Research Assessment Exercise 2020
Panel 5 – Computer Science / Information Technology
Panel-specific Guidelines on
Assessment Criteria and Working Methods
(September 2018)

Content:

Introduction

1. This document sets out the assessment criteria and working methods that the Computer Science / Information Technology Panel of the Research Assessment Exercise (RAE) 2020 will apply. It should be read alongside the General Panel Guidelines of the exercise. The provisions set out in this document serve as further elaboration and amplification on the assessment criteria and working methods as applied to the Computer Science / Information Technology Panel. In areas where no additional information has been specified, the provisions in the General Panel Guidelines will prevail and apply in the assessment process of the Panel. These guidelines do not replace or supersede the requirements for submissions that are set out in the Guidance Notes for the RAE 2020.

2. This document describes the criteria and methods for assessing submissions in the Computer Science / Information Technology Panel. It provides guidance on the type of information required in the submissions. It also provides a single, consistent set of criteria that will be applied by the Panel and sub-group(s)/sub-panel(s), if any, when undertaking the assessment having regard to any differences in the nature of disciplines of the respective unit of assessment (UoA) under purview. It also provides a common approach to the working methods applied within the Panel.

Section A: Submissions

UoA under the Panel

3. The Computer Science / Information Technology Panel will assess universities' submissions from the following UoA –

Code	UoA
13	computer studies/science (incl. information technology)

4. The Panel expects to receive submissions whose primary research focus falls within the respective remit of the above UoA. The UoA under the Panel's remit covers the full spectrum of computer studies and information technology, which includes the study of methods for acquiring, storing, processing, communicating and reasoning about information, the application of such methods, and the role of interactivity in natural and artificial systems, through the implementation, organisation, management and use of computer hardware, software, human resources and other resources. The subjects are characterised by the rigorous application of analysis, experimentation and design.

Inter-disciplinary Research

5. The Panel also recognises that individual UoAs do not have firm or rigidly definable boundaries, and that certain aspects of research are naturally inter-disciplinary or span the boundaries between individual UoAs, whether within the Panel or across panels. The Panel will adopt the arrangements for assessing inter-disciplinary submissions as set out in paragraphs 39-40 of the General Panel Guidelines.

6. The Panel recognises the increasingly pervasive role that computer science and information technology plays across the full spectrum of scholarly disciplines. Therefore, the Panel has no presumption about any limits on the areas of inter-disciplinary research that are relevant to the Panel. However, inter-disciplinary submissions to the Panel are still expected to contain significant contributions to computer science and information technology (and possibly significant contributions to other areas) and not merely be applications of existing computing techniques to other areas. The Panel will rely on its inter-disciplinary champion to resolve questions regarding the assessment of inter-disciplinary outputs.

Assignment of Eligible Academic Staff in Each UoA

7. Pursuant to paragraphs 7-11 of the General Panel Guidelines, the Computer Science / Information Technology Panel does not expect to receive information on sub-discipline(s) in relation to eligible academic staff and respective research outputs.

8. It is critical that research outputs are assessed by the most appropriate panel. If a panel suspects any anomaly regarding universities' assignment of eligible academic staff (and therefore their outputs) to research area(s) and UoA(s) under its remit, it will follow the procedures for re-assignment of the eligible staff according to paragraphs 10-11 of the General Panel Guidelines. The Panel also recognises its responsibility to handle submissions arising from any re-assignment of eligible academic staff to the Panel.

University's Research Strategy Statement

9. Following paragraphs 2.16-2.18 and Appendix B of the Guidance Notes and paragraph 15 of the General Panel Guidelines, the Research Strategy Statement submitted by each university will provide contextual information for the Panel when assessing the submissions. These Statements will not be assessed, but may help the Panel to understand better the material that is presented in each submission, particularly insofar as UoAs refer to the overall position of their university. The Statements will also help the University Grants Committee (UGC) when viewing the quality profiles of the universities as a whole upon completion of the RAE 2020.

10. *(Template paragraph deleted)*

Section B: Assessment Criteria: Research Outputs

Output Types

11. The Computer Science / Information Technology Panel will consider the eligibility of research outputs as described in paragraphs 16-18 of the General Panel Guidelines, paragraphs 5.7-5.11 and Appendix F of the Guidance Notes.

12. The Panel will assess the quality of each eligible output on its own merits and not in terms of its publication category, medium or language of

publication. The Panel will examine each item in detail and will not assess outputs mechanistically according to the publication venue. The Panel recognises that there can be work of the highest quality in various output forms, and no distinction will be made between types of output submitted nor whether the output has been made available electronically or in a physical form.

13. Forms of research outputs that are admissible and specifically relevant to the Computer Science / Information Technology Panel include the following examples. This should not be regarded as an exhaustive list. Equally, there is no implication of priority or importance in the ordering of examples in this list –

- books, book chapters and research monographs.
- published papers in peer-reviewed conferences.
- new devices, software, computer code, algorithms, prototypes, demonstrations, products and processes.
- patents awarded.
- published papers in peer-reviewed journals.
- review articles where these incorporate new research, or new hypotheses.

Please note the requirements for an abstract that includes a clear indication of what new insights or innovation are presented in outputs, as at paragraph 18 of the General Panel Guidelines.

14. Research outputs will be assessed for the quality of original research they include. The Panel will accept the submission of review articles only where they contain a significant component of unpublished research or new insight. Such outputs will be judged only on their original research or novelty of insight. In general, the Panel recognises that the process of peer review entails careful refereeing of papers submitted to academic publishing outlets. The Panel therefore discourages the submission of outputs that have not undergone a peer-review/refereeing process prior to publication, apart from new devices, software, computer code, algorithms, prototypes, demonstrations, products and processes, which the Panel considers to be non-traditional outputs.

15. The Panel will consider subsequent editions of previous work only where they contain significant new material and research contributions. In situations where authors have published a conference paper and then

subsequently extended it for journal publication, with both publications having appeared within the assessment period, the Panel disallows submission of both the conference paper and journal paper, either by the same author or by different authors. More generally, the Panel discourages submission of two or more outputs containing a significant overlap in content.

Double-weighting of Research Outputs

16. Paragraphs 29-31 of the General Panel Guidelines indicate that in exceptional cases a submitting university may request that outputs of extended scale and scope be double-weighted in the assessment. However, given the prevailing publication patterns in its UoA, this Panel does not expect to receive any items proposed for double-weighting.

17. *(Template paragraph deleted)*

Co-authored/Co-produced Outputs

18. The Panel affirms the principles and arrangements on assessing co-authored/co-produced research outputs as set out in paragraphs 32-34 of the General Panel Guidelines.

19. The Panel considers co-authorship to be a normal element of research activity in its UoA and expects all co-authors named on an output to have made a significant contribution to the research process leading to the output. For outputs having more than six authors, the Panel requires an explanation to be provided describing the contribution of the submitting author.

Non-traditional Outputs

20. The Panel will handle research outputs in non-traditional form according to paragraphs 35-37 of the General Panel Guidelines. The Panel expects to receive additional information about each non-traditional output in terms of its novelty, method used to ensure academic rigour in the production of the output, deliverables, and dissemination method.

Criteria and Quality Levels for Assessing Research Outputs

21. Panel members will use their professional judgement with reference to international standards in assessing research outputs.

22. In assessing outputs, the Panel will look for evidence of originality, significance and rigour, and will grade each output into one of the five categories of quality level as set out in paragraph 19 of the General Panel Guidelines. The generic description of the quality levels as set out in paragraph 20 of the General Panel Guidelines will be applied in the Panel's assessment.

23. The Computer Science / Information Technology Panel provides the following amplifications on the criteria of assessing research outputs –

- originality: will be understood as the extent to which the output introduces a new solution to a recognised problem or a new way of thinking about a subject.
- significance: will be understood as the extent to which the output has exerted, or has the potential to exert, an influence on research and practice in the field.
- rigour: will be understood in terms of the intellectual precision, robustness, soundness and appropriateness of the concepts and methodologies deployed within the output.

24. In addition, the Panel provides the following advice on their understanding of the quality definitions adopted for assessing research outputs –

The Panel will consider the following characteristics for assigning a quality level to an output –

- scientific rigour and excellence with regard to the design, research method, execution and analysis of the work.
- whether or not the output has been subject to peer-review.
- significant addition to knowledge and to the conceptual framework of the field.
- potential and actual significance of the research both within and beyond the field concerned.
- the scale, challenge and logistical difficulty posed by the research.
- the logical coherence of argument.
- contribution to theory-building or establishment of a new area of study.

- significance of the work to advance knowledge, skills, understanding and scholarship in theory, practice, application, education, management and/or policy.
- academic impact achieved by the output.

Metrics/Citation Data

25. Pursuant to paragraph 24 of the General Panel Guidelines, the Panel acknowledges that metrics and citation data may serve as advisory or secondary information, and that they should not be used in any algorithmic or deterministic way for the evaluation of research quality.

26. While the Computer Science / Information Technology Panel will examine each output in detail for the assessment, the Panel may use recognised sources of citation data and information about the quality, impact factor or ranking of publication venues to inform its assessment of the significance and impact of an output. However, such metrics and data will not be used in any algorithmic or deterministic way for the evaluation of research quality. The Panel is aware of the limitations of such data, in particular their variability within as well as between disciplines, and the need to consider that some excellent work takes time to demonstrate its full achievements and may not have been published in the highest-ranked venue of its field.

Additional Information on Research Outputs

27. Other than the information required on research outputs as specified in the Guidance Notes, and unless specifically required by the Panel during the assessment process, no other information should be provided, and the Panel will take no account of any such information if submitted.

Section C: Assessment Criteria: Research Impact

Range of Impacts

28. The Computer Science / Information Technology Panel will accept submissions on research impacts that meet the generic definition and criteria as set out in paragraphs 47-48 of the General Panel Guidelines.

29. The Panel will assess the quality of all eligible impact submissions based on their merits on equal footing with no consideration given to the

differences among submitting universities/units in terms of staff size, resources and histories. Given the increasingly pervasive reach of computer science and information technology across the range of scholarly disciplines, the Panel recognises that impact can be manifested in many different ways and may occur in a wide range of spheres, whether locally, regionally or internationally.

30. Examples are provided to illustrate the range of potential impacts from research across the Computer Science / Information Technology Panel in Table A. These examples are indicative only, and are not exhaustive or exclusive. Equally, there is no implication of priority or importance in the ordering of examples in the list.

31. Universities are expected to submit their strongest impact cases and not to align submitted cases specifically with the particular types of impact listed, as an impact case may describe more than one type of impact, such as a new machine learning algorithm that achieves productivity gains through automation and also leads to improvements in the diagnosis of a medical condition, or a new general-purpose sensor network design applicable to both environmental monitoring and preservation of cultural heritage.

Table A: Examples of Impact

Impacts on the economy	• Demonstrated gains in productivity have been realised as a result of research-led practices. • A spin-out or new business has been created, established its viability, or generated revenue or profits. • Demonstrated contribution to economic prosperity, innovation and entrepreneurial activities.
Impacts on the environment	• The management of an environment risk or hazard has changed. • The management or conservation of natural resources (e.g. water) has been improved. • A new technology for awareness of usage of natural resources and conservation of natural resources has been adopted.

Impacts on health	• A new drug delivery, diagnostic or medical technology has been adopted. • Decisions by health service or regulatory authority have been informed by research. • Adoption of new approaches or new indicators of health or well-being. • A new technology to support the work or training of medical personnel has been adopted.
Impacts on public policy and services	• Policy decisions or changes to legislation, regulations or guidelines have been informed by research. • Policy or public debate has been stimulated or informed by research evidence. • Evidence of influence on the work of public or non-governmental organisations.
Impacts on quality of life and welfare	• Improved provision or access to services. • Improved standards of training. • The user experience has improved.
Impacts on society and culture	• Evidence that the awareness, attitudes or understanding of or interactions among (sections of) the society have been informed or enhanced. • Enhancements to preserving, conserving and presenting culture heritage have been achieved. • Enhancements to the security and privacy of information and communications have been realised.

(Note: Other examples of research impact as assessed in other jurisdictions may be accessible online such as <http://results.ref.ac.uk/Results/SelectUoa> from the United Kingdom.)

Impact Overview Statement

32. Following paragraphs 7.7 (a) and (b), 7.8 and Appendix G of the Guidance Notes and also paragraph 49 of the General Panel Guidelines, submitting units are required to describe how they have sought to enable and/or facilitate achievement of impact arising from their research during the assessment period, and how they are developing and adapting their

plans to ensure that they continue to do so. This is distinct from the environment overview statement, which should describe how the units support the conduct and production of research.

33. The impact overview statement should include relevant illustrative explanations with examples and traceable references where possible, rather than broad, general statements. The Panel expects the impact overview statement to include –

- context: main non-academic user groups, beneficiaries or audiences for the unit's research; main types of impacts specifically relevant to the unit's research, and how these relate to the range of research activities or research groups in the unit.
- approach to impact: the unit's approach to interacting with non-academic users, beneficiaries, or audiences; its approach and mechanism to support the achievement of impacts from its research. This could include but is not limited to indicators such as participation in knowledge exchange schemes, industrial training provided, collaboration with non-academic organisations, or consultancy undertaken.
- strategy and plans: how the unit is developing a strategy for achieving impact including its goals and plans for supporting and enabling impact from its current and future research.
- relationship to the case studies: how the selected case studies relate to the submitting unit's approach to achieving impact; how particular case studies exemplify aspects of the unit's approach or informed the development of the unit's approach. The Panel recognises that impact case studies are underpinned by research that may have taken place over a period longer than the assessment period, and that individual case studies may not directly relate to or necessarily arise from the unit's current approach.

Impact Case Study(ies)

34. Following paragraphs 7.7 (c) and (d), 7.9-7.10 and Appendix H of the Guidance Notes and also paragraph 51 of the General Panel Guidelines, submitting units are required to provide a narrative account in each case study that should be precise and coherent, clearly explaining the relationship between the research and impact, and the nature of the changes or benefits arising.

35. Each impact case study should include appropriate evidence and indicators that support the claims for the impact achieved, including who and what has/have benefitted. Individual case studies may draw on various evidence and indicators, which may take different forms depending on the type of impact.

36. Examples are provided in Table B to illustrate potential evidence or indicators that may be mostly relevant to the Computer Science / Information Technology Panel. These examples are not intended to be exhaustive. Equally, there is no implication of priority or importance in the ordering of examples in the list.

Table B: Examples of Evidence or Indicators for Impact

Quantitative indicators	• Quantitative data relating to cost-effectiveness or scalability. • Computational performance measures. • External performance measures (e.g., employment, sales, turnover, profits associated). • Customer numbers, clickstream data or download figures.
Documentary evidence	• Documented changes to public policy / legislation / regulations / guidelines. • New professional codes and standards. • Licences awarded and brought to market. • Patents awarded and realised in a suitable implemented form.
Engagements	• Commercial adoption of new technology, process, knowledge or concept. • Application or incorporation in professional best practice, training and continuing development materials. • Evidence of policy or public debate.
Independent testimony	• Formal acknowledgements/testimonials of and/or evaluations by relevant beneficiaries, bodies and organisations.

Reviews and citations	• Citations and reviews outside the academic literature, such as in policy, regulatory and practice documents. • Citations in reports and white papers of technology consulting firms. • Citations by prominent technology evangelists. • Citations in media.

(Note: Other examples of evidence or indicators for research impact in other jurisdictions may be accessible online such as <http://results.ref.ac.uk/Results/SelectUoa> from the United Kingdom.)

37. The Panel will consider any impact case study that is substantially, but not necessarily exclusively, underpinned by research contributions in computer science and information technology.

Underpinning Research

38. The Panel acknowledges the level of quality required for research underpinning impact cases, i.e. equivalent to at least 2 star (2*) or international standing, as stipulated in the General Panel Guidelines. Impact case studies should include bibliographic information and an accessible reference to the outputs that present the underpinning research (e.g., DOI or URL), so that the Panel may make its own assessment that the underpinning research achieves the required quality threshold.

39. Provided that the Panel is satisfied that the quality threshold has been met, any assessment of the quality of the underpinning research will not affect the assessment of the quality of impact. In particular, the quality of impact may be scored higher or lower than the assessed quality of the underpinning research. Underpinning research referenced in a case study may also be submitted for separate assessment under the research output element, in which case the guidance on output types and criteria for assessing research outputs as stipulated in paragraphs 11-15, 21-24 above would apply.

Criteria and Quality Levels for Assessing Research Impact

40. Panels will exercise their expert judgement in assessing the quality of each impact submission, and will not judge in terms of the type of research underpinning the impact cases.

41. In assessing impacts, the Panel will look for evidence of reach and significance, and will grade each impact submission as a whole and give a rating using one or more of the five categories of quality level following paragraphs 53-55 of the General Panel Guidelines. In respect of the Computer Science / Information Technology Panel, the criteria of reach and significance will be understood as follows –

- reach: the extent and/or diversity of the communities, individuals, organisations that have benefitted from or have been positively affected by the impact. For example, the Panel will evaluate the extent to which society as a whole, communities or individuals have benefitted from the introduction of a new computer application or system.
- significance: the degree of beneficial effects to policies, practices, perspectives, lifestyle, productivity, efficiency, cost-effectiveness, security, privacy, safety or awareness of organisations, communities or individuals. For example, the Panel will evaluate the degree of productivity improvement achieved by the introduction of a new computer application or system.

42. The Panel will make an overall judgement about the reach and significance of impacts, rather than assessing each criterion separately. The criteria will be applied in the assessment of the research impact regardless of the domain to which the impact relates.

Section D: Assessment Criteria: Research Environment

Research Environment

43. The Computer Science / Information Technology Panel will accept submissions on research environment according to paragraphs 57-58 of the General Panel Guidelines. The Panel recognises that excellent research can be undertaken in a wide variety of research structures and environments. The Panel has no pre-formed view of the ideal size or organisational structure for a research environment. The Panel will assess each submission based on what has been presented in relation to the work of the submitting unit in providing and ensuring a good environment.

44. As a research environment submission may relate to a single coherent faculty and equally to multiple departments, submissions may depict the commonalities and dynamics among faculties and departments

within the submitting unit, and define their prime activities, how they operate and their main achievements.

Environment Overview Statement

45. Following paragraphs 9.6 (a) and (b), 9.7 and Appendix I of the Guidance Notes, and also paragraph 59 of the General Panel Guidelines, submitting units are required to describe how they have supported the conduct and production of research. This is distinct from the impact overview statement, which should describe how the units encourage and facilitate the achievement of research impact.

46. Within the terms of the Guidance Notes, the Computer Science / Information Technology Panel will expect in particular to see the following in the environment overview statement –

- overview: a brief description of the organisation and structure of the unit, which research groups are covered in the submission and how research is structured across the submitting unit.
- research strategy: evidence of the achievement of strategic aims for research during the assessment period, and details of future strategic aims and goals for research; how these relate to the structure described above; and how they will be taken forward; methods for monitoring attainment of targets; new and developing initiatives not yet producing visible outcomes but of strategic importance; identification of priority developmental areas for the unit, including research topics, funding streams, postgraduate research activity, facilities, staffing, administration and management.
- people: staffing policy and evidence of its effectiveness; how individuals at the beginning of their research careers are being mentored, supported and integrated into the research culture of the submitting unit; information on postgraduate recruitment, training and support mechanisms; mechanisms by which standards of research quality and integrity are maintained, such as ethics procedures and authorship; policies and achievements with respect to diversity, including gender and cultural diversity; support for engagement of students in research and entrepreneurship.
- income: information on research funding portfolio; evidence of successful generation of research income; major and

prestigious grant awards made by external bodies on a competitive basis.

- infrastructure and facilities: provision and operation of research infrastructure and facilities, including special equipment, library, technical support, space and facilities for research groups and research students; information on joint-university infrastructure, university-industry research centres, and cross-institution shared or collaborative use of research infrastructure.
- collaborations: information on support for and extent and exemplars of research collaborations; mechanisms to promote collaborative research at local and international level; support for collaboration with industry; support for inter-disciplinary research collaborations; research collaboration with research users.
- esteem: prestigious/competitive research fellowships held by individual researchers, including both funded fellowships and recognition as fellows of local, national and international professional societies; best paper, distinguished paper, and test-of-time awards for research publications; institutional awards for excellence in research or graduate student mentoring; external prizes and awards in recognition of research achievement.
- contribution to the discipline or research base: exemplars of leadership in the academic community such as advisory board membership; participation in the peer-review process for grants committees, academic program reviews and departmental/faculty reviews; service on editorial boards, conference organisational committees and conference program committees; service in leadership positions for professional societies.

Environment Data

47. Following paragraphs 9.6 (c) and (d), 9.8 and Appendix J of the Guidance Notes, and also paragraph 60 of the General Panel Guidelines, submitting units are required to provide environment data as evidence for statements appearing in the environment overview statement. The Panel will consider the environment data within the context of the information provided in the environment overview statement, and within the context of the disciplines concerned.

48. Data on "staff employed by the university proper" and "graduates of research postgraduate programmes" will be used to inform the Panel's assessment in relation to the "people" (section (3) (i) and (ii)). Data on "research grants/contracts" obtained during the assessment period will be used to inform the Panel's assessment on the "income" (section (4)). Additional relevant quantitative data or indicators are indicated in paragraph 46 above. Such additional information should be submitted within the appropriate section(s) of the environment overview statement.

Criteria and Quality Levels for Assessing Research Environment

49. Panels will exercise their expert judgement in assessing the merits of each environment submission, and will not judge automatically in terms of the scale of research environment concerned.

50. In assessing environment, the Panel will consider research environment in terms of vitality and sustainability, including its contribution to the vitality and sustainability of the wider discipline or research base. The Panel will grade each environment submission with weighting attached to individual aspects as follows –

- strategy – 5%
- people – 20%
- income – 20%
- infrastructure – 20%
- collaboration – 15%
- esteem – 10%
- contribution to the discipline or research base – 10%

The Panel will use one or more of the five categories of quality level as specified in paragraphs 62-64 of the General Panel Guidelines for assessing each aspect within the environment element and by aggregating assessments of individual aspects according to the weights shown above to form an overall assessment for each environment submission.

51. The Computer Science / Information Technology Panel provides the following amplifications to supplement the generic criteria for assessing research environment –

- vitality: the extent to which a unit provides an encouraging and nurturing environment for research, has an effective

strategic plan, is engaged with the regional and international research community, is able to attract excellent faculty, research staff, postgraduate students and postdoctoral researchers through a worldwide reputation.

- sustainability: vision for the future, viability for investment in people and infrastructure, and the extent to which activity is supported by a continual portfolio of research funding.

52. The Panel will make an overall judgement about the vitality and sustainability of research environments, rather than assessing each criterion separately.

Section E : Working Methods

Use of Sub-Group(s)/Sub-Panel(s)

53. There will not be any sub-group or sub-panel formed under the Computer Science / Information Technology Panel.

Allocation of Work in the Assessment Process

54. The Convenor, consulting the Deputy Convenor and other panel members, as appropriate, will allocate work to members and, if necessary, impact assessors and/or external reviewers in light of their expertise and workload. In allocating the work, the Convenor will also take into account any potential conflicts of interest of respective panel members and assessors. All panel members will take account of the requirements of the General Panel Guidelines to ensure that the exercise is conducted fairly and equitably.

55. Panel members will examine the submitted outputs in detail, and put forward a recommendation to the Panel for a collective decision on the final grading. To ensure fairness and consistency, each research output will be assessed in detail by at least two members, one of whom should be a non-local member to the extent possible. Final grading on research outputs will be decided by the Panel as a whole.

56. Subject to conflicts of interest of individual members, the impact and environment submissions will be assessed by members of the whole Panel, and the final grading of individual submissions will be a collective decision of the Panel.

Cross-Panel Referrals

57. This Panel will follow the procedures in paragraphs 41-43 of the General Panel Guidelines when initiating referrals to other panels and assessing submissions cross-referred by another panel.

58. *(Template paragraph deleted)*

59. *(Template paragraph deleted)*

External Advice

60. This Panel will follow the procedure in paragraph 66 of the General Panel Guidelines when referral to external reviewers for expert advice becomes necessary for panel assessment. External reviews may be sought in the cases for which members of the Panel do not have the necessary expertise.

Trial Assessment

61. With reference to paragraphs 89-91 of the General Panel Guidelines, the Panel will conduct a trial assessment using a sample of submissions selected from universities' submissions. These sample submissions will be assessed by all members of the Panel. Members will share among themselves any important observations in the assessment to calibrate a consensus on quality ratings and to ensure fairness and consistency in the actual assessment. Submissions used for the trial assessment will be assessed afresh during the main assessment period regardless of their assessment results during the trial. The Panel will decide on the sample size after the submissions are received.

Panel Feedback Report

62. With reference to paragraph 71 and Appendices E and F of the General Panel Guidelines, the Panel will provide feedback to the UGC after the assessment process. Non-local panel members will be involved in offering comments for an impressionistic international comparison. The Convenor on behalf of the whole panel will submit the panel feedback report to the UGC by 10 November 2020.