access to the full dataset, they are restricted by confidentiality considerations from presenting us with any analysis from which individual network data could be 'back-solved'. This excludes a range of analyses being presented to us including analysis of any individual debt issues.

The inability for stakeholders to properly critique the AER's approach sets an unsatisfactory precedent for transparency over regulatory decision-making on a key element of the building blocks. This is especially problematic in the context of the significant number of measurement issues that remain unresolved, as discussed in the next section.

In this regard, ENA refers back to the AER's original decision to rely on publicly available independent third-party data sources. Specifically, the AER listed the following advantages in its December 2013 guideline decision:[8]

> *Using an independent third party also reduces the scope for debate on debt instrument selection issues and curve fitting or the use of some form of averaging methods to derive the estimate of the return on*

[8] AER, Explanatory Statement, Rate of Return guideline, December 2013, p. 127.

debt. As we have previously highlighted, if we used an in-house method, we would need to develop and apply:

• detailed criteria for selecting debt instruments with appropriate specification of contingencies to allow automatic updating

• a detailed description of the estimation method (that is, a curve fitting technique or some form of averaging observed yields—for example, Nelson–Siegel, Svensson or spline-based approaches).

The above logic was reaffirmed in the AER's 2018 discussion paper on estimating the allowed return on debt.[9]

ENA submits that these same conclusions apply to the use of the AER's EICSI – only with more force. The above discussion was in the context of the AER taking publicly available information (e.g. bond yields from Bloomberg) and constructing its own cost of debt estimate. The AER EICSI has the same problems plus the serious additional problem that it uses almost exclusively non-publicly available information.

ENA also notes that the NEL and the NGL both state that a rate of return instrument must describe:[10]

how the stated value, or the way to calculate the rate or value, was decided.

It is not obvious to ENA that the AER could use a version of the EICSI and reasonably satisfy this requirement. The AER could write a broad description of the factors it would consider when deciding whether to include or exclude a debt instrument from the EICSI. However, no network or customer would be able to replicate or understand what the AER actually did to arrive at its value.

These transparency issues appear intractable, and represent a critical threshold point of failure in relation to its proposed use to directly estimate costs.

The EICSI should be constructed differently based on its use

The differing understanding of the use of industry data (as described previously) has critical implications for how the EICSI should be constructed. By way of example:

- If testing for the existence of a "halo effect" relative to third party data providers BBB+ benchmark, it makes sense to exclude bonds that are materially different to the 'standard' bonds that third party data providers are estimating the cost of debt for. On this basis, excluding callable and/or subordinated debts may be justified on the basis that these types of debts are not sufficiently similar to the debts the RBA/Bloomberg/TR are estimating credit spreads for.
- However, if the objective is to use network data to arrive at an estimate of average network costs, and to set compensation based on those estimated average network costs, then all network debts should be included in the analysis – no matter how different to the 'standard' debts. This is especially true for callable and subordinated debts because the flexibility and ranking of these debts support the credit perceptions and ratings of the 'standard' debt issuances. This is consistent with the advice by Dr Lally to the AER.

Table 2 lists the key methodological issues being debated and how the ENA considers their resolution depends on whether the EICSI is being used to: a) test whether the benchmark compensation method is

[9] AER, Discussion paper, Estimating the allowed return on debt, May 2018.
[10] NEL s 18F, NGL s 30A.

accurately compensating the cost of the benchmark debt strategy (the ENA and previous AER test); versus b) estimate, and set compensation for, the industry average actual costs (the new proposed AER test).

Table 2: Instrument selection and weighting depends on whether BCM is targeting BDS vs targeting industry average costs

Issue	ENA test: target BCM to compensate the BDS	AER test: target BCM to compensate for industry average costs
Should tenor weighting be applied to the relevant sample?	**Yes (with possible exceptions)** Longer tenor debts play a more important role in funding and should be given a commensurately higher weight. The possible exception is if there are some debts with much shorter/longer tenor than assumed in the BDS and if there is evidence that this makes their spreads uninformative of the cost of the BDS (even if tenor matched).	**Yes (no reasonable exception)** Longer tenor debts play a more important role in funding and should be given a commensurately higher weight. There is no reasonable exception to this given the objective of matching BCM compensation to industry costs.
Should tenor matching be applied?	**Yes.** Including tenors different to 10 years is likely to be necessary in order to have a large enough sample from which to draw any material inference about whether, for example, networks benefit from a "halo effect" relative to third party data providers' estimates of BBB+. However, having regard to instruments with tenors different to 10 years requires that the analysis controls for the impact of tenor on credit spreads (as the AER did in the 2018 RoRI process).	**No.** If the objective is to change the BCM credit rating to lower the compensation for the 10 year BDS tenor in order to make that compensation match industry average credit spreads then tenor matching plays no role in the analysis. Under this objective, credit rating is now being used adjust for all sources if difference between the BDS and the average of network debt management strategies. The ENA strongly rejects the reasonableness of this objective but acknowledges that tenor matching is not required under this objective.
Should value weighting be applied to the relevant sample?	**Yes (with possible exceptions)** Higher value debts play a more important role in funding and should be given a commensurately higher weight. The possible exception to this is if there are some very high value debts that are also highly lumpy in nature and, therefore, are inconsistent with the trailing average BDS.	**Yes (no reasonable exception)** Higher value debts play a more important role in funding and should be given a commensurately higher weight. There is no reasonable exception to this given the objective of matching BCM compensation to industry costs. Moreover, failure to value weight will be unsustainable.
Should subordinated debt be included in the analysis?	**No**. Not unless the BDS assumes the issuance of subordinated debt.	**Yes (no reasonable exception)** All debt that forms part of the industry average costs should be included. High cost subordinated debts support lower cost senior debt.
Should callable debt be included in the analysis?	**No.** Not unless the BDS assumes the issuance of callable debt.	**Yes.** All debt that forms part of the industry average costs should be included. High cost callable debts provides flexible funding sources that support lower cost non-callable debts.
Should higher fees associated bank debt (including callable 'lines of credit') be included?	**No.** Not unless the BDS assumes the use of bank debts (including callable lines of credit) with high fees.	**Yes.** All debt that forms part of the industry average costs should be included. High fees on lines of credit provide flexible funding sources that support lower cost fixed term debts.
Should bank debt be included in the analysis?	**Potentially.** Provided bank debt has sufficiently similar risk characteristics to the debts specified in the BDS.	**Yes.** All debt that forms part of the industry average costs should be included.

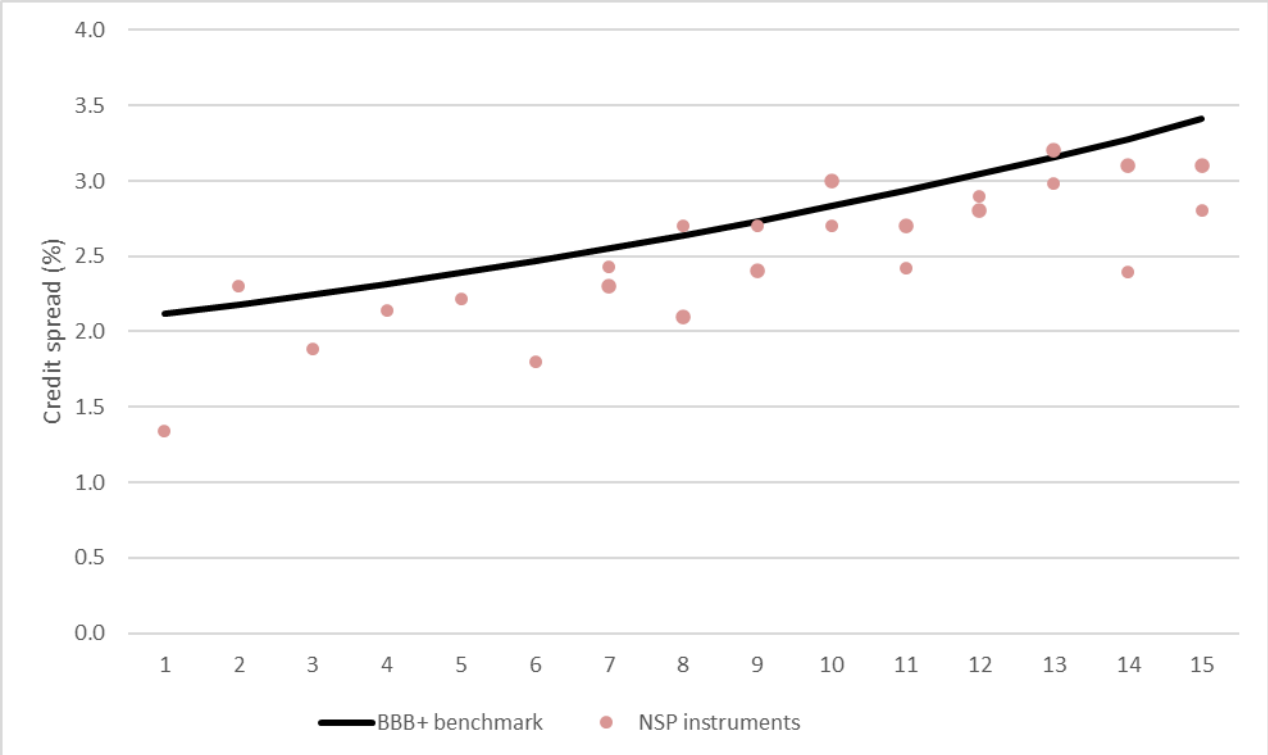
Note: 'BDS' refers to benchmark debt strategy, and 'BCM' refers to benchmark compensation methodology.

The remainder of this section examines each of these issues separately. In doing so, the ENA sets out what the appropriate construction of the EICSI is if the AER's newly proposed objective is to be implemented. However, it is critical that it is understood that the ENA rejects the reasonableness of the newly proposed AER objective of targeting compensation at an estimate of industry average costs based on the EICSI with no attempt made to adjust the benchmark debt strategy to match that implied by the AER construction of the EICSI. ENA advice on how to construct the EICSI, given the AER's proposed use of the EICSI should not be interpreted as lending any support to the reasonableness of this proposed use of the EICSI.

The role of tenor matching when comparing credit spreads

Tenor matching can play an important role in an empirical analysis of whether the benchmark cost methodology is accurately compensating for the costs of the benchmark debt strategy. Consider Figure 4 below which illustrates a scenario in which NSPs are issuing a range of instruments with different tenors. In this scenario these are, on average, debts being issued at less than the benchmark BBB+ credit spread.

Figure 4: Hypothetical scenario where Networks have a "halo effect" relative to the BBB+ benchmark.



However, if a statistical analysis of this issue was restricted to only examine debts with the identical characteristics of the benchmark debt strategy (10 years tenor) then the test would be inconclusive). In this scenario, looking exclusively at 10 year tenor debt would not identify any outperformance relative to the benchmark BBB+ credit rating because the two 10 year tenor debts issued in this period have a cost very similar to that predicted by the benchmark.

However, it is clear that widening the scope of the analysis to include tenors shorter and longer than 10 years does reveal an apparent "halo effect" relative to the BBB+ benchmark. It is appropriate to widen the sample to tenors other than 10 years so long as the comparison to the benchmark BBB+ curve is undertaken at the same tenor as each instrument.

Such an analysis may reveal that networks are typically issuing debt at less than the third party data providers' estimates of BBB+ credit spreads in general (across a range of tenors). If so, this provides a rationale for reducing the benchmark compensation methodology at 10 years tenor below the third party data providers' estimate of the BBB+ credit spread at 10 years (on the assumption that what is true in general across tenors is likely true specifically at 10 years). This was precisely the empirical analysis and the rationale the AER employed for raising the benchmark compensation methodology assumed credit rating from BBB to BBB+ in the 2018 RoRI.

The ENA considers that this analysis is reasonable and should form the basis for the approach that is adopted in the 2022 RoRI.

Should tenor weighting be applied?

The ENA is concerned that the AER continues to present an unweighted simple average version of the EICSI in its presentations (e.g. Figure 1 of the draft omnibus paper). This is despite multiple submissions from the ENA that an unweighted EICSI materially overweights short term debt issuance relative to its importance to networks in their funding costs. The AER has partially acknowledged this point in its previous final working paper as follows (emphasis added).[11]

> *Network stakeholders have raised the issue that short term debt is currently given the same weight per issuance in the EICSI as long term debt. Using this method a network issuing 10 year debt and 1 year debt at the same time will have the same impact on the EICSI.*
>
> *We consider that there **may be** merit re-weighting the debt by tenor to account for the difference in issuing long term debt compared to short term debt, given that long term debt will be held on the network's debt books for longer. We can recalculate the EICSI weighting it by tenor using data we already have so we will not lose our historic series.*
>
> ***However, we also consider there is merit in using a simple average as this provides an insight into the active debt management practices of the networks we regulate which is useful for informing the development of regulatory practice.***
>
> *We therefore propose to publish two versions of the EICSI, one weighted by term and one based on the simple average. To the extent that we use the EICSI in directly estimating our return on debt we will use the version weighted by term as it is a better match for our trailing average by recognising that debt is held over multiple years.*

The unweighted EICSI is a biased measure of network costs because it is a simple average of all instruments issued in any 12-month period. As a result, the EICSI gives most weight to instruments that are refinanced most often. Short-term instruments are, by definition, refinanced more often than long-

[11] AER, Energy network debt data Final working paper November 2020, p.26.

term instruments. Consequently, the EICSI gives more weight to short-term debts – even if short-term instruments are less important in funding the RAB.

The ENA is unclear whether the AER's proposal to change the credit rating in the benchmark compensation methodology to target the credit spreads in the EICSI refers to the tenor-weighted or non-tenor-weighted version of the EISCI.

More detail on this issue has been provided in previous submissions made by the ENA. So far the only response from the AER on this matter is provided above (in the bolded paragraph of the above quotation from the November 2020 Energy network debt data final working paper).

The ENA considers that an unweighted EICSI has no informational value and its continual publication creates an erroneous and misleading picture of the quantum of the gap between the benchmark 10 year BBB+ credit spread and credit spreads that networks actually pay on their portfolios of debt. While a simple average of a measure is intuitively simple to understand, in this case, the simple average is not relevant to the analysis. Given this, the continued publication of the simple average is likely to detract from clarity, not add to it.

Should value weighting be applied?

Higher value debt instruments represent a larger fraction of industry debt funding than otherwise identical smaller value debt instruments. If the AER's objective is to set the benchmark compensation methodology to compensate for industry average debt costs then value weighting must be applied to the measure of industry average debt costs.

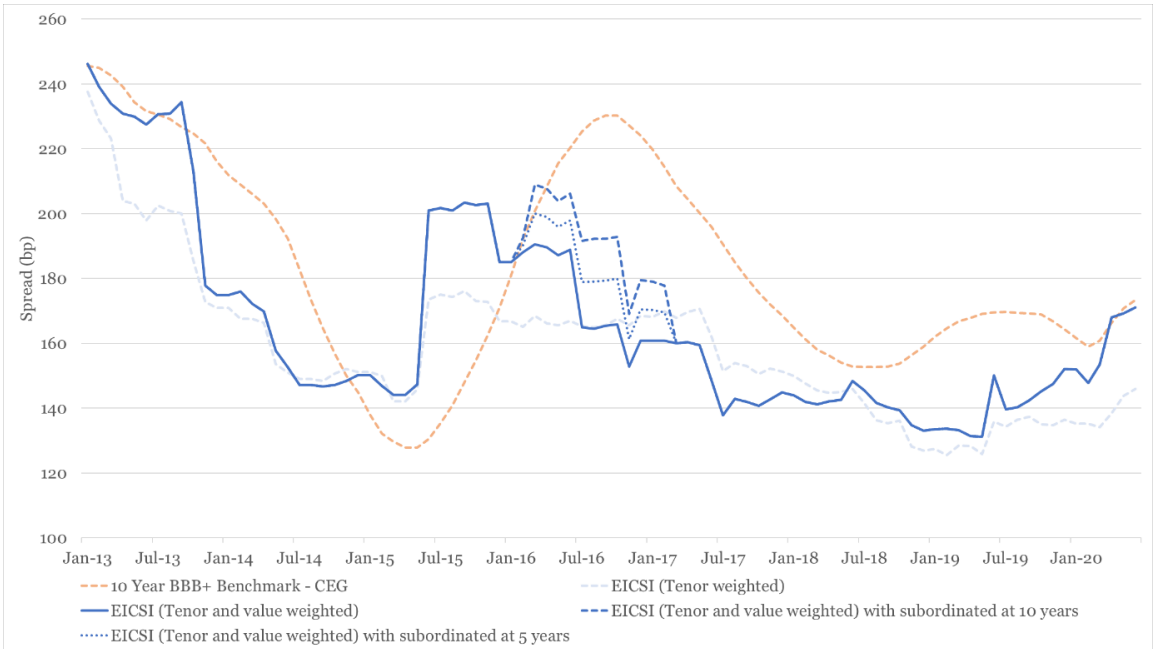
In this regard the ENA notes Dr Lally's advice to the AER.

> *The ENA (2020b, para 28) argues that the average DRP in the EICSI series should be value-weighted.* ***If the EICSI data were being used to directly set the allowed DRP for the regulated businesses, I would agree, otherwise use of the average cost in the EICSI series to generate the allowed DRP for regulated businesses would fail to match the costs of these businesses in aggregate****.*

The ENA contends that the AER's proposed use of the EICSI is precisely as Dr Lally hypothesises in the above quote. The AER is proposing to target the level of compensation (under the BCM) to the industry average costs measured using the EICSI. In this context, not value weighting the EICSI would cause debt compensation not to match to the costs of these businesses in aggregate.

CEG estimates that the value and tenor weighted EICSI is typically materially higher than the tenor weighted EICSI. This was materially so in 2015/16 and has been true since July 2018.

Figure 5: The impact of value weighting the EICSI



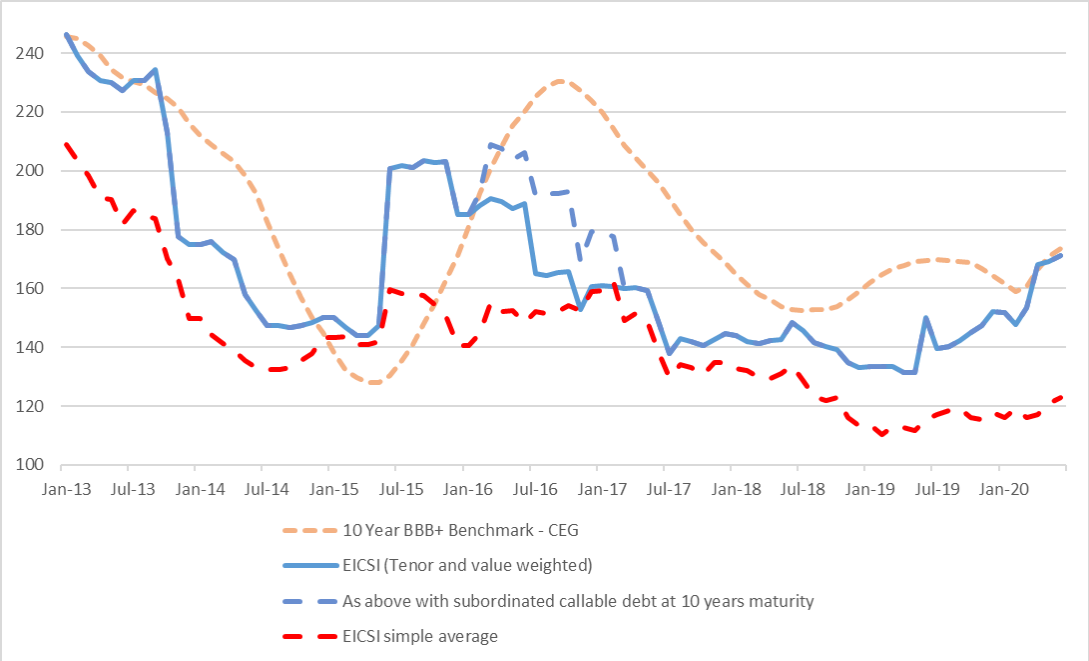
Source: CEG analysis of industry debt data

The AER's current proposal is, in effect, to lower the dotted orange line so that it is, on average, equal to the EICSI. If the AER were to proceed with this, notwithstanding the principled objections from the ENA in the preceding section, the only relevant EICSI for this purpose is one that is both tenor and value weighted.

In order that stakeholders can clearly see the impact of the AER using the simple average (unweighted) EICSI, the ENA compares the value and tenor weighted EICSI against the unweighted EICSI in Figure 6 below. There is commonly a 40+bp difference between these two curves – including in the most recent two years.

Lowering the benchmark compensation methodology line (the orange dotted line) to be consistent with the unweighted EICSI (red dotted line) would lower compensation well below industry average costs.

Figure 6: Value and tenor weighted versus unweighted EICSI



Source: CEG analysis of industry debt data

We note that Dr Lally , in the same paragraph as quoted from above, makes the following statement.

> *However the EICSI data is being used **merely to modify the AER's use of the RBA, Bloomberg and Thomson Reuters indexes**. Accordingly, the technical features of the indexes need to match, to avoid differences in the DRP estimates that arise purely from differences in such features (which would wrongly be ascribed some real significance). So, the EICSI data should be value or not value-weighted according to whether the RBA etc indexes are or are not. The RBA index is certainly value-weighted (Arsov et al, 2013, page 20), the Bloomberg index is partly value-weighted through excluding low value bonds (directly and via the minimum BVAL score requirement: see ACCC, 2014, page 8), and the situation regarding the Thomson Reuters index is unclear. So, it is unclear whether the EICSI index should be value-weighted or not.*

However, we understand that the proposed use of the EICSI is not just a test of whether networks' credit spreads are consistent with those estimated by the RBA, Bloomberg and Thomson Reuters indexes - as was done in the 2018 RoRI process. The current proposal is to modify the use of the third party indexes in order to set compensation for the DRP (credit spread) equal to industry average DRPs. In this context, it is essential to value weight – as Dr Lally himself makes clear in the first of the above two quotes and the worked example he provides (not shown).

The ENA's proposed use of the industry debt data is to test whether networks' credit spreads are consistent with those estimated by the RBA, Bloomberg and Thomson Reuters indexes (as the AER did in the 2018 RoRI process). In this context, Dr Lally's points about value weighting by the index providers are well taken. However, the ENA considers that the evidence that two index providers do value weight and uncertainty around the practice of the third provider is evidence to support the need to value weight the EICSI (as opposed to the evidence being 'unclear').

In any event, the fact that a higher value debt forms a higher proportion of network's funding costs than a lower value debt strongly points to the importance of value weighting the EICSI – even if third party data providers did not value weight their estimates. To see why, consider a simple example:

- Assume networks issue 90 large value ($100m) and 100 low value ($10m) instruments in a given period;
- Assume the spread to the third-party data providers' BBB+ estimate is:
  - +50bp for the large value instruments (i.e. 50bp above the third-party data providers' BBB+ estimate); and
  - -100bp for the smaller value instruments (i.e. 100bp below the third-party data providers' BBB+ estimate).
- An unweighted average will indicate "outperformance" of 0.29bp. By contrast, a weighted average will indicate "underperformance" (higher costs) by 35bp.

This example highlights that it would be unreasonable to reduce debt compensation based on the observed unweighted outperformance. This would result in compensation being lowered by 29bp even though the evidence shows that networks issued debt at an average of 35bp above the BBB+ benchmark.

Should subordinated debt be include in the analysis?

If the AER continued to apply the same 2018 RoRI approach to testing the appropriateness of the credit rating in the benchmark compensation methodology then there would be no imperative to include subordinated debt in the analysis. The test the AER applied in the 2018 RoRI (and the test the ENA proposes again in 2022) involved comparing at matched tenor:

- the credit spreads of third-party data providers at the credit rating set out in the benchmark compensation methodology (then BBB); with
- the credit spreads achieved by NSPs on the relevant instruments.

In this context, the "relevant instruments" are those that had attributes consistent with the benchmark debt strategy as defined by the AER and the selection criteria defined by the third party data providers (which is the issuance of senior non-callable debt). In this context, it is reasonable to exclude subordinated debt because it differs from the debt assumed to be issued under the benchmark debt strategy.

Given the purpose of the test is to inform an assessment of whether the benchmark compensation methodology is delivering compensation consistent with the costs of the benchmark debt strategy, it is reasonable to exclude debts that are not consistent with the benchmark debt strategy.

However, and as set out above, the AER is proposing to move away from the setting compensation to be consistent with the cost of following the benchmark debt strategy. The AER is now proposing to set compensation to target the industry average costs estimated in the EICSI. In this context all debt must be included in the EICSI. There is no basis to exclude debts on the basis that they are different to the debts assumed in the benchmark debt strategy because the compensation is no longer based on a benchmark debt strategy.

The ENA separately, in its submission in response to the overall rate of return omnibus paper, describes why it would be unreasonable to include only AusNet's A- rated debt and exclude AusNet's BBB rated

subordinated debt when subordinated debt supports the credit rating of the senior debt (relative to if the subordinated debt was instead issued as senior debt).

The ENA also notes that just as senior debts are paid before subordinated debts (and therefore have lower risk and lower credit spreads), 2 year debts are paid before 10 year debts and, for the same reason, have lower risk and lower credit spreads. It would be unreasonable in all respects if the AER were to exclude subordinated debts on the basis that they have higher risk than the assumed 10 year senior debt in the BDS but include much lower tenor than 10 year debt.

Finally, the ENA notes that there appears to be some confusion about AusNet's subordinated debts being "hybrid" debts in the sense that they can be converted into equity. These debts cannot be converted into equity. They are referred to as "hybrids" in AusNet publications because rating agencies assign them a favourable treatment counting 50% of their principal and interest in their credit metric calculations *for the purpose of determining the credit rating on the senior debt they are subordinated to***.** Rather than being a reason to exclude these subordinated debts this is precisely why they must be included if the AusNet A- rated senior debt is to be included in the EICSI.

Should callable debt be included?

The same logic applies to callable debt as to subordinated debt.

If the AER continued to apply the same 2018 RoRI approach to testing the appropriateness of the credit rating in the benchmark compensation methodology then there would be no imperative to include callable debt in the analysis. This is because that debt is different to the debt assumed in the benchmark debt strategy and, consequently, the cost of callable debt is less relevant as a measure of the costs of implementing the benchmark debt strategy.

However, if the AER's intention is to set the credit rating in the benchmark compensation methodology in order that compensation for credit spreads matches industry average credit spread costs (as measured in the EICSI) then callable debt should be included in this analysis because it is a relevant part of industry average costs.

The treatment of callable debt highlights instability and opaqueness in the approach to inclusions and exclusions from the EICSI. The treatment of callable debt appears to have changed over time, with no explanation for the change provided. At the origination of the EISCI, the AER listed callable debt as being specifically excluded. More recently, the word 'callable' has been removed from the list of excluded debt instruments. However, it has not been explained why the AER no longer considers callable debt should now be included. On the other hand, if the AER continues to consider callable debts should be excluded, it would be useful if the AER clarified that callable bank lines of credit are now excluded from its EICSI construction.

There remains the question of what tenor to assign callable debt. The ENA notes that this is a question that must be answered in relation to both:

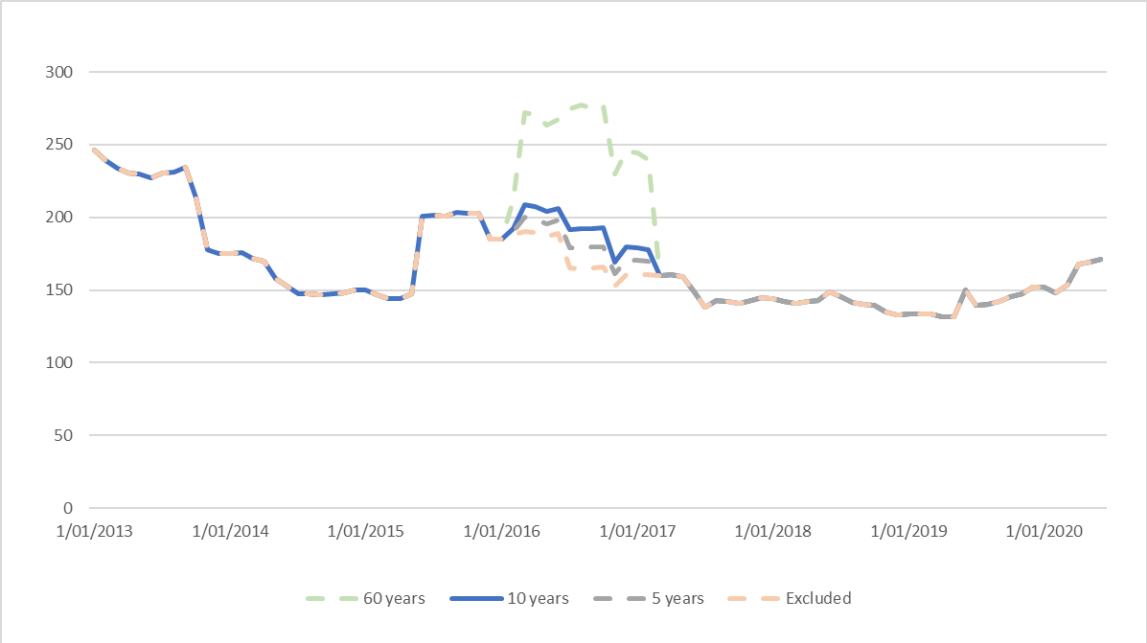
- callable bank debts; and
- the AusNet callable subordinated debts.

The ENA understands from CEG that, in the case of the former, the AER appears to be assigning the final maturity date to callable bank debts. This is also an option in the case of the AusNet callable subordinated debts. However, their 60 year final maturity dates would mean that applying the same approach as the

AER adopts for bank debts would assign a very high weight to the AusNet callable notes (given the EICSI must be tenor weighted).

An alternative, conservative approach would be to apply the first call date. This is 5.5 years for current AusNet hybrids.

Figure 7: Illustrations of sensitivity of EICSI (tenor and value weighted) to different maturities assigned to the AusNet callable debts



Should bank debt (and higher fees on bank debt) be included?

Many bank debts have materially higher fees (on a bppa basis) than long term bonds. This is especially true of (callable) bank lines of credit.

By way of illustration, consider a $100m callable line of credit with a 5-year tenor and a 70bppa credit spread but with $0.6m upfront costs and a 33bppa commitment fee. This line of credit has fees of 59bppa if it is, on average, half drawn. [12] Thus, the 'all in' credit spread (70bppa + 59bppa) is almost double the reported value that would be used in the AER EICSI (70bppa).

The ENA understands that, to date, the AER has not included the fees on these instruments in its construction of the EICSI.

The ENA considers that bank debts need to be treated on a comparable basis as long term bonds. To the extent that:

- bank debts have higher fees than long term bonds; and
- bank debts are included in the EICSI; then

[12] 26bppa annualised upfront costs ($0.13m pa on $50m average drawn) plus 33bppa commitment fee.

- these higher fees need to be included as part of the credit spread for those instruments when implementing the EICSI.

If this is done then the ENA considers that it is reasonable to include bank debts in the EICSI.

Benefits of maintaining a replicable benchmark

Managing insolvency risk is the primary task of all corporate treasuries – networks included. This does not mean that networks are currently, or are ever likely, to become insolvent. Rather, it is the job of corporate treasurers to make sure that this does not happen – precisely because the costs of failure in this regard are catastrophic.

To the extent that the regulatory framework can deliver compensation allowances that more closely match costs (both in terms of levels and patterns over time) then this lowers the costs to networks in managing insolvency risk (and hence, lowers prices for customers).

Regulatory compensation is a key tool in managing insolvency risk

An efficient debt management strategy for a regulated NSP must manage two distinct sources of insolvency risk:

- **refinance risk:** which is the risk that the business is unable to refinance debt as it comes due (or only able to do so at very disadvantageous terms); and
- **regulatory mismatch risk**: which is the potential for a mismatch between the regulated firm's actual debt costs and the compensation for debt costs given by the regulator.

The ability for a regulated business to manage its debt portfolio to replicate the costs that it is being compensated for is a core component of managing these risks.

The AER has previously recognised the importance of compensating for debt costs consistent with a replicable benchmark debt management strategy. This was a significant part of the AER's reasoning for adopting the trailing average.[13]

> *In contrast to the on-the-day approach, a trailing average approach is expected to* ***better account for a benchmark efficient entity's actual (cash) debt costs within a regulatory period because it provides service providers with a return on debt allowance that they can more readily match each regulatory period****. As such, this will likely reduce the mismatch between actual debt interest costs of regulated firms and the regulated return on debt allowance. Given that a trailing average approach reduces the risk of cash flow mismatch (a form of interest rate risk), it might better lead to productive efficiency. All else being equal, this reduced risk and the reduced need to enter hedging arrangements might lower the cost of financing.*

Further, the benefits of replicability appear to be referenced in the rationale for the AER's proposed shift to a capex-weighted trailing average. That is, in its debt omnibus working paper the AER states:

> *[T]he integrated system plan (ISP) developed by the Australian Energy Market Operator (AEMO) has raised the prospect of large projects being undertaken in the near future… As a result, there could be large debt raising requirements in some years beyond the 10 per cent level built into our current*

[13] AER | Final decision: Australian Gas Networks Access Arrangement 2016–21, Attachment 3 – Rate of return p. 297

trailing average return on debt. ***This in turn could create a mismatch between our return on debt and the capital requirements of the firms we regulate****.*

And similarly, the imperative for regulated businesses to managing regulatory mismatch risk has been recognised by other regulators. For example, the QCA states: [14]

> *Regardless of the benchmark implemented by the regulator (i.e. on-the-day, trailing average, or hybrid),* ***a firm subject to revenue or price determination has a strong incentive to 'match' that regulatory benchmark****. This incentive arises because the regulator sets allowed revenues, and any difference between the allowed (i.e. benchmark) cost of debt and the firm's cost of debt will effectively flow to (or from) the firm's equity holders.*
>
> *If the benchmark firm is able to match the benchmark debt servicing costs relatively closely, it can substantially reduce this source of volatility to its equity holders (QCA, 2014d: 26).* ***The regulator's specification of a benchmark, therefore, implies a corresponding debt management strategy for the regulated firm*** *(Lally, 2014a: 8–9; SFG Consulting, 2012: 5).*

The importance of a viable approach was also outlined by Dr Martin Lally in his recent advice to the AER. Specifically, Lally advised the AER that the assumed efficient debt financing strategy that forms the basis of the allowed return on debt will only satisfy the NPV=0 principle if that assumed strategy is "viable". In this context, Lally defined viability as follows:[15]

> *'a viable debt policy means feasible and not so inefficient that firms would avoid it'*

Put another way, a debt management strategy that no network could, or would, ever adopt would not be an appropriate regulatory benchmark. However, this is exactly the situation being proposed.

Consistent with the above, the ENA proposes the return on debt is best estimated by first setting a benchmark debt management strategy based on the observed practice of networks, and then estimating compensation for the cost of debt to match the costs a network will incur in following this benchmark debt management strategy. Ultimately, the ENA expects this approach will minimise costs to networks, and ultimately their customers, of managing debt strategies.

Further details on the practical application of this approach are provided in **Appendix A.**

Replicability is not a roadblock to lowering debt compensation to NSPs

Ensuring that the cost of debt allowance is replicable does not, in any way, prevent customers from benefiting from any outperformance found in the industry debt data.

For example, if NSPs are, on average, engaging in debt management strategies that lower their cost of debt relative to the 10 year trailing average cost of debt, the AER can pass this onto customers by changing the benchmark debt strategy to be consistent with the observed average NSP debt management strategy. Doing so simultaneously delivers both:

- lower costs associated with the specified lower cost benchmark debt strategy;
- a replicable benchmark debt strategy that networks can continue to hedge to (this must be replicable because it is based on what networks are, on average, doing).

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[14] QCA, Trailing average cost of debt, April 2015, p. 9.
[15] Lally, April 2021, The appropriate term for the allowed cost of capital, p. 25.

There is no trade-off between achieving these two objectives. To further illustrate the above, consider the stylised example below.

Practical implications of a non-replicable benchmark

Imagine that there was evidence that most NSPs were persistently following a debt management strategy of issuing 5 year debts and that this materially reduced their debt costs below the current compensation for 10 year debts. The AER could deliver lower debt costs to customers by changing the benchmark debt strategy to assume a 5 year tenor rather than a 10 year tenor. The new cost of debt allowance would still be replicable because, by construction in this illustration, most networks were already adopting that strategy. In this illustration, sharing of outperformance and replicability go hand-in-hand. There is no trade off.

Now contrast this with what would occur if the AER, instead, maintained a 10 year trailing average benchmark debt strategy but populated that trailing average with the costs of 5 year debt (i.e. akin to the AER's current proposal to simply adjust credit rating even if outperformance is due to an average tenor different to 10 years). In this case, to match debt costs to the allowance, a network will have a choice:

- either issue 5 year debt and expose the business to more volatile debt costs than the benchmark compensation methodology will provide (noting that this methodology will continue to update only 10% of the portfolio cost based on market conditions in each year but the NSPs' costs will update 20% based on market conditions in each year); or
- issue 10 year debt, giving the NSP the same time path for exposure to prevailing market conditions as the AER benchmark assumes, but have costs in excess of those provided by the AER's methodology.

In both scenarios described above, customers get the benefit of paying less compensation towards the cost of debt (and, equivalently, networks receive less compensation). However, in the second scenario:

- no network could align its costs to the resulting compensation; and
- customers would be paying a cost associated with 5 year debt while only being exposed to the volatility of a 10 year trailing average.

Relative to the first reform option (delivering lower compensation to customers by changing the tenor in the benchmark debt strategy), the non-replicable reform option will tend to raise credit spreads for networks and place upward pressure on credit ratings.[16] Over time, this will cause the EICSI to rise and some of the benefits associated with outperformance will be lost (to both customers and NSPs).

In summary, if sustained outperformance is due to networks departing in some way from the 10 year benchmark debt strategy, it is in all stakeholders interest that the AER seek to deliver that outperformance to customers by changing the benchmark to reflect the industry practice that gave rise to the outperformance. If the AER seeks to deliver the benefits of outperformance to customers without reflecting that in a changed benchmark debt strategy then the AER will be creating a non-replicable debt

[16] Or cause NSPs to incur other costs associated with offsetting higher cash flow risk – such as lowering gearing and paying more in corporate taxes.

allowance. This will ultimately raise costs to all stakeholders (relative to a policy of passing on outperformance by adjusting the BDS).

Therefore, as outlined previously in this submission, the ENA strongly considers that if:

- there is any material average outperformance relative to current debt compensation that is due to some businesses issuing at tenors less than 10 years; and
- if the AER, after consideration of the reasons and transiency or otherwise of this outperformance, wishes to pass that outperformance onto customers; then
- it must do so by adjusting the benchmark debt management strategy to reflect the source of the outperformance (i.e. lower than 10 year tenor).

Changing the tenor of the trailing average is disruptive, but less disruptive than creating an unhedgeable allowance

The ENA agrees that changing the tenor of the trailing average would require some work on the part of the AER in consulting on the replicable transition path to apply. However, the disruption would be insignificant compared to the disruption if the AER proceeds to implement non-replicable cost of debt allowance (for the reasons outlined above).

Other issues

Debt data providers

The ENA is unaware of any evidence to support a change to the approach to the selection of third-party debt data providers.

Proposed capital expenditure weighting of the trailing average

The ENA considers that this is an issue that individual NSPs are best placed to submit on.

Averaging period timing

The ENA recommends a minor change to the debt averaging proposal and notes that this change will drive additional costs for industry.

The AER proposes that the debt averaging period end date moves from no later than 4 months, to no later than 5 months, prior to the commencement of a regulatory year (i.e. 31 January). The AER has not proposed a corresponding change to the starting requirement though (i.e. no later than 16 months prior to the commencement of a regulatory year, or 1 March).

Without a corresponding change from 16 months to 17 months, this means that the maximum averaging period is restricted to 11 months rather than 12 months. This is inconsistent with the debt averaging period requirement as being between 10 days and 12 months.

If the AER wish to amend the end date for debt averaging periods by one month, it is essential that it moves the start date by a similar period.

The ENA notes that many networks have swap portfolios with instruments designed to rollover in periods that they expected to be able to nominate an averaging period. Placing a new restriction on when an averaging period can be nominated may be disruptive to those businesses, and/or add cost (e.g, may cause them to put in place temporary hedging strategies and/or bear more risk than they otherwise would). The AER should carefully consider whether the additional costs levied on networks justify the benefits of its proposal.

Instrument contingencies

The ENA has no submission to make at this stage on contingencies in relation to the availability of third party data provider estimates.

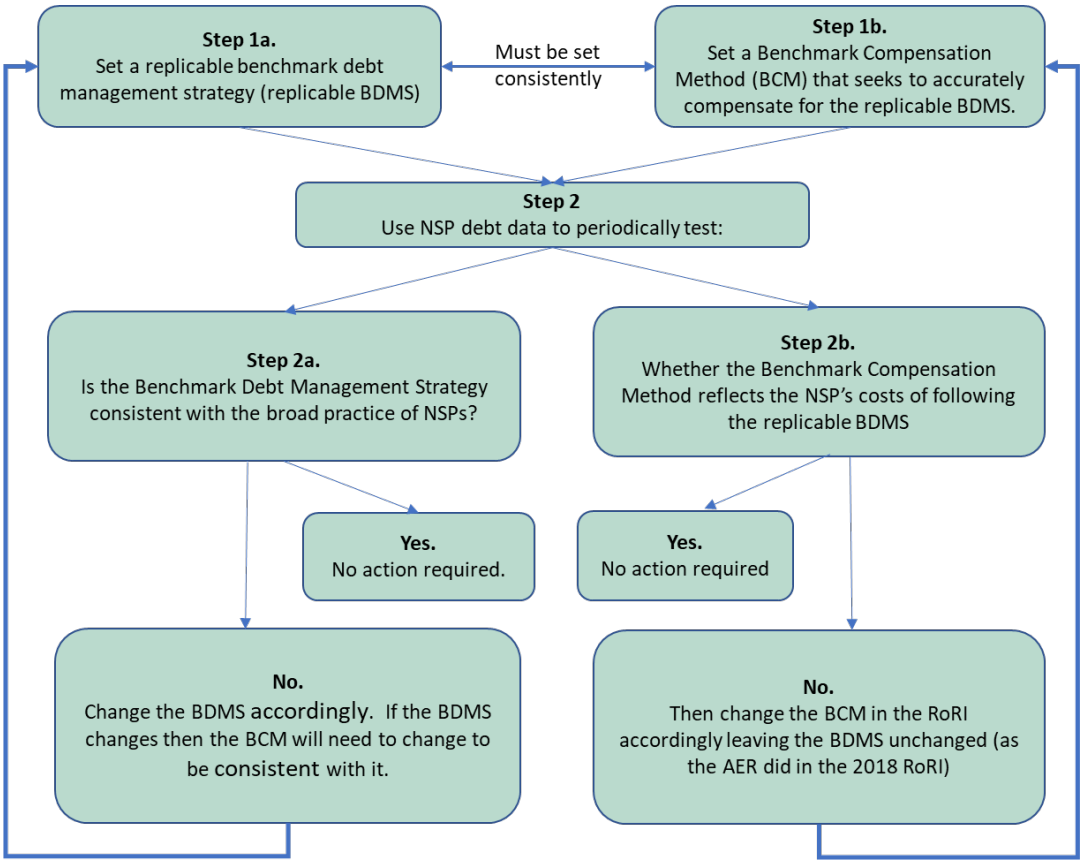
Debt raising costs

The ENA considers it is reasonable to continue to estimate debt raising costs for 10 year benchmark debt issuances outside the rate or return process. However, the ENA reiterates its position that if the EICSI relies on instruments that have higher debt raising costs (and other fees) than the 10 year benchmark debt issuance then this difference in costs should be attributed to those instruments within the EICSI.

Appendix A - Proposed ENA use of network data

As outlined in the body of this document, the ENA proposes the return on debt is best estimated by first setting a benchmark debt management strategy based on the observed practice of NSPs, and then estimating compensation for the cost of debt to match the costs an NSP will incur in following this benchmark debt management strategy. This approach is summarised in the flow diagram below.

Figure 8: Setting an efficient cost of debt allowance



Each of the steps above are described in more detail below.

In **Step 1a** the AER sets a replicable benchmark debt management strategy ("replicable BDS"). The current replicable benchmark debt management strategy is the issuance of evenly staggered 10 year debts with a total value of 60% of the RAB.

The AER can, and in the ENA's view must, satisfy itself that a BDS is replicable by choosing a BDS that is consistent with the broad practice of NSP's debt management strategies. In this regard, the ENA commends the AER's approach, as implemented in the 2013 rate of return guideline and the 2018 rate of return instrument (RoRI) of setting a trailing average benchmark debt management strategy that consists of:

- An assumed tenor of debt issuance that is close to the observed average, and consistent with the observed range, or weighted average term of issuance (WATMI) from the industry debt data.

» An assumed debt gearing that is close to the observed average, and consistent with the observed range, of debt gearing for the industry.

In **Step 1b** the AER sets a Benchmark Compensation Method (BCM) that seeks to accurately compensate for the costs of the replicable BDS determined in Step 1a. That is, having determined a benchmark replicable debt management strategy in Step 1a, the ENA considers the AER's next task should be to set a method for accurately estimating the cost of implementing this strategy.

The AER's original approach, in the 2013 rate of return guideline, was to estimate a benchmark credit rating for the purpose of estimating the interest costs on 10 year debts. In 2013, the AER determined that the cost of debt estimated by Bloomberg and the RBA for a broad BBB rating (i.e., from BBB- to BBB+) should be used. The choice of a broad BBB credit rating reflected the fact that, while the average credit rating for NSPs was BBB+, all published third party sources of the cost of debt were based on a broad credit rating category (and BBB+ fell within the broad BBB range).

In **Step 2b** the AER would use network debt data to periodically test whether the benchmark compensation method reflects the NSP's costs of following the replicable benchmark debt management strategy. The ENA considers that the AER's approach in the 2018 RoRI process was a fair and reasonable application of this test. In that process, the AER determined to estimate a proxy BBB+ estimate of the cost of debt by weighting third party data providers' estimates of the broad BBB and A curves. The AER's description of its use of network debt data, and its reasoning in that process is set out below.

> *Our key reasons for this view are as follows. Firstly, we consider the use of a 'broad-BBB' series alone will, other things held constant, overestimate the return on debt required for a BBB+ rated entity. … some combination of broad-BBB and broad-A curves should therefore provide the best fit to a BBB+ benchmark credit rating. As a conceptual expectation, our view is that a 2/3 broad-BBB: 1/3 broad A rating is most likely to match a BBB+ benchmark credit rating.*
>
> *Secondly, our analysis of **actual debt instruments** raised by service providers compared to our current approach suggests that:*
>
> - *When **term and date of issuance are controlled**, the use of broad-BBB curves has, over 2013–17, overestimated by approximately 29 basis points the spreads at which service providers have issued debt*
> - *When **term and date of issuance are controlled**, a weighted average of 2/3 broad-BBB : 1/3-broad A curves has, over 2013–17, overestimated by approximately 9 basis points the spreads at which service providers have issued debt*
>
> *We therefore conclude, that a 2/3 broad-BBB : 1/3 broad-A estimate is a better match for our benchmark credit rating of BBB+. This is supported conceptually and by our analysis of debt issuances over the past 5 years.*

In this analysis the AER essentially investigated whether there was any "halo effect" for NSPs relative to the BBB cost of debt estimates by third party data providers. The AER determined that there was such a halo effect by comparing the credit spreads on instruments issued by networks with the matched tenor equivalent credit spread estimated by third party data providers. On this basis the AER assigned weights to the third-party data providers' A and BBB curves to largely eliminate that halo effect (estimated to reduce it from 29 to 9 basis points over the estimation period).

In **Step 2a** the AER would use network debt data to periodically test whether the benchmark debt management strategy remained consistent with the broad practice of networks. As noted above, the AER

has taken this approach in the 2013 and 2018 rate of return process and the appears to be continuing to take that approach in the 2022 process.

Specifically, the AER has estimated a weighted average term to maturity at issuance (WATMI) of all debts currently in NSPs' portfolios. The ENA supports this approach (which as noted previously, updated network debt data continues to support a 10-year benchmark tenor).

If the application of the tests in Steps 2a and 2b indicate a reform to the benchmarks is appropriate, it is critical that only the benchmark corresponding to the relevant test is changed. Specifically:

- If the test in Step 2a (the test of the benchmark debt strategy against networks' debt management strategies) indicates a need for change then it is the BDS that needs to change. The BCM should not be changed in response to a departure by (some or all) networks from the benchmark debt strategy.
- If the test in Step 2b (the test of BCM compensation against the costs networks incurred when following the benchmark debt strategy) indicates a need for change then it is the BCM that must change not the benchmark debt strategy.

This correspondence between the benchmark being tested and changed is critical to maintaining internal consistency within the overall regulatory regime. If this is not maintained, then a network following the BDS will be unable to recover their efficient costs. Similarly, customers paying the BCM will not be exposed to the risk/return trade off inherent in setting the benchmark debt strategy.