

ERA & EIA Review Consultation – All Questions

12 October 2020

CQUniversity welcomes the opportunity to comment on the ERA and EIA Review Consultation paper. Please find below comments to the review questions.

Value of ERA

Q3.1 To what extent is ERA meeting its objectives to:

- a. Continue to develop and maintain an evaluation framework that gives government, industry, business and the wider community assurance of the excellence of research conducted in Australian higher education institutions. A very large amount; A large amount; A moderate amount; A small amount; Not at all.

Comment: A moderate amount. The ERA evaluation framework has a high profile within the various levels of Government and the university sector however it is not really recognized, or just not known about, outside government and university circles.

ERA has helped universities improve their research quality and focus more on quality than on quantity of research.

Provide a national stocktake of discipline level areas of research strength and areas where there is opportunity for development in Australian higher education institutions. A very large amount; A large amount; A moderate amount; A small amount; Not at all. Please explain your answer.

Comment: A large amount.

Comment: Assuming the evaluation tool accurately recognises excellence within discipline areas, then it does provide a national stocktake of research strength however we are unaware of how that information is used.

- b. Identify excellence across the full spectrum of research performance. A very large amount; A large amount; A moderate amount; A small amount; Not at all. Please explain your answer.

Comment: A moderate amount. Peer panel evaluation of excellence and the KPI's used by the peer panels to decide the level of excellence remains unknown to most of the sector; so it is difficult to know if the panels are truly covering all aspects of excellence.

- c. Identify emerging research areas and opportunities for further development. A very large amount; A large amount; A moderate amount; A small amount; Not at all. Please explain your answer.

Comment: large amount; Within our university, the ERA outcomes are one tool used to develop research strategy and planning within the organization, helping to identify where support is needed and where research performance is high.

However, feedback has found that some academic staff feel the current system leads University's to narrow their areas of expertise rather than to develop and expand.

- d. Allow for comparisons of research in Australia, nationally and internationally, for all discipline areas. A very large amount; A large amount; A moderate amount; A small amount; Not at all. Please explain your answer.

Comment: A moderate amount; ERA outcome comparisons are reliable on a relative basis however it does not factor in a number of other metrics or outcomes that are indicative of research excellence such as impact, engagement, return on research dollar investment, etc.

Q3.2 The ERA objectives are appropriate for meeting the future needs of its stakeholders. Strongly agree; Agree; Neither agree nor disagree; Disagree; Strongly disagree. Please explain your answer.

- a. If you disagreed with the previous statement, what should the primary purpose of ERA be going forward? Please explain your answer.

Comment: Neither agree nor disagree; ERA outcomes are not decided on the full scope of research outputs and inputs and therefore tell a limited story regarding 'excellence' within a university, noting that the peer review panel process for deciding outcomes is largely unknown.

There are many stakeholders in ERA, not least industry and the community. Perversely, ERA has promoted more focus by academics on academically cited publications and outlets, making research potentially less accessible to the wider community. While a significant proportion of academics do contribute to public debates and more accessible publications, most academics, especially ECRs, are now more focused on publishing in prestigious, high impact journals. This seems at odd with the government's focus on engagement impact in the EIA exercise. Essentially, we are trying to serve two masters, but because of our history, and despite CRC's etc. universities are not perceived to be well connected and engaged with industry in Australia. They do this much better in other countries e.g. UK, Germany. ERA does not help this problem, if anything, it tends to accentuate it. This makes the EI assessment more important than ever.

Q3.3 What impacts has ERA had on:

- a. the Australian university research sector as a whole

The sector has increased its focus on publication in ARC-recognised journals and quality publications, which is a good thing.

b. individual universities

Comment: It has been used to inform university research strategy, identifying areas of research that need support or otherwise, and areas of research that need researcher training, etc.

c. researchers

Comment: Researchers respond by building programs of research and teams in particular FoR's (i.e. research focus) and developing publishing strategies centred on quality journals.

d. other?

Please explain your answers.

Comment: Impacts of ERA – one of the major impacts has been in the area of academic staff recruitment. Even ECRs now need to show that they will be bringing high quality publications into their employment. Again, this detracts from community/industry engagement at a time when we may need it most, and also detracts from the pursuit of quality teaching. To capture a greater spectrum of research activity-related excellence it is suggested that there is a shift in the balance, to emphasise external, real world impact as much as or more than academic impact.

There is a general feeling in the sector that academics are confused by the diverse array of objectives and functions they need to meet in their everyday work – quality publications as measured by ERA, industry and community engagement, excellent teaching, university and/or school/department administration and contributions, and academic/professional contributions beyond the university, e.g. journal reviewing, grant assessments etc. The fact that these things are now all measured and can translate to individual objectives leads to an overload of goals that individual academics feel they need to meet. This causes pressure and burnout.

ERA has contributed to this pressure and perversely, in some cases has driven academic behaviour away from their research being recognised and used in the real world of industry, communities and the professions.

If it doesn't already do so, ERA should publish the proportion of research that is cross-disciplinary i.e. across at least two FoR codes, and the type of research this covers, for example which disciplines and which combinations? This would be useful information for those working on real world cross-disciplinary problems that could also feed into the EI assessment rounds.

It might be suggested that the EI assessment should have a higher profile and now be given more prominence than ERA, given that ERA has run for 10 years and achieved its objectives, it is now time to focus more on impact.

Q3.4 How do you use ERA outcomes? Please describe.

Comment: It has been used to inform university research strategy, identifying areas of research that need support or otherwise, and areas of research that need researcher training, etc.

ERA outcomes are used primarily to focus efforts on quality publication.

Q3.5 ERA outcomes are beneficial to you/your organisation. Strongly agree; Agree; Neither agree or disagree; Disagree; Strongly disagree. Please explain your answer.

Comment: Agree; It has been used to inform university research strategy, identifying areas of research that need support or otherwise, and areas of research that need researcher training, etc..

Q3.6 Do you have any suggestions for enhancing ERA's value to you/your organisation? Please explain your answer.

ERA Methodology

Q3.7 The current methodology meets the objectives of ERA. Strongly agree; Agree; Neither agree or disagree; Disagree; Strongly disagree. Please explain your answer.

Comment: Neither agree or disagree

The citation analysis meets the objectives of ERA, however, the peer review analysis does not. The peer-reviewed process for peer-reviewed disciplines is opaque and subjective. The process should be made much clearer and more systematic.

Q3.8 What are the strengths of the overall methodology? Please describe.

Comment: The strengths of the methodology are its focus on a realistic number of papers in the reporting period with citation analysis. This emphasises quality rather than quantity and it discourages overpublishing and wasted effort.

Q3.9 What are the weaknesses of the overall methodology? Please describe.

Comment: Peer review disciplines are not double-blind peer review.

Another limitation is that the quality and the value of the research is not always proportional to citation rates. Citation can also be driven by topic popularity rather than a balance of national interest needs. Publishers of course respond to popularity and give more space and avenues to get more 'papers of interest' published. Hence the quality verses citation relationship can become distorted. It is already recognised by the discipline based system that different groups of industry stakeholders and researchers have different norms in citation practice within discipline groups. (4 digit codes). So these two aspects can combine to give very different ranking outcomes depending of the disciplines subgroup and its current popularity. For example, currently, due to climate change concerns, in several contexts, energy papers can be guaranteed to cite more highly than other titles. While this may accurately reflect stakeholder priorities, it does not mean other areas of engineering and science become less essential or that other research is of lower quality. Expected behaviour is that researchers direct to get papers in the best journals to get high citation rates, (good outcome) but it does not work so well if the group's topic is not so popular.

Another problem that leads to under reporting good research is that the system reports a group metric rather than the standard of the best 50 papers. The group metric is an important driver in reducing wasted effort in overpublishing, but there may be an argument to also ranking the Best 50 papers. In this was there is a measure of the group, let's say it is "poor" e.g. an ERA = 2.0, but its best 50 papers, assessed alone is ranked ERA =4.0. These two metrics together would deliver a more transparent picture and the groups can be rewarded and encouraged for the good research that is done.

Q3.10 Does the discipline-specific approach for evaluating research quality (citation analysis or peer review for specific disciplines) continue to enable robust and comparable evaluation across all disciplines?

Comment: Mostly, but not always. Peer review methodology consistently rates poorly in ERA. The Engagement & Impact Assessment indicated a disparity, in that many peer review disciplines rated highly when their rating was mid-range or poor for ERA.

Citation Analysis

Q3.11 The citation analysis methodology for evaluating the quality of research is appropriate. Strongly agree; Agree; Neither agree nor disagree; Disagree; Strongly disagree. Please explain your answer.

Comment: AGREE – There has to be some sort of metric driven system.

Q3.12 What are the strengths of the citation analysis methodology? Please describe.

Comment: The comparison with world standard citation rates.

Q3.13 What are the weaknesses of the citation analysis methodology? Please describe.

Comment: The system works well if the research falls nicely into a discipline area and is one that cites well within it. It does not perform so well for more niche areas. There is an unavoidable limitation on the complexity the system can or should have.

Q3.14 Can the citation analysis methodology be modified to improve the evaluation process while still adhering to the ERA Indicator Principles? Yes/No.

- a. If you answered 'Yes', please describe how the methodology could be improved.

Comment: Citations are merely the result of awareness, not quality. Many highly cited works are the result of being controversial or incorrect theoretically or empirically.

Yes, Concept: Retain the basic citation analysis but allow some further benchmarking.

For Niche areas, that score lower than expected – allow the option for further alternative analysis of research groups against similar groups around the world. The analysis could be either citation based or peer. This is an important innovation to ensure Australia develops capabilities of small groups to drive specialties. As we are not a large population there will always be smaller industry groups that will be needed in the national interest, but not encouraged by the more general discipline ERA groups.

Concept: Rank the Best 50 papers in each code in addition to the rank for the collection, to get measures of both institution wide and research group quality.

Peer Review

Q3.15 The peer review methodology for evaluating the quality of research is appropriate. Strongly agree; Agree; Neither agree nor disagree; Disagree; Strongly disagree. Please explain your answer.

Q3.16 What are the strengths of the peer review methodology? Please describe.

Comment: Allows a broader collection type.

Q3.17 What are the weaknesses of the peer review methodology? Please describe.

Comment: As noted above.

Q3.18 Can the peer review methodology be modified to improve the evaluation process while still adhering to the ERA Indicator Principles? Yes/No.

- a. If you answered 'Yes', please describe how the peer review methodology could be improved.

Comment: Yes - Establish a double-blind peer review process at the beginning.

Contextual Indicators

Q3.19 The volume and activity indicators are still relevant to ERA. Strongly agree; Agree; Neither agree nor disagree; Disagree; Strongly disagree. Please explain your answer.

Q3.20 The publishing profile indicator is still relevant to ERA. Strongly agree; Agree; Neither agree nor disagree; Disagree; Strongly disagree. Please explain your answer.

Q3.21 The research income indicators are still relevant to ERA. Strongly agree; Agree; Neither agree nor disagree; Disagree; Strongly disagree. Please explain your answer.

Q3.22 The applied measures are still relevant to ERA:

- a. Patents. Strongly agree; Agree; Neither agree nor disagree; Disagree; Strongly disagree. Please explain your answer.

Comment: Agree; Patents represent new knowledge that has the potential to be applied in society.

- b. Research commercialisation income. Strongly agree; Agree; Neither agree nor disagree; Disagree; Strongly disagree. Please explain your answer.

Comment: Agree; Commercialisation income is indicative of the societal value of the research that led to the commercialisation.

- c. Registered designs. Strongly agree; Agree; Neither agree nor disagree; Disagree; Strongly disagree. Please explain your answer.

Comment: Agree; Registered designs represent creativity that has the potential to be of value in society.

- d. Plant breeder's rights. Strongly agree; Agree; Neither agree nor disagree; Disagree; Strongly disagree. Please explain your answer.

Comment: Agree; Plant breeder's rights are indicative of the value of the research that led to the plant development.

- e. NHMRC endorsed guidelines. Strongly agree; Agree; Neither agree nor disagree; Disagree; Strongly disagree. Please explain your answer.

Comment: Neither agree nor disagree.

ERA Rating Scale

Q3.23 The five-band ERA rating scale is suitable for assessing research excellence. Strongly agree; Agree; Neither agree nor disagree; Disagree; Strongly disagree. Please explain your answer.

Comment: Agree; it is simple to understand and has sufficient category levels to have meaning without being too limited or complex.

Q3.24 Noting that 90% of units of evaluation assessed in ERA 2018 are now at or above world standard, does the rating scale need to be modified to identify excellence? Yes/No.

- a. If you answered, 'Yes', please explain how the rating scale can be modified to identify excellence.

Comment: No. It is benchmarked against the world standard indicating that Australian universities are performing well – it would seem to be the appropriate metric for Australian comparison.

ERA Low-volume Threshold

Q3.25 The ERA low-volume threshold is appropriate. Strongly agree; Agree; Neither agree nor disagree; Disagree; Strongly disagree. Please explain your answer.

Comment: Yes it's appropriate, it is low enough to demonstrate volume in a research area, and high enough to rate the quality. However, the new ERA codes have introduced more 4 digit classes and will split some collections. This may require a lower threshold to match.

Q3.26 Are there ways in which the low-volume threshold could be modified to improve the evaluation process? Please describe.

ERA Staff Census Date

Q3.27 What is the more appropriate method for universities to claim research outputs—staff census date or by-line? Please explain your answer.

Comment: We should not adopt a by-line approach to attributing outputs – due to the long timelines in both publishing and ERA periods, this would not reflect the contemporary research strengths/quality of the university whose research outputs are being assessed.

Q3.28 What are the limitations of a census date approach? Please describe.

Comment: Institutions can game the use of a census date.

Q3.29 Would a by-line approach address these limitations? Yes/No. Please explain your answer.

Comment: Yes, the by-line approach would address this issue.

Q3.30 What are the limitations of a by-line approach? Please describe.

Comment: There is the potential for research publication papers to be ‘missed’ or not recorded once a researcher leaves an institution and could create a gap in the data.

ERA Interdisciplinary Research and New Topics

Q3.31 ERA adequately captures and evaluates interdisciplinary research. Strongly agree; Agree; Neither agree nor disagree; Disagree; Strongly disagree. Please explain your answer.

- a. If you disagreed with the previous statement, how could interdisciplinary research best be accommodated? Please describe.

Comment: Neither agree nor Disagree – the strict guidelines for the assignment of FoR codes could have a negative effect on the multi-disciplinary research, forcing research outputs into Field of Research codes rather than the establishment of new research across new discipline areas.

ERA and Indigenous Research

Q3.32 My institution would meet ERA low-volume threshold in Indigenous studies at:

- a. Two-digit? Yes/No. If you answered ‘yes’, please list which ones.

Comment: Yes, in 45 Indigenous studies.

- b. Four-digit? Yes/No. If you answered ‘yes’, please list which ones.

Comment: Yes, in 4504 – Aboriginal and Torres Strait Islander health and wellbeing.

Q3.33 In ERA, the best approach for evaluating Indigenous Studies is (choose one):

- a. Using established ERA methodology i.e. the low-volume threshold would apply to the Indigenous Studies discipline and all its specific disciplines
- b. For Aboriginal and Torres Strait Islander studies by combining low-volume disciplines into single units of evaluation
- c. For Aboriginal and Torres Strait Islander studies by combining low-volume disciplines into two units of evaluation (one unit comprising Humanities, Arts, and Social Sciences disciplines and one unit comprising Science, Technology, Engineering and Mathematics disciplines)

d. Other. Please describe.

Q3.34 What would be the advantages and/or disadvantages of your preferred approach for evaluating Indigenous studies in ERA? Please describe.

Collection of ERA Data

Q3.35 ERA should move to an annual collection of data from universities. Strongly agree; Agree; Neither agree nor disagree; Disagree; Strongly disagree. Please explain your answer.

Comment: Neither agree nor disagree, An annual collection of publication data with the ability to revise and resubmit codes to demonstrate areas of strength every 3 years.

Q3.36 What would be the advantages and/or disadvantages of an annual data collection? Please describe.

Comment: It would be advantageous to collect and report publication data on an annual basis as per the discontinued HERDC publication collection as it demonstrates the research activity within an institution, however, counting of points should not be included as it discourages research collaboration by splitting the papers across the researchers/institutions. This data is also useful for benchmarking.

Publication of ERA Data

Q3.37 In future ERA rounds, should the volume of outputs submitted for each unit of evaluation be published?

a. Yes, Please explain your answer.

b. No, Please explain your answer.

Q3.38 In future ERA rounds, research outputs should be published with their assignment to specific disciplines following completion of the round. Strongly agree; Agree; Neither agree nor disagree; Disagree; Strongly disagree. Please explain your answer. a. What would be the advantages? Please explain your answer.

b. What would be the disadvantages? Please explain your answer.

Q3.39 What other data do you think the ARC should publish following an ERA round? Please describe.

Engagement & Impact Assessment

EI Overview

Q4.1 Considering that EI is a new assessment, to what extent is it meeting its objectives to:

- a. encourage greater collaboration between universities and research endusers, such as industry, by assessing engagement and impact? A very large amount; A large amount; A moderate amount; A small amount; Not at all. Please explain your answer.

Comment: No, not yet – this evaluation hasn't increased the interaction between universities and research end users, it may eventually happen, but it hasn't been a part of the sector long enough to drive change in this behavior.

- b. provide clarity to the Government and the Australian public about how their investments in university research translate into tangible benefits beyond academia? A very large amount; A large amount; A moderate amount; A small amount; Not at all. Please explain your answer.

Comment: Maybe a small amount – not sure the public know or understand the importance of this element of research outcomes, and interaction with industry.

- c. identify institutional processes and infrastructure that enable research engagement? A very large amount; A large amount; A moderate amount; A small amount; Not at all. Please explain your answer.
- d. promote greater support for the translation of research impact within institutions for the benefit of Australia beyond academia? A very large amount; A large amount; A moderate amount; A small amount; Not at all. Please explain your answer.
- e. identify the ways in which institutions currently translate research into impact? A very large amount; A large amount; A moderate amount; A small amount; Not at all. Please explain your answer.

Q4.2 The EI objectives are appropriate for the future needs of its stakeholders.

Strongly agree; Agree; Neither agree or disagree; Disagree; Strongly disagree. Please explain your answer.

Comment: Agree; These are appropriate, but difficult to achieve.

Q4.3 What impact has EI had on:

- a. the Australian university sector as a whole? Please describe.
- b. Individual universities. Please describe.
- c. researchers. Please describe.
- d. other sectors outside of academia? Please describe.

Comment: Almost no impact. It is not clear if or how anyone uses the data.

Q4.4 How do you, or your organisation, use EI outcomes? Please describe.

Comment: No mechanism yet exists, except consideration of impact in plans and identifying how impact may be tracked into the future.

Q4.5 The EI outcomes are valuable to you or your organisation. Strongly agree; Agree; Neither agree nor disagree; Disagree; Strongly disagree. Please explain your answer.

Comment: EI outcomes are valuable because they recognize and drive industry research activity.

Q4.6 How else could EI outcomes be used? Please describe.

Definitions

Q4.7 The current Engagement definition is appropriate. Strongly agree; Agree; Neither agree or disagree; Disagree; Strongly disagree.

- a. If you don't agree, what are your suggested amendments to the Engagement definition? Please describe.

Q4.8 The current Impact definition is appropriate. Strongly agree; Agree; Neither agree or disagree; Disagree; Strongly disagree.

- a. If you don't agree, what are your suggested amendments to the Impact definition? Please describe.

Q4.9 The current end-user definition is appropriate. Strongly agree; Agree; Neither agree or disagree; Disagree; Strongly disagree.

- a. If you don't agree, what are your suggested amendments to the end-user definition? Please describe.
- b. Are there any end-user categories excluded in the current definition of research end-user that you think should be included? Please explain your answer.

Q4.10 Are there other key terms that need to be formally defined? Yes/No. If you answered 'Yes', please explain your answer.

EI Methodology

Q4.11 Are the two-digit Field of Research codes the most appropriate method to define units of assessment for Engagement and Impact? Yes/No. Please explain your answer.

Comment: Yes, they are appropriate.

Q4.12 Are there other ways to classify units of assessment in EI, for example, SEO codes? Yes/No. Please explain your answer.

Selectiveness of EI

Q4.13 Should there be more or fewer units of assessment per university? More units of assessment; The same number as in EI 2018; Fewer units of assessment.

Comment: Fewer, or more flexibility of the low volume threshold and the reference years.

- a. How many and why? Please explain your answer.

EI Low-volume Threshold

Q4.14 The EI low-volume threshold should continue to be based on the number of research outputs submitted for ERA. Strongly agree; Agree; Neither agree or disagree; Disagree; Strongly disagree.

Comment: Agree; no other way to do it.

- a. If you disagree, how should eligibility for assessment in EI be determined? Please explain your answer.

Q4.15 The low volume threshold is set at the appropriate level. Strongly agree; Agree; Neither agree or disagree; Disagree; Strongly disagree. Please explain your answer.

Comment: As in the first round, there is a need for the option to 'opt out' if an institution does not have impact in areas which reach volume, as volume in ERA does not necessarily mean there is research impact.

Engagement Indicators

Q4.16 Overall, the engagement indicator suite for the assessment of research engagement is suitable. Strongly agree; Agree; Neither agree nor disagree; Disagree; Strongly disagree. Please explain your answer.

Comment: Agree

Q4.17 The cash support from research end-users indicator using HERDC data is appropriate for the assessment of research engagement? Strongly agree; agree; neither agree nor disagree; disagree; strongly disagree. Please explain your answer.

Comment: Agree

Q4.18 The research commercialisation income is appropriate for the assessment of research engagement. Strongly agree; agree; neither agree nor disagree; disagree; strongly disagree. Please explain your answer

Comment: Disagree; Commercialisation income is patchy and not core business for universities.

Q4.19 Are there additional metrics that would be appropriate across many or all disciplines? Yes/No. If you answered 'Yes', please outline the metrics. If you answered 'No', please explain your answer.

Q4.20 Are there alternative metrics that would be appropriate across many or all disciplines? Yes/No. Please specify the metrics.

Q4.21 Should any of the current Engagement metrics be redesigned? Yes/No. If you answered 'Yes', which ones and how?

Q4.22 The co-supervision of HDR students should be made an engagement indicator in future rounds of EI. Strongly agree; Agree; Neither agree or disagree; Disagree; Strongly disagree. Please explain your answer.

Comment: Disagree; This will only work if the co-supervisor is from industry. Often such are difficult to recruit.

Q4.23 In your opinion, are any of the ERA applied measures appropriate indicators of research engagement in EI?

- a. Patents. Yes/No. Please explain your answer.

Comment: Yes, they indicate innovation and possible engagement/impact.

- b. Research commercialisation income. Yes/No. Please explain your answer.

Comment: No, too patchy

- c. Registered designs. Yes/No. Please explain your answer.

Comment: No, low levels

- d. Plant breeder's rights. Yes/No. Please explain your answer.

Comment: Yes, they indicate innovation and possible engagement/impact

- e. NHMRC endorsed guidelines. Yes/No. Please explain your answer.

Engagement Narrative

Q4.24 The narrative approach is suitable for describing and assessing research engagement with end-users. Strongly agree; Agree; Neither agree or disagree; Disagree; Strongly disagree. Please explain your answer.

Comment: Strongly agree – it is important to provide the story behind the stats and the narrative offers this opportunity.

- a. If you disagree, what alternative approach could be used to replace the narrative? Please explain your answer. If you are suggesting indicators, please be specific.

Q4.25 One engagement submission per broad discipline is sufficient for capturing the research engagement within that discipline. Strongly agree; Agree; Neither agree or disagree; Disagree; Strongly disagree. Please explain your answer.

Comment: Strongly disagree – engagement varies within discipline, so a broader approach is required to capture the full spectrum.

Q4.26 The engagement narrative needs to be longer. Strongly agree; Agree; Neither agree or disagree; Disagree; Strongly disagree. Please explain your answer.

Comment: Strongly disagree; This will just encourage needless longer descriptions.

Q4.27 Additional evidence is needed within the narrative. Strongly agree; Agree; Neither agree or disagree; Disagree; Strongly disagree. Please explain your answer.

Comment: Strongly disagree; Endorsement by Industry Partners is sufficient

- a. If you agreed, what evidence should be provided? Please describe.

Impact Narrative

Q4.28 The narrative approach is suitable for describing and assessing impact. Strongly agree; Agree; Neither agree or disagree; Disagree; Strongly disagree. Please explain your answer.

Comment: Strongly agree – translational research requires impact so it is important to articulate this.

- a. If you disagree, what alternative approach could be used to replace the narrative? Please explain your answer. If you are suggesting indicators, please be specific.

Q4.29 One impact study per broad discipline is sufficient for capturing the research impact within that discipline. Strongly agree; Agree; Neither agree or disagree; Disagree; Strongly disagree. Please explain your answer.

Comment: Agree; As impact, by definition, will be patchy, narrower reporting will not give a correct or useful picture.

Q4.30 The impact narrative needs to be longer. Strongly agree; Agree; Neither agree or disagree; Disagree; Strongly disagree. Please explain your answer.

Comment: Strongly disagree.- it is important to keep narrative succinct.

Q4.31 There is a need for additional evidence to be provided within the narrative. Strongly agree; Agree; Neither agree or disagree; Disagree; Strongly disagree. Please explain your answer.

Comment: Strongly disagree; Endorsement by Industry Partners is sufficient.

- a. If yes, what evidence should be provided? Please explain your answer.

Q4.32 In your opinion, are there quantitative indicators that could be used to measure the impact of research outside of academia? Yes/No. Please explain your answer.

Comment: Yes: Investment by industry partners in Research outcomes – taking them on to product - would be the most obvious.

- a. If you answered 'yes' to the previous question, please name and describe the quantitative indicator/s, and the disciplines for which they are relevant. Please list and describe.

Approach to Impact Narrative

Q4.33 The narrative approach is suitable for describing and assessing approach to impact. Strongly agree; Agree; Neither agree or disagree; Disagree; Strongly disagree. Please explain your answer.

Comment: Agree; There is no other way. However, current guidelines are not specific enough to ensure consistency across Universities. A template should be developed to facilitate comparability and consistency.

a. If you disagree, what alternative approach could be used to replace the narrative? Please explain your answer. If you are suggesting indicators, please be specific.

Q4.34 One approach to impact narrative per broad discipline is sufficient for capturing the activities within that discipline. Strongly agree; Agree; Neither agree or disagree; Disagree; Strongly disagree. Please explain your answer.

Comment: Agree

Q4.35 The approach to impact narrative needs to be longer. Strongly agree; Agree; Neither agree or disagree; Disagree; Strongly disagree. Please explain your answer.

Comment: Strongly disagree.- This will just encourage waffle.

Q4.36 There is a need for additional evidence to be provided. Strongly agree; Agree; Neither agree or disagree; Disagree; Strongly disagree. Please explain your answer.

Comment: Strongly disagree; Organisational culture and process is usually well documented.

Q4.37 Would there be benefit in combining engagement and approach to impact? Yes/No. Please explain your answer.

Comment: Yes, The two could be assessed together – would streamline process.

EI Rating Scales

Q4.38 The engagement rating scale is suitable for assessing research engagement.

Strongly agree; Agree; Neither agree or disagree; Disagree; Strongly disagree. Please explain your answer.

Comment: Agree; There is no other way. At best it is only an approximate measure.

Q4.39 The descriptors for the engagement rating scale are suitable. Strongly agree; Agree; Neither agree or disagree; Disagree; Strongly disagree. Please explain your answer.

Q4.40 The impact rating scale is suitable for assessing impact. Strongly agree; Agree; Neither agree or disagree; Disagree; Strongly disagree. Please explain your answer.

Comment: Agree; There is no other way. At best it is only an approximate measure.

Q4.41 The descriptors for the impact rating scale are suitable. Strongly agree; Agree; Neither agree or disagree; Disagree; Strongly disagree. Please explain your answer.

Comment: Agree; Only broad parameters should be used.

Q4.42 The approach to impact rating scale is suitable for assessing approach to impact. Strongly agree; Agree; Neither agree or disagree; Disagree; Strongly disagree. Please explain your answer.

Comment: Agree; Only broad parameters should be used.

Q4.43 The descriptions for the approach to impact rating scale are suitable. Strongly agree; Agree; Neither agree or disagree; Disagree; Strongly disagree. Please explain your answer.

Comment: Agree

EI Interdisciplinary Research

Q4.44 Should EI continue to include an interdisciplinary impact study in addition to the two-digit Fields of Research impact studies? Yes/No. Please explain your answer.

Comment: Yes, to allow for the emergence of new research areas, this element is essential.

EI and Aboriginal and Torres Strait Islander Research

Q4.45 Should the EI low-volume threshold be applied to the unit of assessment for Aboriginal and Torres Strait Islander research in EI 2024 with the option to opt in if threshold is not met? Yes/No. Please explain your answer.

Q4.46 Should the unit of assessment for Aboriginal and Torres Strait Islander research include engagement in EI 2024? Yes/No. Please explain your answer.

Overarching Issues Common to both ERA and EI

Frequency of ERA

Q5.1 How often should ERA occur? Every three years; Every five years; Other, please specify. Please explain your answer.

Comment: Every three years; This is an appropriate time period to register any shift in the research quality of particular FoR's while not too frequent to be an administrative burden on universities.

Q5.2 What impact would a longer assessment cycle (i.e. greater than three years) have on the value of ERA results, particularly in the intervening years? Please explain your answer.

Comment: It is a long time for a university to live with a result that they want to improve. Longer periods between assessments may also mean that researchers on short-term contracts may not even be audited since they fall between census dates.

Q5.3 How often should the EI assessment occur? Every three years; Every five years; Other, please specify. Please explain your answer.

Comment: Every three years; This is an appropriate time period to register any shift in the research impact of particular FoR's while not being too frequent to be an administrative burden on universities.

Q5.4 What impact would a longer assessment cycle (i.e. greater than three years) have on the value of EI results, particularly in the intervening years? Please explain your answer.

Comment: It is a long time for a university to live with a result that they want to improve. Longer periods between assessments may also mean that researchers on short-term contracts may not even be audited since they fall between census dates.

Streamlining and simplifying ERA and EI

Q5.5 ERA and EI should be combined into the one assessment. Strongly agree; Agree; Neither agree nor disagree; Disagree; Strongly disagree. Please explain your answer.

Comment: Neither agree nor disagree; depends on how the model is structured and if any efficiency gains can be realized.

a. What would be the advantages and/or disadvantages. Please explain your answer.

Comment: This potentially has some advantages since the metrics used for these respective audits are often polar opposites i.e. sometimes the best impact for research is publishing in industry journals, however, these journals do not attract citations and therefore affect ERA outcomes. It would be good to see research audit outcomes that, at the same time, show performance outcomes for both aspects of research activity. The administration needed to prepare the submission may be less involved compared to two separate submissions, but this depends on how the combined audit is structured.

Q5.6 Are there other ways to streamline the processes to reduce the cost to universities of participating in ERA and EI? Yes/No. Please explain your answer.

Q5.7 In your view, what data sources could ERA utilise? Please explain your answer.

Q5.8 In your view, what are the most time-consuming elements of an ERA submission? Please describe.

a. Are there efficiencies that could be introduced? Yes/No. Please describe.

Q5.9 In your view what are the most time-consuming elements of an EI submission? Please describe.

a. Are there efficiencies that could be introduced? Yes/No. Please describe.

Comment: The identification of items to go into the narrative and the need to obtain industry statements.

Utilising Technological Advancements and Existing Data Sources

Q5.10 ORCID iDs should be mandatory for ERA. Strongly agree; Agree; Neither agree nor disagree; Disagree; Strongly disagree. Please explain your answer. a. What are the advantages and/or disadvantages? Please explain your answer.

Comment: Agree, on the proviso that sufficient time is provided for organisations to respond.

Q5.11 The automatic harvesting of output data using ORCID iDs would streamline a university's submission process. Strongly agree; Agree; Neither agree nor disagree; Disagree; Strongly disagree. Please explain your answer.

a. What are the advantages and/or disadvantages? Please explain your answer

Comment: Agree, It would make authentication processes more efficient, reduce the time spend on cross-referencing author outputs where their affiliation content varies across publications.

Q5.12 DOIs should be mandatory for ERA. Strongly agree; Agree; Neither agree nor disagree; Disagree; Strongly disagree. Please explain your answer.

a. What are the advantages or disadvantages? Please explain your answer.

Q5.13 Are there new ways to collect data to reduce the cost and burden to universities of participating in ERA and EI whilst maintaining the robustness of the ERA and EI process? Yes/No. Please explain your answer.

a. What are the advantages and/or disadvantages? Please explain your answer.

