



Australian Government
Australian Research Council

Evaluation Framework

ERA 2023

SUPPORTING
DOCUMENTATION

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ERA 2023 Evaluation Framework

Introduction

The *ERA 2023 Evaluation Framework* outlines key elements of the evaluation methodology for ERA 2023.

Following a review of ERA in 2020-21, the ARC revised the ERA benchmarks and rating scale. For ERA 2023, the new benchmarks and rating scale will be implemented through a two-stage process with the ERA 2023 evaluation to be followed by a limited pilot.

ERA 2023

ERA 2023 will proceed as planned, with no changes to the submission process or timeline outlined in the [ERA 2023 Submission Guidelines](#). The assessment methodology will involve:

- The ERA 2018 rating scale (**Appendix A** – now referred to as the ERA 2023 rating scale)
 - Units of Evaluation rated 1 and 2 will be reported collectively as ‘below world standard’.
- Continued use of dual methodologies (citation analysis OR peer review)
- Use of dynamic RCI classes (**Appendix B**) as part of the indicator suite for citation analysis disciplines
- Revised peer review guidance for peer review disciplines
- Full evaluation of Indigenous studies
- Enhanced cross-committee calibration methods

Pilot

The pilot of the new rating scale and High Performance Indicator (HPI) will take place shortly after ERA 2023, using the same Research Evaluation Committees (RECs) and outputs submitted for ERA 2023.

The pilot assessment methodology will involve:

- Re-evaluation of Units of Evaluation (UoE) rated 4 and 5 in ERA 2023, using:
 - The top two levels of the ERA 2023 Pilot Rating Scale (**Appendix A**)
 - The HPI (**Appendix B**), alongside the full suite of other citation and contextual indicators used in ERA 2023, in disciplines assessed by citation analysis
 - ERA 2023 peer review reports (using revised peer review guidance, which includes directions to identify the presence of world leading research) and additional supplementary reading by RECs (if necessary) in disciplines assessed by peer review.

Results

Results for both ERA 2023 and the pilot will be reported to universities. If the pilot is successful, the ARC may present the pilot results as the final results in the ERA 2023 National Report.

Evaluation Framework

The following sections outline the evaluation framework for ERA 2023 and the HPI pilot. Full details of the evaluation process for ERA 2023 round will be published in the *ERA 2023 Evaluation Handbook* and the *ERA 2023 Peer Review Handbook*, due for release in December 2022.

For details of standard elements of the ERA process, see the [ERA 2018 Evaluation Handbook](#) (key changes for ERA 2023 are outlined below).

A summary of the process is at **Appendix C**.

ERA 2023

ERA 2023 will continue to use the same expertise-based model of evaluation as in previous rounds, in which committees of discipline experts – known as Research Evaluation Committees (RECs) – assign ratings based on a holistic assessment of a suite of key quality indicators.

Rating Scale

ERA 2023 will use the rating scale previously used in ERA 2018. However, it is important to note that results from ERA 2023 will *not* be directly comparable to previous ERA rounds. This is due to the transition to ANZSRC 2020 Fields of Research, which will be used for the first time in ERA 2023.

Dual Methodologies

ERA 2023 will continue to use *either* citation analysis or peer review, based on suitability for the discipline, to produce the key quality indicators that inform evaluators' judgments.

The ARC intends to investigate the use of mixed methodologies following the ERA 2023 round.

Key Quality Indicators

Citation analysis disciplines

In ERA 2023, the key quality indicators for citation analysis disciplines will include:

- Relative Citation Impact (RCI) calculated against
 - World citations per paper (cpp) benchmark
- Distribution of papers based on world centiles
- Dynamic RCI classes

The following information provided to evaluators in previous rounds of ERA will not be used in ERA 2023:

- RCI Class Comparison (replaced by the dynamic RCI classes)
- Australian HEP benchmarks

Dynamic RCI Classes

Dynamic RCI classes will be introduced in ERA 2023, to replace the RCI classes used in previous rounds of ERA. Dynamic RCI class boundaries are *discipline-specific* and will reflect citation performance in that discipline during the reference period for each ERA round. In ERA 2023, for the first time, evaluators will also be provided with the distribution of papers worldwide for more contextual comparison. It is important to note that the dynamic RCI classes are only *one* of a suite of citation indicators (listed above) and will always be interpreted in the context of the full UoE profile.

Peer review disciplines

In ERA 2023, the key quality indicator for peer review disciplines will continue to be peer review, undertaken by peer reviewers and REC members who read across a 30% sample of outputs for each UoE.

Peer reviewers and REC members for ERA 2023 will be supported by the enhanced peer review criteria and guidance proposed in the *ERA 2023 Benchmarking and Rating Scale Consultation Paper*, following revisions to account for sector feedback. The ARC has convened a dedicated Peer Review Working Group to assist with ongoing revisions of the guidance. This group will consider both the structural requirements of the pilot and the detailed feedback from the Benchmarking and Rating Scale consultation.

Calibration

The ARC is investigating ways to improve the calibration methods used in ERA, in collaboration with the Peer Review Working Group. These improvements aim to better support a shared high-level interpretation of the ERA rating scale across REC committees, particularly in peer review disciplines.

Indigenous studies

The new Field of Research 45 for Indigenous Studies will be assessed in ERA 2023, using peer review, with results published alongside the results for other disciplines.

Peer reviewers for 45 Indigenous studies will use the main peer review criteria, with supplementary guidance that provides discipline-specific context. The ARC is continuing to consult with stakeholders in Indigenous studies on the content of the supplementary guidance. The *ERA 2023 Peer Review Handbook* will emphasise that the supplementary guidance is *not* intended to replace the main peer review criteria and should only be used if relevant.

To assist the sector with preparations for the assessment of Indigenous Studies in ERA, the ARC has released a roadmap and factsheets developed with the Indigenous Studies Excellence and Engagement (ISEE) group. The ISEE was convened to:

- co-design and promote strategies for sector-wide leadership in applying the Indigenous studies FoR in ERA 2023 and EI 2024, and
- encourage and support Indigenous researchers to participate in submission and assessment processes.

The factsheets have been circulated to ERA Liaison Officers at universities and are available, alongside the ISEE membership list, on the [ARC website](#).

Post-ERA 2023 Pilot

The post-ERA 2023 pilot will test the new rating scale, focusing on the top two levels of the new rating scale (Appendix A) and its supporting indicators in citation analysis and peer review.

Methodology

RECs from ERA 2023 will re-evaluate UoEs rated 4 and 5 in ERA 2023 against the new rating scale, using:

- the High Performance Indicator (alongside the full suite of other citation indicators) in citation disciplines and
- existing peer review reports and further reading (as necessary) by RECs in peer review disciplines.

The ARC will provide further information on the pilot in the *ERA 2023 Evaluation Handbook*.

Appendix A – Rating Scales

ERA 2023 Rating Scale

Rating	Descriptor
5	The Unit of Evaluation profile is characterised by evidence of outstanding performance well above world standard presented by the suite of indicators used for evaluation.
4	The Unit of Evaluation profile is characterised by evidence of performance above world standard presented by the suite of indicators used for evaluation.
3	The Unit of Evaluation profile is characterised by evidence of average performance at world standard presented by the suite of indicators used for evaluation.
2	The Unit of Evaluation profile is characterised by evidence of performance below world standard presented by the suite of indicators used for evaluation.
1	The Unit of Evaluation profile is characterised by evidence of performance well below world standard presented by the suite of indicators used for evaluation.
n/a	Not assessed due to low volume. The number of research outputs does not meet the volume threshold standard for evaluation in ERA.

ERA 2023 Pilot Rating Scale

Rating	Key Benchmark and Descriptor
World leading	High performer and world benchmarks – this rating represents universities that are among the small number of the best of the high performing institutions worldwide
Well above world standard	High performer and world benchmarks – this rating represents universities that are comparable to, or better than , other high performing institutions and well above the standard of universities worldwide
Above world standard	High performer and world benchmarks – this rating represents universities that are below the high performers but above the standard of other universities worldwide
World standard	World benchmark – this rating represents universities that are around the average standard of universities worldwide
Not at world standard	World benchmark – this rating represents universities that are below the average standard of universities worldwide

Appendix B – ERA 2023 Citation Metrics

Dynamic Relative Citation Impact (RCI)

The ARC will adopt dynamic RCI classes to address fluctuations in world citation performance and provide increased granularity. The dynamic RCI classes will support RECs in differentiating between high degrees of citation performance and allow the standard to automatically change over time to keep pace with global trends. They will also provide a more accurate representation of citation performance in individual disciplines compared to world performance over time

The ARC will use the following specifications for the dynamic RCI classes in ERA 2023:

- The new ERA dynamic RCI classes are to be formulated using the ERA world data set.
- The optimum number of classes is 6 (0 to 5) including the class 0 which is used for uncited papers.
- For 2-digit UoEs, the RCI and the class that each paper belongs to will be derived from their respective 4-digit UoEs as there are no indicators calculated at the 2-digit level. This process is consistent with the current ERA methodology.
- With the introduction of the dynamic RCI classes, the RCI Class Comparison used in previous ERA rounds will not be necessary

High Performance Indicator (HPI)

The HPI will be used in the ERA 2023 pilot to support the revised rating scale in Appendix A, specifically by enabling an increased level of granularity at the top end of the scale and responding to changes in world research performance.

- The top 10% of organisations, with a minimum of 10 organisations, is to be selected for this indicator for each FoR. The indicator is intended to provide RECs with supplementary information on the high performers in the FoR, and the 10% range is recommended to ensure sufficient coverage across fields. Selection of organisations for the indicator is based on the ranking of citations per paper (CPP) performance of each organisation within the relevant FoR, also taking into account the publication year. Smaller or highly specialised disciplines may not have a sufficient number of organisations conducting research in the discipline. The minimum of 10 organisations ensures that there is a sufficient number of organisations included in the indicator.
- To be consistent with the ERA methodology, a low volume threshold of 50 indexed journal articles for the entire six-year reference period should also apply to each organisation in this indicator. This also ensures that the organisation was research active in the FoR during the reference period.
- This indicator uses the same ERA world dataset and the ERA Journal List for identifying organisations and disciplines (FoRs), as used for the existing ERA citation indicator calculations.
- The selection of the top 10% of organisations will include all organisation types and will not be restricted to universities, consistent with the current ERA citation indicator calculation methodology, which includes papers from all organisation types.

- Identification of organisations will be based on meta data as supplied by the citation data provider. The new indicator is to be included as an additional indicator among the existing suite of indicators in the RCI indicator profile. The HPI is not designed to align with a 'world leading' rating. World leading will typically be much more exclusive than the high performers represented in the HPI.
- For the pilot only, the dynamic RCI class profile will also include the high performing group of organisations as a comparator indicator, along with the existing world and Australian higher education institution indicators within each class, allowing the UoE performance to be compared against these comparators.

Appendix C – ERA 2023 process

