9 August 2012

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Dear Mr Pierce

Review of Distribution Reliability Outcomes and Standards – Issues Paper National Workstream

Ausgrid welcomes the opportunity to provide a submission on the issues paper on the national review of distribution reliability outcomes and standards.

We support a focus on the framework for distribution reliability rather than a harmonisation of existing jurisdictional arrangements. As the Standing Council on Energy Resources (SCER) notes, it is appropriate for standards to differ across jurisdictions due to differing characteristics of distribution networks. We would submit that this is particularly the case for Ausgrid which owns and operates distribution and transmission assets.

We also support the need for consultation on the recommended best practice framework prior to the publication of the final report. We believe the implementation of such a framework would take longer than the suggested four months. As the AEMC correctly points out, the development of a best practice framework would require engagement with stakeholders. It is for this reason that we support the AEMC's proposal to negotiate an additional consultation step with the SCER prior to publication of the final report.

It is our belief that a nationally consistent framework can contribute to the achievement of the National Electricity Objective if there are reliable and recent data for Value of Customer Reliability (VCR) and Willingness to Pay (WTP) that capture the diverse needs of various customer segments across the diverse distribution networks. On this basis we would support an outcomes approach to setting the standards for Reliability.

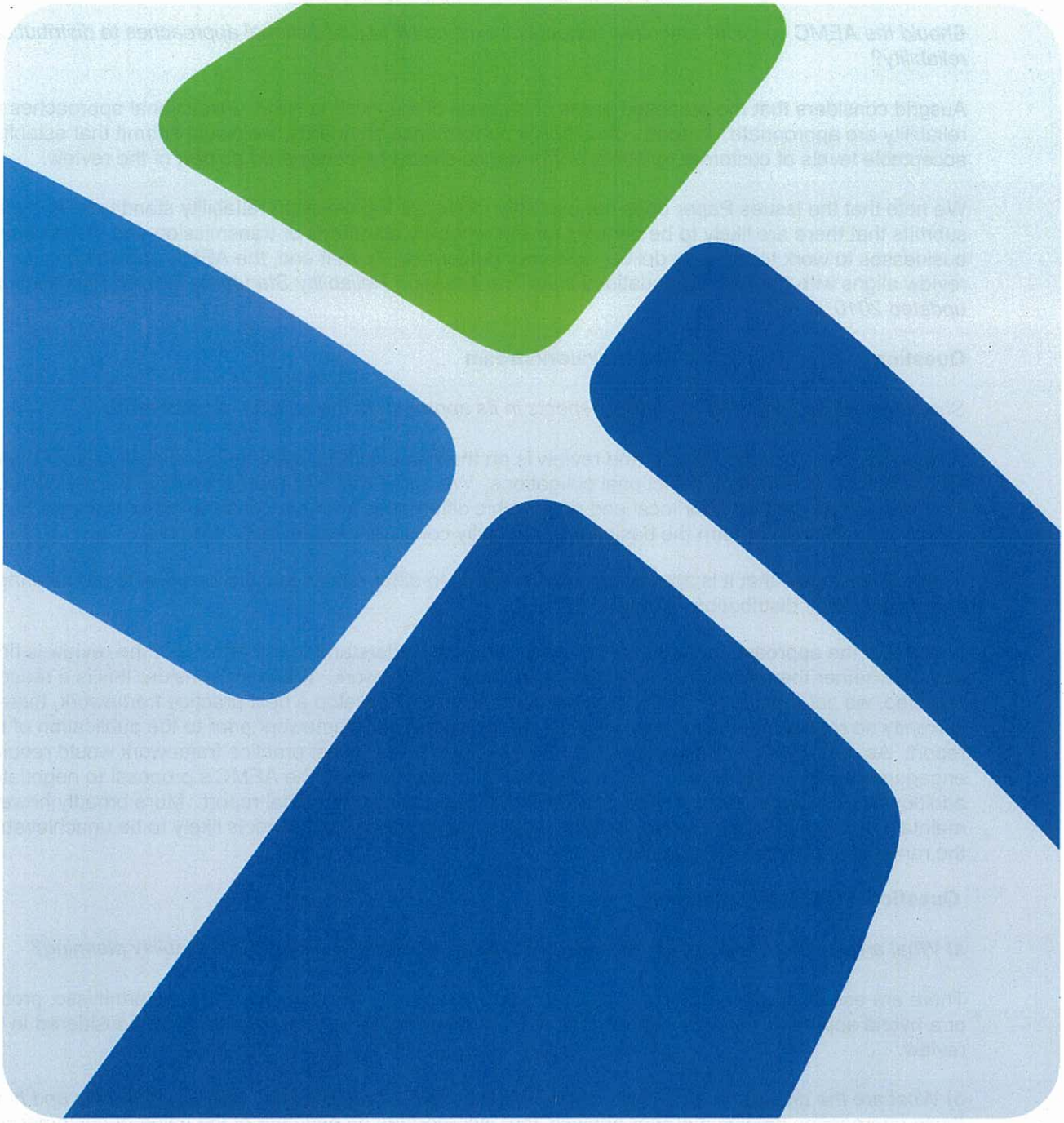
If you have any queries or wish to discuss this matter in further detail please contact Mr Keith Yates, A/Executive Manager Regulation & Pricing on 9269 4171.

Yours sincerely

TREVOR ARMSTRONG
Interim Chief Operating Officer

Submission on the Distribution Reliability Outcomes and Standards Issues Paper – National Workstream

9 August 2012



1 Response to Issues Paper Questions

Question 1 Analysis of NEM jurisdictional approaches to reliability

Should the AEMC consider any other aspects of existing NEM jurisdictional approaches to distribution reliability?

Ausgrid considers that the proposed areas of analysis of the existing NEM jurisdictional approaches to reliability are appropriate. In terms of reliability performance standards, we would submit that establishing acceptable levels of customer reliability performance should be considered as part of the review.

We note that the Issues Paper does not explicitly reference transmission reliability standards. Ausgrid submits that there are likely to be benefits for the reliability standards of transmission and distribution businesses to work together to deliver customer outcomes. To that end, the AEMC should consider how this review aligns with the recommendations in its *Transmission Reliability Standards Review Final Report – updated 2010*.

Question 2 Approach to the national workstream

Should the AEMC consider any other aspects in its approach to the national workstream?

Ausgrid supports that the focus of the review is on the framework for distribution reliability rather than a harmonisation of existing jurisdictional obligations. We agree that it is appropriate that the review recognises the importance of allowing for local and geographic differences and that consistency for the sake of consistency should not form the basis for a nationally consistent framework. We note:

"…the SCER notes that it is appropriate for standards to differ across jurisdictions due to the differing characteristics of distribution networks."[1]

In terms of the approach to the national workstream, we understand that the focus of the review is first to assess whether there is merit in a nationally consistent framework. While we consider this is a reasonable first step, we note that if the SCER requests that the AEMC develop a best practice framework, there is currently no requirement for consultation on the recommended framework prior to the publication of the final report. As the AEMC correctly points out, the development of a best practice framework would require engagement with stakeholders. It is for this reason that we support the AEMC's proposal to negotiate an additional consultation step with the SCER prior to publication of the final report. More broadly however, we maintain that a four month timeframe to develop a best practice framework is likely to be unachievable given the range of issues for consideration.

Question 3 Reliability planning

a) What are the most appropriate administration arrangements for distribution reliability planning?

There are essentially three different approaches to distribution reliability planning: deterministic, probabilistic or a hybrid approach. Ausgrid agrees that all three planning arrangements should be considered in the review.

b) What are the different approaches that could be adopted for distribution reliability planning and how could these approaches employ a proper analysis that incorporates an estimate of the value of customer reliability or willingness to pay?

In NSW, deterministic design planning criteria dictate requirements for the design of the network in order to achieve specified reliability outcomes. In this sense, NSW is similar to the United Kingdom where established design criteria are used to specify the security 'safety net' levels of the network.

[1] AEMC, *Review of Distribution Reliability Outcomes and Standards, Issues Paper - National Workstream*, 28 June 2012, Sydney p 7.

These criteria are expressed in terms of the proportion of load that must be able to be supplied following the first and second circuit outage but are not specific in terms of nominating the network configuration.

Ausgrid notes that one of the advantages of the deterministic planning criteria is that it is relatively straightforward to apply as it explicitly states forecast demand assumptions and is premised on selection of the least cost investment option. Despite these advantages, we would submit that because the current criteria were not set with reference to a value of customer reliability, there is likely to be some benefit in relaxing these criteria to reflect a UK 'safety net' approach.

A probabilistic approach as used in Victoria is an output based approach which relies on a value of customer reliability (VCR) to assess the cost benefit of reliability investment decisions and ultimately, the value customers' place on their reliability of supply. As the approach does not prescribe planning criteria, it allows a more flexible approach to reliability planning where the DNSP identifies major capacity constraints in terms of a forecast impact on reliability (unserved MWh and length of interruption) and investment options for resolving the forecast constraints. The methodology is the most successfully deployed when the VCR is accurately measured and incorporates a Willingness to Pay (WTP) measure that produces accurate and reliable results at a national, regional and network level.

As an alternative to both approaches, the AEMC indicates that a hybrid approach to distribution reliability standards could be considered where the DNSP sets input standards based on the results of a VCR study. The AEMC used a hybrid approach in its assessment of reliability outcomes in the NSW reliability review and we note that a hybrid approach is recommended in the Transmission Reliability Frameworks review[2]:

Transmission reliability standards should be economically derived using a Customer Value of Reliability (CVR) or similar measure. They should be capable of being expressed in a deterministic manner, either as specified pre-set standards (referred to elsewhere in this document as a "hybrid" form of standards) or through reporting on an equivalent basis.

...the proposed framework is flexible enough to allow Victoria to continue to use its probabilistic planning methodology and allows other jurisdictions the same flexibility if deemed appropriate. The proposed framework achieves this by establishing probabilistic planning as an adjunct to the hybrid model. Jurisdictions which choose the probabilistic approach to planning will be required to determine these standards based on the framework's common economic parameters and express them in a deterministic (hybrid) format for reporting purposes

Ausgrid submits that there may be benefits in a probabilistic approach in terms of ensuring standards reflect customers' value of reliability combined with a deterministic approach to having a standard that is transparent and enforceable. The hybrid approach may be particularly suited for planning Ausgrid's subtransmission network where there are currently no customer outcome measures in place to enable investment decisions regarding high impact wide area outages caused by low probability sub transmission network incidents.

Irrespective of the approach to reliability planning, it is important that it incorporates an estimate of VCR and WTP. Further, if an economic modeling methodology is recommended as part of a nationally consistent framework, it will be important to review the appropriateness of the AEMO VCR methodology currently utilised in some jurisdictions in terms of its ability to capture the diverse needs of various customer segments in the distribution component of the NEM. This is all the more important because AEMO itself states (in reference to the application of its VCR) that '*caution should be exercised when using VCRs in any analysis other than for transmission planning*'[3].

[2] *Transmission Reliability Standards Review* MCE response to AEMC Final Report 2011, p 6.
[3] AEMO *Value of Customer Reliability Issues Paper*, 2011, p 18.

Question 4 Reliability standards

a) What are the expected costs and benefits associated with consistency in expressing reliability standards and how can locational differences between jurisdictions be accommodated?

Ausgrid would submit that as DNSP reporting systems become more sophisticated, customers will make greater use of comparative analysis in terms of choosing their next connection site or understanding expected reliability outcomes. Moreover, transparency and consistency of expressing reliability standards will enable regulators to develop best practice or efficiency comparators which will also inform customers' locational decisions.

In terms of how locational differences between jurisdictions can be accommodated, Ausgrid would strongly caution against adjusting for locational differences by normalising by network factors such as length of network, storm days, or voltage level etc. We believe that this does not promote transparency and can introduce a "black box" approach where customers, regulators and even DNSPs are uncertain of the real performance hidden behind the various normalisation adjustment factors.

A more transparent approach to accommodate locational differences would be a regulatory requirement to include a small suite of data to explain the local conditions which impact on reliability of supply performance, for example, information on the impact of legacy investments, environmental factors or customer density/profile. In the case of Ausgrid, this will be particularly important as we have sub transmission assets and as such, faults at this level of the network are included in our unplanned outage statistics.

Overall, we consider that the administrative costs of adopting a consistent reporting approach are relatively minimal compared to the risk of failing to ensure that transparent and credible information is available in the NEM.

b) Is there merit in having one entity regulating both reliability standards and investments and what are the possible alternatives to this approach?

The Brattle Group report found that Australia is unique in that within the jurisdictions reviewed, the same body (AER) is responsible for both regulating certain reliability outcomes (STPIS average performance targets) and the price charged for distribution services[4].

Ausgrid notes that there are both advantages and disadvantages with having both responsibilities for reliability outcomes setting and the price charged for the reliability service under one entity. The advantage is that there is likely to be less inconsistency in expressing, delivering and reporting reliability service outcomes and to that end, we note that the AER has commenced a consistent reporting regime through the RIN process. However, the disadvantage is that the AER is an economic regulator and does not "represent" the customers and the value that they place on reliability. As energy supply is an essential service, there may be times when reliability outcomes need to be set in accordance to local conditions or circumstance.

Ausgrid submits that the AEMC is in the best position to assess the merits of alternative reliability regulatory arrangements.

c) What are the important elements of distribution reliability reporting and is there value in a nationally consistent approach?

In consideration as to whether there is value in a nationally consistent approach to reliability reporting, it is important to note that the Steering Committee for National Regulatory Reporting Requirements (SCNRRR) framework attempted to establish consistent regulatory reporting requirements across the NEM, however the evolution of more sophisticated recording and reporting systems, combined with a lack of any legal requirement to adopt consistency across the NEM allowed local jurisdictional differences to flourish.

While there has been some alignment between the jurisdictional arrangements and the AER reporting arrangements, for example Ausgrid has voluntarily adopted the AER definition of the "major event day" there are still many differences that would hinder the adoption of a national reliability reporting regime.

[4] The Brattle Group. *Approaches to setting electric distribution reliability standards and outcomes.* 2012. p 147.

We consider that there is merit in furthering the SCNRRR objectives for national reliability reporting consistency as access to comparative data is likely to improve customer decisions in terms of their ability to make informed choices about reliability outcomes. To that end, a nationally consistent reporting approach would need to:

- Address the inconsistent reporting of planned outages in SAIDI and SAIFI measures and the definition and use of the major event day exclusion rule. Although, we submit that this does not mean that an appropriate exclusion methodology should not be retained.
- Review the SCNRRR customer segmentation definitions to better reflect the diversity of customer types and preferences across the customer base.

Question 5 Incentives

a) What are the expected costs and benefits associated with existing jurisdictional incentive schemes for distribution reliability performance and the movement towards a more consistent approach across the NEM?

The STPIS provides DNSPs with a financial incentive to improve reliability and customer service performance. The reliability component is based on the VCR estimate and the weighting of the incentive rate between the various reliability parameters is set according to WTP information. While an attempt has been made to link incentives to customer outcomes, because the VCR was originally based on 2002 average performance data and the outcomes of a 2003 WTP survey (updated in 2007), its currency is questioned. Ausgrid therefore submits that any movement towards establishing consistency in terms of incentive schemes needs to be premised on the development of reliable and up to date distribution VCR and WTP values based on acceptable performance thresholds of service.

We note that the AEMC has tried to capture DNSP reliability performance for the most recent available year in figure 3.1 of the Issues Paper. In addition, the Issues Paper comments that "As shown in Figure 3.1 it is not uncommon for DNSPs to fail to meet the reliability standards, and yet, in these cases, no enforcement action appears to have been taken ....." [5] Ausgrid submits that figure 3.1 mischaracterises reliability performance by mixing STPIS average performance targets (used in Victoria) with minimum service standards (used in NSW and QLD). This is significant because minimum service standards require DNSPs to target reliability to a level below the established threshold whereas annual performance against STPIS targets reflects the normal variation around the longer term average performance level. The AEMC should make this clear in its draft report.

b) How could a nationally consistent incentive scheme for distribution reliability performance accommodate worst served customers?

There are currently no provisions for worst served customers in the STPIS. Ausgrid agrees with the Brattle Group report that there may be benefits in including measures relating to worst served customers in both the STPIS framework and in the approval process for investment expenditure in regulatory determinations. To that end, we note that for the current five-year price control period, the UK regulator Ofgem has allocated £42 million to a 'Worst-served customer fund' on a use-it-or-lose-it-basis[6].

In general, without poor performance measures, there may be a risk that investments may be directed to areas of the network that may already have acceptable levels of reliability. Accordingly, improving reliability performance where customers can detect and experience an improvement may be a better use of scarce resources and funds than in areas where customers may not perceive an improvement.

c) What are the important considerations for GSL schemes and is there value in a nationally consistent approach?

There may be value in a nationally consistent approach to GSL schemes. However, if a VCR estimate is used as the basis for setting incentive rates for the reliability component of the scheme, it needs to be based on robust VCR and WTP studies appropriate for the distribution component of the NEM.

[5] AEMC Issues Paper – Review of distribution reliability outcomes and standards 28June 2012, Page 35
[6] The Brattle Group. *Approaches to setting electric distribution reliability standards and outcomes.* 2012. p 70.

d) What are the expected costs and benefits associated with customer communications?

Customer communication which provides timely and accurate information on outages is an important component of a reliability framework, particularly for rural customers. Ausgrid recognises that timely and accurate communications are not a substitute for acceptable reliability performance, however we also acknowledge that in some areas, customers may place a high value on DNSP investment in customer communications for both planned and unplanned outages.

Ausgrid takes a proactive approach to advising customers of outages via its call centre, traditional media, social media and where appropriate on online tools such as websites. These are the most effective means of reaching the maximum number of customers across broad or specific areas on a regular basis.

Customers are advised of planned outages via direct mail and on Ausgrid's website.

Question 6 The meaning of a nationally consistent framework

a) What should a nationally consistent framework mean, and what should it not mean?

Ausgrid agrees with the AEMC that the design of an efficient framework is that the level of reliability should be consistent with a balance of the economic and social value placed on reliability by consumers and the costs of providing it. However, the AEMC should be guided by additional principles such as those identified in the transmission reliability review which included: transparency in standard setting, technological neutrality and effectiveness[7].

Importantly, the framework must be fit for purpose in that a nationally consistent framework should not be a one size fits all approach. Accordingly, it does not require that the same level of reliability be applied to all areas of a DNSP's network or that all DNSPs should be subject to the same reliability standards or outcomes. For example, standards should differ depending on the criticality of the load or according to an explicit customer valuation of reliability at a connection point.

The process for setting standards should be transparent and open, with ample opportunity for stakeholder input. We note that one of the principles for a national framework for transmission standards specified that the degree of transparency for setting standards should be the same as specified in the NEL for the assessment of Rule changes by the AEMC[8].

b) How should a "nationally consistent framework" be interpreted and what degree of consistency/harmonisation is appropriate?

We note that the Issues Paper outlines three potential ways to achieve a nationally consistent framework[9], suggesting that consistency in setting and enforcing regulatory requirements may be desirable. It is our contention that all options may be workable, with each option having relative advantages and disadvantages. However, it will be important that these advantages and disadvantages are considered in terms of their potential to contribute to the NEO.

c) In the context of setting and enforcing regulatory requirements, is it appropriate for the same body (e.g. the AER, a jurisdictional regulator, or a jurisdictional minister) to be responsible for both setting and enforcing reliability standards and outcomes?

We note that this is a similar question to question 4b, which we have addressed above.

[7] AEMC, *Review of Distribution Reliability Outcomes and Standards, Issues Paper - National Workstream*, 28 June 2012, Sydney p 9.
[8] *Transmission Reliability Standards Review* MCE response to AEMC Final Report 2011, p 4.
[9] AEMC, *Review of Distribution Reliability Outcomes and Standards, Issues Paper - National Workstream*, 28 June 2012, Sydney p 41.

Question 7 Costs and benefits of a nationally consistent framework

What are the expected costs and benefits of moving to a nationally consistent framework?

As noted in response to question 4a previously, the expected administrative costs in expressing and reporting reliability outcomes consistently would be minimal. The only cost that is not a normal part of current DNSP activities is that of the customer surveys required to establish the value of customer reliability and customers' willingness to pay.

In regards to delivering reliability outcomes, Ausgrid does not know if a move to a nationally consistent framework would result in significant cost savings for customers or not. However, as a general principle, increased investment expenditure would likely result if it was determined that a DNSP had not been investing in sufficient reliability improvement initiatives in areas where customers valued it the most. Conversely, projected investment expenditure may reduce if it is determined that a DNSP had been investing in inappropriate areas of the network that do not match customers' value of reliability. Either way, these two outcomes are highly prefaced on a robust VCR estimate that incorporates a WTP.

If the SCER requests the AEMC to proceed with establishment of a nationally consistent framework, establishing acceptable threshold levels of customer reliability performance would be essential in the consideration of a best practice framework. These thresholds would need to be determined by WTP customer surveys. The level of investment appropriate to then improve reliability of supply could be compared to the cost to the community of that performance.

Question 8 The National Electricity Objective

a) How would a nationally consistent framework be likely to contribute to the achievement of the NEO?

A nationally consistent framework is likely to contribute to the achievement of the NEO if it results in standards being derived from economic analysis that relates distribution system cost to the value customers place on reliability. For this to be achieved, the framework must be based on sound regulatory practice and design and be transparent and information based. Moreover, it should seek to minimise implementation costs and risk, including those associated with the duplication of regulatory functions.

b) How material are the current jurisdictional differences in reliability standards and outcomes to consumers? What impact do those differences have on consumers' locational decisions?

As noted in the Brattle Group report, there are jurisdictional differences in reliability standards and outcomes. Ausgrid has no information on whether these differences have impacted on consumers' locational decisions but a transparent expression of reporting reliability outcomes is likely to assist consumers in making more informed decisions.

Question 9 Implementation of a nationally consistent framework

a) What are the important considerations in moving away from existing jurisdictional frameworks to an approach that is nationally consistent?

Any movement to a nationally consistent framework is likely to involve complexities in terms of the implementation and transition process, particularly if amendments to jurisdictional frameworks are required. Given that the framework will be a voluntary, the jurisdictional regulators will have to discuss implementation considerations and timeframes with their local DNSPs.

b) What issues are likely to arise in the process of moving from existing jurisdictional frameworks to an approach that is nationally consistent and how could these best be managed or overcome?

NSW DNSPs will need to be consulted on implementation considerations particularly if a nationally consistent framework is premised on an outputs based approach. At a minimum, we would envisage a two year transition period would be required to develop and implement forecasting and investment analysis processes and to produce robust probabilistic forecasts that are based on the most up to date VCR and WTP data available.

In the early stages of implementation, it will be crucial that there is appropriate consultation with DNSPs and other stakeholders in terms of any guidelines developed as part of setting a VCR methodology.

c) What implementation costs would likely to be incurred in moving to a nationally consistent framework?

While it is difficult to quantify the magnitude of implementation costs in moving to a nationally consistent framework, in the absence of any detail of what that might entail, it will be important that the implementation costs do not outweigh the benefits.