

University Grants Committee

Research Assessment Exercise 2020

Draft General Panel Guidelines

Purpose

Further to the publication of the Framework and Guidance Notes for the Research Assessment Exercise (RAE) 2020, which set out the objectives, principles, methodology and guidelines to universities and staff members involved in making submissions for the exercise, this document provides guidelines and instructions to the panels of the RAE 2020 in relation to the generic criteria and the procedures for the assessment of submissions. All the above-mentioned documents are available on the University Grants Committee (UGC) website at <<http://www.ugc.edu.hk/eng/ugc/activity/research/rae/rae2020.html>>.

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Overview

The RAE 2020 is the sixth such exercise conducted by the University Grants Committee (UGC) to assess the research quality of the UGC-funded universities in Hong Kong. A list of the eight universities involved is provided at **Appendix A**. The exercise will continue to be an expert review exercise using international benchmarks to delineate universities' areas of relative strengths and provide some insight on areas and opportunities for development. It will produce quality profiles of individual units of assessment (UoAs) based on submissions made by universities. The elements of assessment and respective weightings are –

- (a) research outputs – 70%;
- (b) impact – 15%; and
- (c) environment – 15%.

Scope of Research

2. In the context of the RAE 2020, research is defined as the process leading to new knowledge, insights, methodologies, solutions and/or inventions. It may involve systematic investigation, use of existing materials, synthesis, analysis, creation of artefacts or concepts, design, performance, and/or innovation.

3. The RAE 2020 maintains an inclusive view on the scope of research. The broadened meaning of scholarship as defined by the Carnegie Foundation continues to be a guiding reference for the RAE 2020, that is, the discovery of knowledge, the integration of knowledge, the application of knowledge and the sharing of knowledge through teaching are regarded as different forms of scholarship on par with each other, so that high quality research in all forms of scholarship including inter-disciplinary and collaborative research will be encouraged and assessed as equally important across a broad front.

Panels and UoAs

4. There are 13 assessment panels for the expert review of submissions, covering 41 UoAs in the RAE 2020. A complete list of panels and UoAs is at **Appendix B**. Sub-groups(s)/Sub-panel(s) under each panel may also be set up. Each UoA forms the basis of data/submissions for assessment. Each panel is chaired by a Panel Convenor who is assisted by a

Deputy Convenor. Composition of each panel will include local and non-local international scholars/experts, research end-users and professionals in respective fields. Each panel will have at least one member (who can be Panel Convenor or Deputy Convenor) to be nominated as “inter-disciplinary champion” with specific role to ensure thorough and appropriate handling of any inter-disciplinary submissions (see paragraphs 39-43 below).

5. All panel members of the RAE 2020 are appointed in their personal capacities, and should refrain from representing the interests of their affiliated institutions in the assessment of and deliberations on relevant submissions.

Outline of Assessment Process

6. The census date of the RAE 2020 is 30 September 2019. Key dates in respect of the RAE process are as follows –

Time	Major Events
2 December 2019	Due date for universities to submit a list of all eligible academic staff and other staff-related information
16 December 2019	Due date for universities to submit: <ul style="list-style-type: none"> • Research Strategy Statement of the university • Full version of research outputs and information required on research outputs • Information required on research impact including impact overview statement and impact case study(ies) • Information required on research environment including environment overview statement and related data
January – February 2020	Panels to conduct trial assessment of sample submissions
March 2020	Panel Convenors/Deputy Convenors to assign submissions for Members’ assessment
April – July/August 2020	Panel members to assess submissions with specialist advice from external reviewers where necessary
August – September 2020	Panels to meet and conclude assessment

Time	Major Events
10 November 2020	Panel Convenors/Deputy Convenors to submit Panel Feedback Reports
January 2021	The UGC to consider and approve the RAE results for announcement

Eligible Academic Staff in Each UoA

7. All academic staff who meet the criteria as set out in paragraph 4.1 of the Guidance Notes will be taken into account in the universities' results for the RAE 2020. The application of the eligibility criteria is primarily an administrative matter with regard to the staff's appointment nature, job category and continuous employment period at the universities concerned. It does not involve any academic judgment on individual staff.

8. Universities are required to assign each of their eligible academic staff (including those staff on joint appointment by two or more departments in the same university) to a research area and hence the corresponding UoA as listed out at **Appendix C**. In the context of the RAE 2020, the mapping of eligible staff to UoAs is for the purposes of –

- (a) determining the number of submissions in respective UoAs (including output, impact and environment) (see paragraph 12 below); and
- (b) determining whether assessment results in respect of research outputs at research area level are to be generated (see paragraph 70 below).

9. Submissions in respect of an eligible staff under a UoA will primarily be assessed by the subject RAE panel as shown in **Appendix B**. To ensure that cross-disciplinary research will receive adequate attention and be evaluated by members with suitable expertise, submissions will be referred to another panel with the relevant expertise and/or external reviewers for assessment, where appropriate (see paragraphs 39-44 below).

10. Universities' assignment of eligible academic staff to research area and respective UoAs can be subject to re-assignment by the UGC in case of an anomaly, such as the assignment of certain staff members to a research area and UoA and yet a major part or even all of their research outputs are in the field(s) of other research area(s) or UoA(s) or RAE panel(s). If an

anomalous case is suspected, the Panel Convenor of the subject RAE panel (i.e. for the research area and UoA to which the staff member is originally assigned by the university) should bring up the case via the UGC Secretariat, with the panel's observations and recommendation, as early as practicable, and in any case no later than 30 April 2020.

11. Panels' recommendations on any suspected anomalous cases will be reported to the RAE Group (RAEG) of the UGC¹ for consideration. Where appropriate, clarifications from the university concerned and/or views from other RAE panel(s) may be sought through the UGC Secretariat. Any re-assignment, once endorsed by the RAEG of the UGC, will be final and not subject to appeal. The RAE panel of the re-assigned research area and UoA will be responsible for the assessment of the relevant submissions, and the RAE results of the submissions will be logged into the re-assigned research area and UoA.

Submissions for Assessment

12. For the purpose of making a submission for assessment to a UoA, there should be at least three eligible academic staff be assigned to the concerned UoA. Universities will make submissions for respective elements to be assessed in accordance with the details as set out in the ensuing paragraphs –

- (a) Research Outputs
(paragraphs 5.1-5.18 of the Guidance Notes refer)
 - (i) each eligible academic staff should have up to four research outputs produced during the assessment period from 1 October 2013 to 30 September 2019² for submission in full version and with relevant data;
 - (ii) new researchers, namely those eligible academic staff who first took up an academic appointment (in Hong Kong or elsewhere) on or after 1 August 2015, may reduce the number of research outputs to be submitted according to the scale below –

¹ The RAEG is established under the Research Group of the UGC to advise on and oversee the planning and implementation of the RAE 2020.

² In case of an individual output bearing multiple publication dates, the date on which it is firstly published or made publicly available, be it online or printed, should be counted. If an output was published or made publicly available online prior to printed publication, the online publication date should be counted.

Duration of appointment prior to the census date	Date of appointment³	Number of outputs to be submitted
39 to 50 months	Between 1 August 2015 and 31 July 2016 inclusive	3 or 4
27 to 38 months	Between 1 August 2016 and 31 July 2017 inclusive	2 to 4
Less than 26 months	On or after 1 August 2017	1 to 4

- (iii) pursuant to paragraphs 4.5-4.6 of the Guidance Notes, special consideration/exemption may be granted by the UGC in exceptional cases if an eligible academic staff has been absent for a prolonged period on medical, parental or compassionate grounds. In these circumstances, universities will be exempted from submitting all or part of the required number of research outputs in respect of the eligible academic staff concerned.

(b) Research Impact
(paragraphs 7.1-7.11 of the Guidance Notes refer)

Submissions about research impact are made on a UoA basis. Each submission should include –

- (i) one impact overview statement describing the submitting unit’s approach during the assessment period from 1 October 2013 to 30 September 2019, to enabling impact from its research; and
- (ii) impact case study(ies) describing specific examples of impacts achieved during the assessment period by the submitting university, underpinned by research, research activity or a body of work (as equivalent to at least 2-star (2*) quality), undertaken at, or significantly supported by, the submitting university in the period from 1 January 2000 to 30 September 2019, with prescribed quantity and page limit as stipulated below –

³ “Date of appointment” refers to the date the academic first took up a full-time academic appointment in Hong Kong or elsewhere in staff grades “A” to “P” in Hong Kong as defined at Appendix D of the Guidance Notes, or an appointment not below assistant professorship or equivalent outside Hong Kong.

Number of eligible academic staff (headcount) in the UoA	Page limit (A4 size) for each impact overview statement	Number of case study(ies) required for submission to the UoA	Page limit (A4 size) for each impact case study
3 – 15	2	1	4
16 – 30	2	2	4
31 – 45	2	3	4
46 or more	3	4, plus 1 further case study per additional 40 staff (headcount)	4

- (c) **Environment**
(paragraphs 9.1-9.9 of the Guidance Notes refer)

Submissions about research environment are made on a UoA basis. Each submission should include –

- (i) an environment overview statement describing the submitting unit’s research strategy; its support for research staff and students; its research income, infrastructure and facilities; its research collaborations, esteem and wider contributions to the discipline or research base during the assessment period from 1 October 2013 to 30 September 2019 with the prescribed page limit as stipulated below –

Number of eligible academic staff (headcount) in the UoA	Page limit (A4 size) for each environment overview statement
3 – 15	4
16 – 30	6
31 – 45	8
46 or more	10

- (ii) data on staff, graduates of research postgraduate (RPg) programmes and research grants/contracts from different sources of funding etc. during the assessment period from 1 October 2013 to 30 September 2019.

Missing Part of Submission

13. Universities may submit fewer than the prescribed number of research outputs per eligible staff / new researchers / staff granted with special consideration/exemption for the RAE 2020 as set out in

paragraph 12 (a) above. In such a case, the missing item(s) will be deemed as “unclassified”. Similarly, in case of nil submission or submission below the respective requirement for impact and environment, the missing submission or the missing part of it will be deemed as “unclassified” and the respective panel will take this into account in the overall rating of the unit concerned.

14. As a general principle, panels’ assessment will be solely based on the submissions made by the universities. Panel members should not take into account any personal knowledge (e.g. about other research outputs or impact cases that have not been included in the submission) for consideration and panel deliberation, as inclusion of such factor(s) could lead to unintentional bias in the assessment. To ensure that the assessment will be conducted fairly to all submissions, no additional information may be submitted by the staff members or universities unless it is requested via the UGC Secretariat. If a panel requires any further information after the submission deadline, such request will be handled through the UGC Secretariat with the universities concerned.

Materials for Background Information

15. Background information in the form of “Research Strategy Statement” will be submitted by each university in the format as set out in Appendix B of the Guidance Notes. These statements will not be assessed, but they will provide a context for panels in assessing comparable submissions under a UoA and for the UGC in viewing the quality profiles of the universities as a whole upon completion of the RAE 2020. A university’s research strategy statement is expected to reflect the university’s research philosophy, vision and priorities in relation to its role and stage of development, as well as the distribution of research efforts across disciplines. In addition, a tabular breakdown of a university’s eligible academic staff in each UoA by rank and years of eligible appointment at the submitting university as well as the number of new researchers will be provided to panels by UGC for background information.

Basis of Evaluating Research Outputs

16. In general, all research outputs submitted to the RAE 2020 for assessment must meet all the following criteria, no matter whether or not the research activities leading to the output items submitted for assessment are funded by the UGC, or the outputs were produced in or outside Hong Kong and/or whether the eligible staff concerned were employed by the submitting universities at the time of publication or production of the outputs –

- (a) the output contains an element of new insights or innovation;
- (b) the output and its process contribute to scholarship or transfer of knowledge, generating impact to academia or society at large; and
- (c) the output is publicly accessible or effectively shared in the profession.

17. PhD dissertations or proprietary research which does not result in output that is accessible to the public and the profession are not accepted as outputs for assessment. However, output items of exhibitions and demonstrations relating to proprietary research which: (a) are accessible to the public and the profession; (b) are non-traditional output for assessment; and (c) contain enough information for evaluation, may be submitted for assessment.

18. The following cases are considered to be falling in the research outputs as defined above –

- (a) any publication, patent awarded or published patent applications, artefact, etc., provided
 - (i) that it was published or made publicly available in other form within the assessment period; or
 - (ii) that it is not yet published, but officially accepted for publication (without any prior condition for its publication) within the assessment period, and supported by a letter of acceptance; or
- (b) other forms of output that were published or made publicly accessible or effectively shared within the profession, e.g. performance recording, video tape, computer software programme, architectural drawings, or any creative work that can be evaluated for merit and an assessment obtained.

Individual panels will decide, by exercising their professional judgement and having regard to the definition of research output, whether any other type of submitted item, including a review article, translation or textbook, would be accepted on the basis of the above criteria. Respective panels will specify in their Panel-specific Guidelines on Assessment Criteria and Working Methods

(“Panel-specific Guidelines”) examples on the forms of research outputs that are admissible and specifically relevant for the panels’ assessment.

Grading Research Outputs

19. Research outputs will be assessed in terms of their originality, significance and rigour with reference to international standards. Each submitted output will be graded into one of the following categories –

Category (Abbreviation)		Standard
4 star	(4*)	world leading in terms of originality, significance and rigour
3 star	(3*)	internationally excellent in terms of originality, significance and rigour
2 star	(2*)	international standing in terms of originality, significance and rigour
1 star	(1*)	research outputs of limited originality, significance and rigour
unclassified	(u/c)	not reaching the standard of 1 star; or not regarded as research outputs in the RAE 2020; or missing item in the submission

20. The five categories of research output grading are broadly defined for all panels as follows –

Category	Description
4 star	<p>showing evidence of, or potential for, some of the following characteristics:</p> <ul style="list-style-type: none"> • agenda setting / primary or essential point of reference; • great novelty in thinking, concepts or results, or outstandingly creative; • developing or instrumental in developing new paradigms or fundamental new concepts for research; • research that is leading or at the forefront of the research area, or having major / profound influence.

Category	Description
3 star	falling short of the highest standard of excellence, but showing evidence of, or potential for, some of the following characteristics: <ul style="list-style-type: none"> • important point of reference or makes important contributions likely to have a lasting influence; • significant influence.
2 star	showing evidence of, or potential for, some of the following characteristics: <ul style="list-style-type: none"> • a recognised point of reference or of some influence; • provides useful or valuable knowledge / influence; • incremental advances in knowledge / thinking / practices / paradigms.
1 star	showing evidence of, or potential for, some useful contribution of minor influence.
unclassified	falling below the quality level of “1 star”; not meeting the definition of research used for the RAE 2020; or a missing item in the submission.

21. To minimise any possible divergence in judgment with regard to the use of international standards, all panels should make evaluation with regard to the quality, rather than the publication venue of the published item, pitching at the best international norms and the standards of rigour and scholarship expected internationally in respective disciplines or sub-disciplines. Should there be divergent views on the assessment of particular submissions, such cases should be fully discussed by the panels. Panels should give due consideration to individual assessors’ comments, and make a considered judgement and collective decision on the final grading.

22. Individual panels will provide further elaboration or amplification (with examples, where appropriate) of the criteria on research output as they see appropriate yet without linking to any particular quality levels, in order to avoid the risk of inconsistent interpretations of the quality levels. Efforts will be made to ensure broad comparability between disciplines through the implementation process, including implementation and calibration of guidelines and assessment standards, conduct of forum and trial assessments, etc.

23. In principle, the quality of each output will be judged on its own merits and not in terms of its publication category (e.g. a journal paper is not

necessarily of higher or lower merit than a book chapter), medium or language of publication. Panels are advised to assess the substance of individual output instead of giving mechanical gradings according to the medium of publication. Panels are expected to recognise that there can be quality output items in media that may not be prestigious and should not adopt a mechanical approach during the assessment.

24. While panels are requested to study each output in detail for assessment, some panels may decide to use metrics or citation data to inform their assessment of individual items. However, while such metrics and data may serve as advisory or secondary information for reference, they will not be used in any algorithmic or deterministic way for the evaluation of research quality. Panels should be aware of the limitations of citation 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. Individual panels will provide specifications on the use of metrics/citation data in the Panel-specific Guidelines.

Assignment of Outputs for Assessment

25. Panel Convenors, with the assistance of Deputy Convenors where appropriate, will assign individual outputs to panel members (including their good selves) and/or external reviewers for assessment based on the match of members' expertise and caseload. Panel members will examine in detail the outputs, and put forward a recommendation with preliminary grading and comments to the panel or sub-group/sub-panel (if a panel decides to have sub-group(s)/sub-panel(s) for assessment) for a collective decision on the final grading. To ensure fairness and consistency, each research output will be assessed by at least two members, one of whom should be a non-local member to the extent possible. For those UoAs which are only housed at one or two submitting university(ies), each output should be assigned to at least two members, one of whom must be non-local, in order to ensure fair and impartial assessment.

26. To ensure research outputs receive adequate attention, panels may consider setting up sub-group(s)/sub-panel(s) within their panels to evaluate such items separately and to make recommendations to the panels in plenary sessions. Each panel will decide if it would be necessary to have sub-group(s)/sub-panel(s) having regard to the nature and spread of subjects as well as caseload under its purview. If a sub-group/sub-panel is to be formed, the relevant panel would need to work out the procedures for the operation of the sub-group/sub-panel and ensure that the yardstick for assessment would be consistent between the sub-group(s)/sub-panel(s) and

the panel. Alternatively, panels may refer doubtful cases to panel members or “inter-disciplinary champion” (see paragraph 39 below) with relevant expertise or external reviewers for advice, as and when necessary.

27. Panel Convenors, Deputy Convenors, panel members and external reviewers should not be assigned submissions from their affiliated university(ies), departments/units or academic staff at other universities in respect of whom they have any conflict of major interest (see paragraphs 78-86 for more details regarding declaration of interest).

28. In handling assignment of submissions which involves any declared or potential conflict of interest, the Panel Convenor may make reference to the guidelines in paragraphs 78-86 below to decide whether the submissions in question need to be re-assigned to another panel member for assessment. For cases of conflict of interest involving the Panel Convenor, the Deputy Convenor will take up the role as the Panel Convenor when the submissions in question are handled. If both the Panel Convenor and Deputy Convenor have declared conflict of interest of the same submission, one of the panel members should be assigned to take up the role.

Double-weighting of Research Outputs

29. Universities may request that outputs of extended scale and scope be double-weighted (i.e. be counted as two outputs) in the assessment. No single output may be counted as more than double-weighted. While universities may submit a maximum of four outputs in respect of each eligible staff member, no more than two outputs of an individual staff member should be double-weighted. For each double-weighting request, the submitting university may place a “reserve” output in the submission in respect of the concerned staff member. The university should provide justification in not more than 100 words as to why the output merits double-weighting, e.g. how the research output (e.g. in terms of its scale or scope) required research effort equivalent to that required to produce two single outputs, and indicate whether a “reserve” item is submitted for each double-weighting request.

30. Panels will first evaluate the claim for double-weighting of an output. Panels will decide whether to double-weight the output so requested in the light of the justification provided by the submitting university, the publication patterns in respective disciplines as well as the output declared to be double-weighted, before proceeding on the assessment of the quality of the output concerned. Where a panel does not accept the case for double-weighting, it will count the submitted output as a single output, and

assess the corresponding “reserve” output as well. If no reserve output is submitted, the missing item will be deemed as “unclassified”. There is no presumption that double-weighted outputs will be assessed at a higher quality. Assessment and grading of an output with double-weighting request will be against the same quality standards as that for single-weighted output items.

31. Journal articles, book chapters or conference papers are not normally permitted to be double-weighted, whereas outputs such as single-authored monographs may be considered without ruling out other types of outputs such as publications based on patents. Co-authored items may in principle be identified and double-weighted by one or more of their authors, bearing in mind that the double-weighting claim should apply to the effort of the author of the submitting university. However, the rule in paragraph 5.16 of the Guidance Notes shall prevail, i.e. multiple submission of the same output in respect of two or more academics within the same university will only be counted as one output under the submitting university, while a co-authored research output submitted by different universities may be counted as one output for each of the universities as long as the co-author of each submitting university has made a substantial contribution to the co-authored output (see paragraphs 32-34 below). Individual panels will specify their position on double-weighting requests in their Panel-specific Guidelines.

Co-authored Research Outputs

32. A co-authored (or jointly-produced) research output submitted by different universities may be accepted and counted as one output for each of the universities as long as the co-author of each submitting university has made a substantial contribution to the co-authored output. Multiple submissions of a co-authored research output in respect of two or more academics within the same university (regardless if they are from the same UoA or not) will however be counted as one output under the submitting university.

33. If a co-authored research output is submitted by a university under the name of two or more academics within the university, the university is required to flag this and specify the academic (i.e. one of the co-authors) under whose name the output is submitted for rating, so that the relevant panel will rate it once, whereas the submission of the same output under the other academic(s)’s name within the same university will be deemed as “unclassified”. If a co-authored output by the same university is submitted to two or more panels, while the panels will collectively decide how to rate the concerned output as in the case of handling other

inter-disciplinary research (see paragraphs 39-40 below), the rating will be logged into the submitting university once.

34. Other than the above principle, panels will consider co-authorship to be a normal element of research activity in the field and expect all named co-authors to have made a significant contribution to the research process leading to the output concerned. Panels will specify their position on co-authored research outputs, and may require information (e.g. role and contribution of individual staff member of the submitting university to a co-authored output) to support the inclusion of co-authored outputs. If a panel is not persuaded that the individual staff member has made a significant contribution to a co-authored output, it may, exceptionally, seek further verification for the inclusion of the output. If the panel is satisfied that a significant contribution to the production of a co-authored output has been made by the individual staff member of the submitting university, the panel will assess the quality of the co-authored output taking no further regard of the individual staff member's contribution. The co-authored output will be judged on its merits independent of authorship arrangements, and be counted as a single output. If the panel is not satisfied that a significant contribution to the production of a co-authored output has been made by the staff concerned, the output will be graded as "unclassified".

Assessment of Non-traditional Outputs

35. In the case of research outputs in non-traditional form as described in paragraph 18 (b) above, the submitting university must provide additional information on (a) novelty of the work; (b) the deliverables; and (c) the dissemination method. The description required for each non-traditional output item is limited to 300 words. Other than this, no other additional textual description will be permitted for individual output items.

36. For submissions relating to performing arts, such as drama, music composition, stage performance or a piece of creative work, including documentary film, they should include recordings which need to be made available to the panel members and external reviewers. For submission in the areas of design, buildings, multi-media, or visual arts, photographs of the originals must include dimensions and good reproduction. Panels are to specify any other additional requirement on the format and method of access to non-traditional outputs in their Panel-specific Guidelines.

37. Assessment and grading methodologies of a non-traditional output should be same as that for regular research outputs. A sub-group/sub-panel with suitable membership (including members drawn

from outside academia, where appropriate) may be constituted under a panel to evaluate non-traditional outputs separately. Panels may also seek specialist advice from external reviewers for assessing the outputs, where necessary.

Assessment of Non-English Outputs

38. As stressed in paragraph 5.12 of the Guidance Notes, **all output items will be assessed without regard to the medium or language of publication.** Non-English items will be indicated by the submitting universities to the panels to which they are submitted. If the panels do not have relevant expertise to assess such items, Panel Convenors will take the role to solicit at least two appropriate experts for assessing each of the non-English items as early as practicable, so that the UGC Secretariat can make necessary arrangements with the external experts to conduct the assessment. Panel Convenors will be expected to provide guidance to the external experts concerned on the panels' specific criteria and requirements.

Inter-disciplinary Research

39. Research submissions will normally be assessed by the panel that is designated for the relevant UoA as set out at **Appendix B**. Panels recognise that individual UoAs do not have firm or rigidly definable boundaries, and that certain aspects of research are naturally inter-disciplinary or multi-disciplinary or span the boundaries between individual UoAs, whether within the panel or across panels. Each panel will have at least one member designated as the “inter-disciplinary champion” with the role to provide specific input and support in overseeing the assignment and assessment of inter-disciplinary submissions and in liaising with relevant panel members to ensure the submissions will receive adequate attention and be evaluated by members with suitable expertise.

40. Where a research output is inter-disciplinary in nature, the submitting university is invited to flag this and indicate the “primary field” and “secondary field” of the output for relevant panel's consideration. In the event that an output is deemed to fall into the expertise of another UoA(s) (under the same or different panel), the Panel Convenor of the subject panel, in consultation with the “inter-disciplinary champion”, will make referral to other UoA(s) with the relevant expertise for assessment. The final grade of the output will be logged into the UoA to which it is submitted or re-assigned (see paragraphs 10-11 above), as appropriate.

Cross-Panel Referrals

41. In assigning research outputs to panel members for assessment, a Panel Convenor may, in consultation with the “inter-disciplinary champion” and/or Deputy Convenor, make appropriate judgment to refer any submitted outputs to another UoA within his/her panel or other panel(s), such that the outputs will be assessed by members with relevant expertise. The Panel Convenor may also consult other relevant panel member(s) in deciding such referrals of outputs.

42. Cross-panel referral may be initiated either (a) by Panel Convenors or (b) by Deputy Convenors or the “inter-disciplinary champions” or panel members with the endorsement of respective Panel Convenors. Any such referral requests, in particular those involving inter-disciplinary assessment, should be initiated as soon as practicable so as to allow sufficient time for the assessment. The Panel Convenor of the “original panel” is encouraged to communicate and discuss the cross-referred submission with the Panel Convenor of the “receiving panel” in initiating a cross-panel referral request. If the referral request is turned down by the “receiving panel”, the Panel Convenor of the “original panel” will approach the UGC Secretariat to arrange for due assessment of the submission concerned by other means.

43. Cross-panel referral can be requested for (a) assessment by another panel or (b) collective assessment by two or more panels, which are required mainly for inter-disciplinary outputs.

(a) Assessment by another panel

Under this category, if a referral request to another panel is accepted, the Panel Convenor of the “receiving panel” will assign the submission to at least two panel members for assessment. Grading and comments on the referred submission given by the two panel members will be forwarded to the Panel Convenor of the “original panel”. Specific criteria and methods which the “receiving panel” has used in the assessment will also be made available to the “original panel” for reference. Subject to endorsement by the Panel Convenor of the “original panel”, the assessment grading given by the “receiving panel” should be accepted without modification. A panel should not make more than one cross-panel referral request for each output concurrently.

(b) Collective assessment by two or more panels

For this category, assessment of the output is intended to be conducted jointly by the “original panel” and one or more “receiving panel(s)”. The “original panel” may request up to two other panels to jointly assess an output item. If such a request is accepted, the Panel Convenors of the “original panel” and “receiving panel(s)” will each assign one panel member to conduct the assessment. Grading and comments given by the panel member(s) of the “receiving panel(s)” will be forwarded to the Panel Convenor of the “original panel”. Specific criteria and methods that the “receiving panel(s)” have used in the assessment will also be made available to the “original panel” for reference. The ultimate assessment methodology and the decision on the final grading of the item in question should rest and remain with the “original panel”.

External Advice

44. Panels may seek expert advice from external reviewers in exceptional circumstances when they consider it will facilitate quality assessment of the outputs. Referral to external reviewers generally applies to outputs which the panels do not have adequate expertise for assessment, such as outputs that are written in a language outside panel members’ expertise. Normally, an output may be referred to not more than two external reviewers for specialist advice. External reviewers should not be referred for assessing submissions from their affiliated university(ies), departments/units or academic staff at other universities in respect of whom they have any conflict of major interest (see paragraphs 78-86 below for guidelines on conflict of interest). Panel members may raise the requests for external advice with the Panel Convenor. Panel members may recommend external reviewers from their knowledge. The UGC Secretariat also maintains a database of individuals who were nominated for external reviews and research assessment. Upon the Panel Convenor’s endorsement, the UGC Secretariat will follow up on such requests.

Assessment of Impact and Environment

45. Universities’ submissions in respect of impact and environment will be initially assessed by members either of the whole panel (save for those having a conflict of interest) or of respective sub-group(s)/sub-panel(s) before the whole panel decides on the final grading. In addition, local research end-users or professionals in respective fields will be engaged and

appointed as lay members to take part in the assessment of impact. Panel Convenors may assign certain members of the panel who have conducted initial assessments of these submissions to lead the presentation of the initial assessments to facilitate the discussion at the panel meetings. Individual panels are to specify their working methods on the assessment of impact and environment in their Panel-specific Guidelines.

46. Panels assess the quality of universities' submissions based on their merits according to international standards. Submissions in respect of impact and environment should be assessed solely on their merits with no consideration given to the differences among the submitting universities/units in terms of staff size, resources, histories, and there should be no discounting/crediting factor arising from the career stage and staff profile information of individual universities/units.

Basis of Evaluating Research Impact

47. Universities will make submissions about impact of research on UoA basis in form of an impact overview statement and impact case study(ies) according to the generic requirements and templates as set out in paragraphs 7.7-7.10 and Appendices G and H of the Guidance Notes.

48. To be eligible for assessment in the RAE 2020, the impact must meet the definition and criteria as set out below –

Definition

- (a) impact is defined as the demonstrable contributions, beneficial effects, valuable changes or advantages that research qualitatively brings to the economy, society, culture, public policy or services, health, the environment or quality of life whether locally, regionally or internationally; and that are beyond academia. Impact in this context includes, but is not limited to –
 - (i) positive effects on, constructive changes or benefits to the activity, attitude, awareness, behaviour, capacity, opportunity, performance, policy, practice, process or understanding, of an audience, beneficiary, community, constituency, organisation or individuals; or

- (ii) the reduction or prevention of harm, risk, cost or other negative effects;
- (b) academic impact of research, i.e. the contribution that research brings to academic advances across and within disciplines, is valuable, but will be assessed through the outputs and/or environment elements in the exercise. As the impact element concerns impact beyond academia, the scope of impact as a distinct element –
- (i) excludes impacts on research or the advancement of academic knowledge within the higher education sector;
 - (ii) excludes impacts on students, teaching or other activities within the submitting university; and
 - (iii) includes other impacts on teaching or students where they extend significantly beyond the submitting university (e.g. impact relating to language teaching in primary and/or secondary schools), or on other fields (e.g. impact of text mining technologies in linguistics or computer science research in the medical or commercial field);

Criteria

- (a) the impact must have been enabled or generated or substantially supported by the submitting university during the assessment period from 1 October 2013 to 30 September 2019;
- (b) the impact must be underpinned by research undertaken at, or significantly supported by, the submitting university during the period from 1 January 2000 to 30 September 2019, i.e. the underpinning research made a distinct and material contribution to the impact taking/taken place, such that the impact would not have occurred or would have been significantly reduced without the contribution of that research; and
- (c) while impact is not in any way meant to be a reflection of the quality of the initial research outputs, the quality of underpinning research should be equivalent to at least attaining 2 star (2*), i.e. of international standing. Panels will specify in their Panel-specific Guidelines the references that a submitting

unit is required to provide as evidence of the quality of underpinning research. Based on the information submitted, the panel will use its expert judgement to determine in how much detail the panel needs to review the underpinning research in order to assure that the quality threshold has been met. Provided that the panel is satisfied that the quality threshold has been met, the quality of the underpinning research will not be taken into consideration as part of the assessment of the claimed impact. Panels will also specify their approach to evaluating the quality of underpinning research in their Panel-specific Guidelines.

49. Impacts may occur in any geographical location or at different stages of development. Impacts underpinned by research of non-eligible academic staff (e.g. part-time researchers and staff appointed after 1 September 2017) may be selected by universities in the submission. It does not matter if the researchers concerned are not eligible academic staff of the submitting university or no longer employed by the university.

Impact Overview Statement

50. The impact overview statement is intended to provide more holistic and contextualised information about the wider range of activities within the submitting unit. Submitting units are required to describe how they have sought to enable and/or facilitate the achievement of impact arising from research, and how they are shaping and adapting their plans to ensure continuing achievement in future. It should include specific details on –

- (a) context: the submitting unit to describe the main non-academic user groups, beneficiaries or audiences for the unit's research and the main types of impact specifically relevant to the unit's research, and how these relate to the range of research activity or research groups in the unit;
- (b) approach to impact: the submitting unit to describe the unit's approach to its interaction with non-academic users, beneficiaries or audiences and to achieving impacts from its research, during the assessment period from 1 October 2013 to 30 September 2019;
- (c) strategy and plans: the submitting unit to describe its strategy and plans, or the development of such, for achieving and enabling impact from its research; and

- (d) relationship to case studies: the submitting unit to describe the relationship between the impact case study(ies) and the unit's approach to impact.

Impact Case Study(ies)

51. Universities are required to submit case study(ies) to support the impact claims. The impact case study(ies) should be based on the strongest example(s) available to present the impacts that are generated or substantially supported by the submitting unit. While impact may take place in a wide variety of areas and in different forms across disciplines, panels will provide in the Panel-specific Guidelines examples or a guide, as appropriate, on the range of potential impacts that may be eligible as case study(ies). The examples provided should not be expected to be exhaustive, or exclusive, and should not be ranked in anyway.

52. In each impact case study, the submitting unit must include evidence appropriate to the types of impact that supports the claims. The submission of an impact case study should contain –

- (a) summary of impact: a brief summary of the impact, including who and what has benefitted, been influenced or acted upon;
- (b) underpinning research: descriptions of the knowledge, insights, methodologies, solutions and/or inventions brought about by research that underpinned the impact, an outline of the underpinning research, when it was undertaken and the key researchers concerned;
- (c) references to the research: references to key outputs from the underpinning research, including name of author(s), title of output, year and location of publication, and evidence of the quality of the research, as requested by respective panels in their Panel-specific Guidelines;
- (d) details of the impact: a detailed narrative explaining how the research led to or underpinned the impact, the beneficiaries and the nature of the impact, when the impact occurs/occurred, evidence (e.g. indicators) illustrating the extent of the impact, and how the submitting unit made contributions to the impact in the assessment period from 1 October 2013 to 30 September 2019; and

- (e) sources to corroborate the impact: sources external to the submitting university that could provide corroboration to support the statements and claims in the impact case study, and details on how the sources can be accessed for audit purposes.

53. The focus of assessment is the impact achieved by the submitting unit, not the impact of individuals or individual research outputs, although they may contribute to the evidence of the submitting unit's impact. Panels will consider the evidence of the quality of individual research underpinning the impact cases (with research being understood as broadly as defined in paragraphs 2-3 above) and where necessary will review the outputs concerned to ensure that the quality of the research is of at least 2 star (2*), i.e. of international standing. A case study will be regarded as not eligible and deemed as "unclassified" if the respective panel considers that the underpinning research outputs are not up to the required standard. Individual panels will specify the kinds of information and evidence expected in the impact submissions.

Grading Research Impacts

54. Research impacts will be assessed in terms of their reach and significance, regardless of the geographic location in which they occurred. The generic assessment criteria of "reach and significance" will be understood as –

- (a) "reach" is the extent and/or breadth of beneficiaries of the impact; whereas
- (b) "significance" is the degree to which the impact has enabled, enriched, influenced, informed or changed the products, services, performance, practices, policies or understanding of commerce, industry or other organisations, governments, communities or individuals.

55. Panels will assess the reach and significance of impacts on the economy, society and/or culture that were underpinned by research conducted in, or significantly supported by, the submitting unit/university, as well as the submitting unit's approach to enabling impact from its research. In assessing the impact described within a case study, the panel will form an overall view about its reach and significance taken as a whole, rather than assessing reach and significance separately. In assessing the impact overview statement, the panel will consider the extent to which the unit's approach described in the overview statement is conducive to achieving

impact of reach and significance.

56. Taking the impact overview statement and case study(ies) as a whole, panels will exercise their expert judgement and give a collective rating based on the merits of each impact submission. A panel may choose to give a profile rating using the following five categories as appropriate –

Category (Abbreviation)		Standard
4 star	(4*)	outstanding impacts in terms of their reach and significance
3 star	(3*)	considerable impacts in terms of their reach and significance
2 star	(2*)	some impacts in terms of their reach and significance
1 star	(1*)	limited impacts in terms of their reach and significance
unclassified	(u/c)	the impact is of either no reach or no significance; or the impact was not eligible; or the impact was not underpinned by research produced by the submitting unit; or nil submission

57. 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. Submissions will be assessed having regard to disciplinary differences. Panels will provide further elaboration on the assessment criteria in respective disciplines under their ambit, as well as any further clarification that they may wish to give on the categories of quality levels for the assessment of impact.

Basis of Evaluating Research Environment

58. Universities will make submission about research environment relating to the assessment period from 1 October 2013 to 30 September 2019 on UoA basis. A research environment submission includes an environment overview statement and environment data according to the generic requirements and templates as set out in paragraphs 9.6-9.8 and Appendices I and J of the Guidance Notes.

59. For the purpose of the RAE 2020, research environment refers to the strategy, resources (e.g. grants obtained, people) and infrastructure that

support research giving rise to collaborations, esteem and contributions to the discipline or research base. A research environment submission may relate to a single coherent faculty, and equally to multiple departments, where the scale may vary or research focus be inter-disciplinary. Universities may as well depict the commonalities and dynamics among faculties and departments within the submitting unit, and show how a good research environment is provided in the submission. As scale alone does not inevitably entail a good environment, universities will have to show what they do to ensure a good environment regardless of their scale (whether large or small).

Environment Overview Statement

60. The environment overview statement should include –
- (a) overview: describing the organisation and structure of the submitting unit, so as to provide a context for the submission;
 - (b) research strategy: providing evidence about the achievement of strategic aims for research during the assessment period, as well as details of future strategic plan for research and how the unit's research strategy articulates with the university's overall research strategy;
 - (c) people: covering (i) staff contributing to research, including research-active academic staff, research support staff e.g. research assistants, and visiting, adjunct or part-time research staff; and (ii) research postgraduate students; and including the unit's strategy on staffing and staff development in respect of research, as well as evidence of the quality of training and supervision of research students;
 - (d) income: covering research income and grants obtained/received, including funds from the university central allocation and external funding bodies, be they competitive or non-competitive grants and donations;
 - (e) infrastructure: including facilities (e.g. accommodation and equipment) for carrying out research;
 - (f) collaborations: including local or international research collaborations, with individual academics, industry and other institutions; collaborative arrangements, partnerships, networks

and joint research projects, intra-university or inter-disciplinary research collaborations may be included;

- (g) esteem: covering recognition conferred by a body outside the university; esteem should demonstrate the distinguished achievement of individual researchers, groups or the unit as a whole; it may include, but is not limited to, research-based awards, honours, or prizes;
- (h) contribution to the discipline or research base: including positive contribution within respective discipline(s) and profession of the submitting unit, as well as wider contribution to the discipline(s) and research base.

Environment Data

61. The environment data in conjunction with the environment overview statement should cover: (i) staff employed by the university proper, be they wholly funded or partially funded by General Funds⁴ or wholly self-financed, by staff category; (ii) graduates of research postgraduate programmes, be they UGC-funded or non-UGC-funded; and (iii) on-going research grants/contracts, by source of funding and by role of university in terms of the funding received, in each of the years from 2013/14 to 2018/19 in line with the relevant cut-off dates of the UGC Common Data Collection Format (CDCF). Where a grant/contract is held across more than one unit/institution, it should be divided between submissions in different units/universities according to the way the grant/contract income has been used. Similarly, research projects with multiple sources of funding should have the grant income reported under respective funding source categories.

62. Respective panels will further specify in their Panel-specific Guidelines the kinds of information, evidence and indicators that the panels are looking for in the environment submissions.

Grading Research Environments

63. Research environment will be assessed in terms of vitality and sustainability, including its contribution to the vitality and sustainability of the wider discipline or research base. The generic assessment criteria of

⁴ General Funds comprise the total income received by the university, except that from specific funds (which include income received for specific or designated purposes, examples of which are earmarked grants and Research Grants Council (RGC) research grants). General Funds include income from the UGC block grant, tuition fees, interest and investment income, donations for general purpose, etc.

“vitality and sustainability” will be understood as –

- (a) “vitality” refers to the extent to which a unit provides an encouraging and facilitating environment for research and supports a research culture characterised by intellectual vigour, innovation and positive contribution within respective discipline(s) and profession; and
- (b) “sustainability” refers to the extent to which the research environment is capable of continuing to support and develop the research activities of the submitting unit and discipline(s).

64. Panels 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. Panels will decide whether to assess each environment submission as a whole, or to attach weighting to individual aspects within the environment element (e.g. strategy, resources, esteem, etc.) in their assessment. Panels will specify their working methods and provide details of the weighting, if applicable, in their Panel-specific Guidelines.

65. Irrespective of whether the assessment is made on the environment submission as a whole or by aggregating assessments of individual aspects within the environment element, panels will give a profile rating using one or more of the following five categories as appropriate. The rating will be based on the following five categories –

Category (Abbreviation)		Standard
4 star	(4*)	an environment that is conducive to producing research of world-leading quality, in terms of its vitality and sustainability
3 star	(3*)	an environment that is conducive to producing research of internationally excellent quality, in terms of its vitality and sustainability
2 star	(2*)	an environment that is conducive to producing research of internationally recognised quality, in terms of its vitality and sustainability
1 star	(1*)	an environment that is conducive to producing research of limited quality, in terms of its vitality and sustainability
unclassified	(u/c)	an environment that is not conducive to

Category (Abbreviation)	Standard
	producing research of 1 star quality; or nil submission

66. 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. Panels will provide further elaboration on the assessment criteria as well as any further clarification that they may wish to give on the categories of quality levels for the assessment of environment.

Assessment Interface

67. Submissions for the RAE 2020 will be processed through an electronic system with allowance for hardcopy submission for cases like non-traditional outputs or printed works which cannot be fully submitted electronically. Data on research outputs (e.g. title, publication date, etc.) and supplementary information (if applicable), together with overview statements, impact case studies and environment data are expected to be available for panel members' assessment through an online interface. Panel members and external reviewers will be given access to full version of the research outputs, either in electronic mode via links to universities' repositories or in hardcopy mode via separate dispatch arrangements. Panel members will be invited to give a preliminary grading and remark/comment through the online interface on individual research outputs and other submissions as assigned to them for assessment. Operational guidance on conducting assessment through the online interface will be provided to panel members separately for reference.

Handling of Assessment Results

68. The primary purpose of the RAE 2020 is to assess the research performance of UGC-funded universities by UoA; it is not intended to evaluate individual staff. Based on the preliminary grading and comments given by panel members, each panel will meet to deliberate and make a collective decision on the final grading of individual submissions. Panels will produce assessment results in the form of quality profiles for each university's submission by UoA.

69. Quality profiles of a university's submission to a UoA in respect of research outputs, impact and environment will be combined to form an overall quality profile of the university's performance in that UoA. Overall

quality profiles and sub-profiles of individual elements of assessment will be published by UoA and by panel at both individual university level and sector-wide level. The same set of results of the RAE 2020 mentioned above will be released to universities and the public. An illustration on building a quality profile by UoA is at **Appendix D**.

70. In addition to the published results, each university will receive their own RAE results in respect of research outputs at research area level under confidential cover (except for those research area(s) consisting of fewer than three eligible staff of the university, or where, in providing the RAE results, the research output results of any of the individual eligible staff of the university may be revealed indirectly).

Panel Feedback Report

71. Panels will submit reports to the UGC with feedback from the assessment process. Panel Convenor on behalf of the whole panel will submit the panel feedback report, which is expected to cover the following major aspects of the exercise –

- (a) approach and methodology;
- (b) composition and meetings of the panel;
- (c) an overview on the research quality in areas under the panel's purview;
- (d) feedback on individual universities' submissions in each UoA;
- (e) impressionistic international comparison by non-local panel members;
- (f) difficulties encountered and recommendations for future exercise; and
- (g) other comments or suggestions.

Description of the above items in a recommended format of the panel feedback report is at **Appendix E**. Guidelines for non-local panel members in offering an impressionistic international comparison are at **Appendix F**. The panel feedback reports will be due for submission to the UGC by 10 November 2020.

Anonymity and Information Security

72. As the purpose of the RAE 2020 is to assess the research quality of universities by UoA, not individual staff, results of the RAE 2020 will be published without disclosing the identities of individual academic staff members. Hence, the principle of anonymity should be strictly applied throughout the assessment process. Records to be kept in respect of the panels' deliberation and grading of submissions should make no reference to the names or identities of any individual academic staff concerned.

73. All members involved in the RAE 2020 including Panel Convenors, Deputy Convenors, panel members, external reviewers and the panel secretariat are bound by information security agreement with the UGC. Communications concerning the business of the RAE 2020 including documentary information, deliberations at panel meetings, discussions and grading of submissions should be kept in confidence and restricted for use by members solely in their respective capacities in the RAE 2020. No part of such communications, documentary information and panels' deliberations should be disclosed or divulged to any third party during or after the exercise, unless the information or document has been passed for publication or public disclosure by the UGC.

74. In addition, working papers and related information kept by Panel Convenors, Deputy Convenors, panel members and external reviewers should be destroyed or returned to the UGC Secretariat as soon as they are no longer needed for carrying out their function or on the request of the UGC Secretariat, whichever may be sooner. This provision applies equally to paper copies or those stored in electronic or other non-paper formats. All members involved in the RAE should take every reasonable step to ensure that other people cannot have access to the information, whether held in paper or electronic copy. In particular, it is noted that computer systems and specifically e-mails are not necessarily secure and appropriate caution should be exercised when using them.

75. A university's submission may contain material which is: patented or patentable / subject to other intellectual property rights / commercially sensitive, or which in the interests of the university and/or its researchers is required to be given a restricted circulation. Universities make submissions to the RAE 2020 on the understanding that their position in these regards will not be prejudiced. Panel Convenors, Deputy Convenors, panel members and external reviewers have to respect and honour that understanding and act accordingly. They are reminded of the risk of "prior disclosure" in the case of potentially patentable material, and

the paramount need to safeguard information security of such materials.

76. To this end, the information that will be released on individual universities' submissions should be limited to the following –

- (a) the overall assessment results: these include the overall quality profiles and sub-profiles in respect of outputs, impact and environment which will be announced by the UGC to universities and the public and will be accessible in the public domain;
- (b) results in respect of outputs at research area level: these results (save for those research area(s) consisting of fewer than three eligible staff of the university, or where, in providing the RAE results, the research output results of any of the individual eligible staff of the university may be revealed indirectly) will be issued to the relevant university(ies) in strict confidence and not made public; and
- (c) written feedback on individual universities' submissions: the feedback drawn from the panel feedback reports will be provided to the relevant university(ies) in strict confidence and not made public.

77. All Panel Convenors, Deputy Convenors and panel members are bound by the above responsibility during and after their service for the RAE 2020 with the UGC. If there is any doubt about anonymity and information security arrangements, members are advised to seek assistance from the UGC Secretariat.

Declaration of Interest

78. To ensure the fairness and impartiality of the RAE, all members involved in the RAE 2020 including Panel Convenors, Deputy Convenors, panel members and external reviewers are requested to declare any conflict of interests within 30 days of appointment and thereafter upon any changes in circumstances that would lead to any real or perceived conflict of interests in the course of assessment. It will be incumbent upon them to declare interests whenever there is a possibility of a conflict or of a perceived conflict, on a case by case basis, erring on the side of declaring interests even if the possibility that they will be material is remote. If they have any affiliation with the submitting universities, departments/units, academic staff or individual submissions, they should make the declaration to the respective

Panel Convenors through the UGC Secretariat. In the case of the Panel Convenors, they should make their declaration to the Convenor of the RAEG through the UGC Secretariat. All members share the responsibility for guarding against influence of personal interests or potential biases. In handling a declaration of conflict of interests case, depending on whether the interest involved is a major or minor one, the procedures set out in paragraphs 79-86 below should be followed.

79. The following situations which take effect on or after 1 October 2013 are considered **major** interests for the purpose of the RAE 2020 –

- (a) currently employed by one of the eight UGC-funded universities;
- (b) having been an employee of one of the eight UGC-funded universities;
- (c) engaging / having been engaged in substantial teaching, research, advisory, consultancy, academic or research review at one of the eight UGC-funded universities (other than those mentioned in paragraph 82 below which are considered minor interests);
- (d) holding / having held adjunct, honorary or visiting position(s) at one of the UGC-funded universities;
- (e) involving / having involved in the authorship or co-authorship of project(s), publication(s) or patent(s) that is/are submitted to the RAE 2020; and
- (f) any other interest(s) ruled by a Panel Convenor / the Convenor of RAEG to be treated as a major interest.

80. Under situations (a) and (b) in paragraph 79 above, individual members should not take part in the assignment, assessment, comment and final grading of any submissions from the concerned university(ies). The members concerned (be they Panel Convenors, Deputy Convenors or panel members) must be excused from panel deliberation when any submissions from the university(ies) concerned are being discussed.

81. Under situations (c) to (f) in paragraph 79 above, the Panel Convenor shall decide on whether the members concerned should refrain from the assessment, comment and final grading of all submissions from the subject university(ies) or particular submissions in relation to particular

UoA(s) or individual staff of the subject university(ies) having regard to the circumstances of individual cases. In the case of the Panel Convenor having a major conflict of interest under situations (c) to (f) in paragraph 79 above, the decision shall rest with the Convenor of the RAEG on whether the Panel Convenor is required to withdraw from discussions of all or particular submissions from the subject university(ies) where circumstances warrant.

82. Any interest other than those mentioned above, that could lead a reasonable observer to doubt the impartiality of a member's assessment will be treated as a **minor** conflict of interest for the RAE 2020. Examples of these include the following situations which take place on or after 1 October 2013 –

- (a) currently supervising or co-supervising student(s) at one of the eight UGC-funded universities;
- (b) supervised / advised or being supervised / advised by any staff member(s) who is / are involved in a submission;
- (c) serving / having served as co-investigator, collaborator, co-holder of a grant with one of the eight UGC-funded universities;
- (d) serving / having served on the editorial board of a publication (e.g. academic journal) of a submitting department / unit at one of the UGC-funded universities;
- (e) serving / having served as an external examiner of a postgraduate thesis or an undergraduate programme for a submitting department / unit at one of the UGC-funded universities;
- (f) co-organising / co-organised academic events or programmes (e.g. conference, summer class) with a submitting department / unit / staff member(s) at one of the UGC-funded universities;
- (g) holding co-authored project(s) / co-authored publication(s) (e.g. book or papers) or patent(s) with any submitting staff that is/are not submitted for the RAE 2020;
- (h) having close personal relationship (e.g. partner, spouse, immediate family member, long-term close friend) or enmity with any submitting staff;

- (i) being employed by a “user” organisation that is the focus of an impact case study; and
- (j) acting as an external advisor to a submitting unit/university on their research or RAE strategy or having pre-reviewed a submission.

83. It shall be for the Panel Convenor to decide what effect the existence of a minor interest shall have on a member’s participation in the assessment. Depending on the nature of the minor interest, the Panel Convenor may decide that –

- (a) the minor interest should be noted by the panel, but it should not affect the member’s participation in the assessment of the submissions;
- (b) the member concerned should refrain from assessing the particular submission(s) or the submission(s) from the relevant university(ies) in relation to the particular UoA(s) that is/are affected by the minor interest; or
- (c) the minor interest or a group of minor interests in relation to a UGC-funded university declared by a member shall be treated as a major interest, and the member concerned should not take part in the assessment, comment and final grading of all submissions from the relevant university.

84. In the case of the Panel Convenor having a minor conflict of interest, the decision on what effect a declared minor interest would have upon his/her role in the assignment, assessment and final grading of submissions shall rest with the Convenor of the RAEG. Relevant provision on handling conflict of interest in paragraph 28 will apply.

85. A register of declared interests of members involved in the RAE 2020 will be maintained by the UGC Secretariat, and the declaration forms should be made available for inspection on request by any member of the public. Individual members should update the Secretariat when there is any change in their declared interests as soon as practicable within 21 days of such change during their appointment and until the completion of the exercise. A summary of declared conflicts of interests and potential conflicts of interest will be made known to and considered by the Panel Convenors and Deputy Convenors in the panel formation phase and

throughout the assessment process, in particular before they assign submissions for assessment. Panel members are advised to declare any conflict or potential conflict of interest before the preliminary assessment and panel meetings or discussions take place.

86. The situations described above and the examples cited are by no means exhaustive. It is not possible to cover every situation where a conflict of interest may arise. In circumstances not specifically covered, members should seek advice from the UGC Secretariat if in doubt.

Timeline in Developing Panel-Specific Guidelines

87. Individual panels will exercise collective professional judgments and develop working methods and assessment criteria for their panels, within the overall framework for assessment. An indicative timetable is set out below –

Time	Major Events
First quarter of 2018	<ul style="list-style-type: none"> • Initial consultation on the draft General Panel Guidelines and template for Panel-specific Guidelines
April/May 2018	<ul style="list-style-type: none"> • Refinement of the draft General Panel Guidelines in consultation with RAE panels, as appropriate • Commencement of drafting Panel-specific Guidelines by respective RAE panels
June to August 2018	<ul style="list-style-type: none"> • Consultation forum on RAE assessment criteria cum meetings of RAE panels for setting respective Panel-specific Guidelines • Finalisation of the General Panel Guidelines and Panel-specific Guidelines
September 2018	<ul style="list-style-type: none"> • Announcement of the General Panel Guidelines and Panel-Specific Guidelines

88. Relevant stakeholders including Panel Convenors, Deputy Convenors and universities will be involved in the initial consultation on the draft General Panel Guidelines and template for Panel-specific Guidelines. Feedback from universities on the guidelines will be conveyed to panels to facilitate their consideration on the relevant issues during the assessment process. Panel Convenors and Deputy Convenors of all 13 RAE panels as

well as members of the panels will be invited to participate in a consultation forum and attend plenary meetings and group sessions tentatively scheduled in July 2018. The plenary meetings are intended to let the Panel Convenors and Deputy Convenors converge on the generic criteria and principles to be adopted across panels in the assessment process, while the consultation forum will aim to extend dialogue with stakeholders from the eight UGC-funded universities on the assessment criteria of the RAE 2020. Meetings of Panel Convenors and Deputy Convenors with panel members will discuss discipline specific criteria.

Trial Assessment

89. To ensure consistent adherence to the published guidelines and assessment criteria within and across panels, a trial assessment involving all 13 RAE panels will be conducted around January/February 2020 after the submission phase. Panel Convenors and Deputy Convenors in cognate groups will be invited to formulate the guidelines and arrangements for the trial assessment, which will provide a platform for panel members to conduct trial assessment, with a view to aligning the standards and achieving a common understanding of the application of the assessment criteria and working methods.

90. Making reference to the practice in previous RAEs, panels will be invited to decide the sample size and the source of sample for trial assessment. It is proposed that the trial assessment covers a sample of research outputs from different academic staff members submitted to a panel as well as a sample of impact and environment submissions. The trial assessment should, as far as possible, include a mix of sample submissions from the eight UGC-funded universities that may or may not come from the same UoA.

91. It is proposed that, in the trial assessment, the sample submissions will be trial assessed by all members of a panel. Panel members are encouraged to discuss with fellow members on the trial assessment and share among each other important observations, with which the Panel Convenors and Deputy Convenors may consider whether there is a need to modify, fine-tune or further elaborate the panel-specific criteria and working methods of the panel, so as to ensure fairness and consistency in the assessment.

Publication and Further Information

92. For transparency of the RAE 2020, these general guidelines will

be published for information. Where appropriate, the UGC Secretariat will provide supplementary information to assist panels in devising the assessment criteria and working methods throughout the assessment process.

* * * * *

UGC Secretariat
February 2018

List of UGC-funded Universities
(in alphabetical order)

Name in Full	Abbreviation
City University of Hong Kong	CityU
Hong Kong Baptist University	HKBU
Lingnan University	LU
The Chinese University of Hong Kong	CUHK
The Education University of Hong Kong	EdUHK
The Hong Kong Polytechnic University	PolyU
The Hong Kong University of Science and Technology	HKUST
The University of Hong Kong	HKU

Research Assessment Exercise 2020
List of Panels and Units of Assessment

Panel (code & name)	Unit of Assessment (code & name)
1 Biology	1 biological sciences (incl. environmental biology, biotechnology, agriculture & food science, veterinary studies)
	2 pre-clinical studies
2 Health Sciences	3 clinical medicine
	4 clinical dentistry
	5 nursing, optometry, rehabilitation sciences and other health care professions
	6 Chinese medicine
3 Physical Sciences	7 physics & astronomy
	8 materials science and materials technology
	9 chemistry
	10 earth sciences (incl. oceanography, meteorology) and other physical sciences (incl. environmental science)
	11 mathematics and statistics
4 Electrical & Electronic Engineering	12 electrical & electronic engineering
5 Computer Science / Information Technology	13 computer studies/science (incl. information technology)
6 Engineering	14 mechanical engineering, production engineering (incl. manufacturing & industrial engineering), textile technology and aerospace engineering
	15 chemical engineering, biomedical engineering, other technologies (incl. environmental engineering & nautical studies) and marine engineering
7 Built Environment	16 civil engineering (incl. construction engineering & management) and building technology
	17 architecture
	18 planning and surveying (land and other)

Panel (code & name)	Unit of Assessment (code & name)
8 Law	19 law
9 Business & Economics	20 accountancy
	21 economics and finance
	22 business
	23 hotel management & tourism
10 Social Sciences	24 psychology
	25 political science (incl. public policy & administration & international relations)
	26 geography
	27 sociology & anthropology
	28 social work and social policy
	29 communications & media studies
11 Humanities	30 Chinese language & literature
	31 English language & literature
	32 translation
	33 linguistics & language studies
	34 history
	35 area studies (e.g. Japanese studies, European studies, etc.), cultural studies and other arts/humanities
	36 philosophy
	37 religious studies
12 Creative Arts, Performing Arts & Design	38 visual arts, design, creative media, other creative arts and creating writing
	39 music and performing arts
13 Education	40 physical education, sport, recreation & physical activities
	41 education (incl. curriculum & instruction, education administration & policy and other education)

Mapping of Units of Assessment and Respective Research Areas

Unit of Assessment in RAE 2020 (code & name)	Research Area in RAE 2014 (code & name)
1 biological sciences (incl. environmental biology, biotechnology, agriculture & food science, veterinary studies)	1a clinical veterinary studies
	1b biological sciences
	1c other biological sciences (incl. environmental biology)
	1d agriculture & food science
	1e biotechnology
2 pre-clinical studies	2a pre-clinical studies
3 clinical medicine	3a clinical medicine
4 clinical dentistry	4a clinical dentistry
5 nursing, optometry, rehabilitation sciences and other health care professions	5a nursing
	5b other health care professions
	5c optometry
	5d rehabilitation sciences
6 Chinese medicine	6a Chinese medicine
7 physics & astronomy	7a physics & astronomy
8 materials science and materials technology	8a materials science
	8b materials technology
9 chemistry	9a chemistry
10 earth sciences (incl. oceanography, meteorology) and other physical sciences (incl. environmental science)	10a earth sciences (incl. oceanography, meteorology)
	10b other physical sciences (incl. environmental science)
11 mathematics and statistics	11a mathematics & statistics
12 electrical & electronic engineering	12a electrical engineering
	12b electronic engineering
13 computer studies/science (incl. information technology)	13a computer studies/science (incl. information technology)
14 mechanical engineering, production engineering (incl. manufacturing & industrial engineering), textile technology and aerospace engineering	14a mechanical engineering
	14b production engineering (incl. manufacturing & industrial engineering)
	14c textile technology

Unit of Assessment in RAE 2020 (code & name)	Research Area in RAE 2014 (code & name)
15 chemical engineering, biomedical engineering, other technologies (incl. environmental engineering & nautical studies) and marine engineering	15a chemical engineering
	15b marine engineering
	15c other technologies (incl. environmental engineering & nautical studies)
	15d biomedical engineering
16 civil engineering (incl. construction engineering & management) and building technology	16a civil engineering (incl. construction engineering & management)
	16b building technology
17 architecture	17a architecture
18 planning and surveying (land and other)	18a planning
	18b surveying, land
	18c surveying, other
19 law	19a law
20 accountancy	20a accountancy
21 economics and finance	21a economics
	21b finance
22 business	22a business
23 hotel management & tourism	23a hotel management & tourism
24 psychology	24a psychology
25 political science (incl. public policy & administration & international relations)	25a political science (incl. public policy & administration & international relations)
26 geography	26a geography
27 sociology & anthropology	27a sociology & anthropology
28 social work and social policy	28a social work
	28b other social studies
29 communications & media studies	29a communications & media studies
30 Chinese language & literature	30a Chinese language & literature
31 English language & literature	31a English language & literature
32 translation	32a translation
33 linguistics & language studies	33a linguistics & language studies
34 history	34a history
35 area studies (e.g. Japanese	35a other arts/humanities

Unit of Assessment in RAE 2020 (code & name)	Research Area in RAE 2014 (code & name)
studies, European studies, etc.), cultural studies and other arts/humanities	35b area studies (e.g. Japanese studies, European studies, etc.)
	35c cultural studies
36 philosophy	36a philosophy
37 religious studies	37a religious studies
38 visual arts, design, creative media, other creative arts and creating writing	38a visual arts
	38b other creative arts
	38c design
	38d creative media
39 music and performing arts	39a performing arts
	39b music
40 physical education, sport, recreation & physical activities	40a physical education & sports science
41 education (incl. curriculum & instruction, education administration & policy and other education)	41a curriculum & instruction
	41b education administration & policy
	41c other education

Building of Quality Profiles by Unit of Assessment

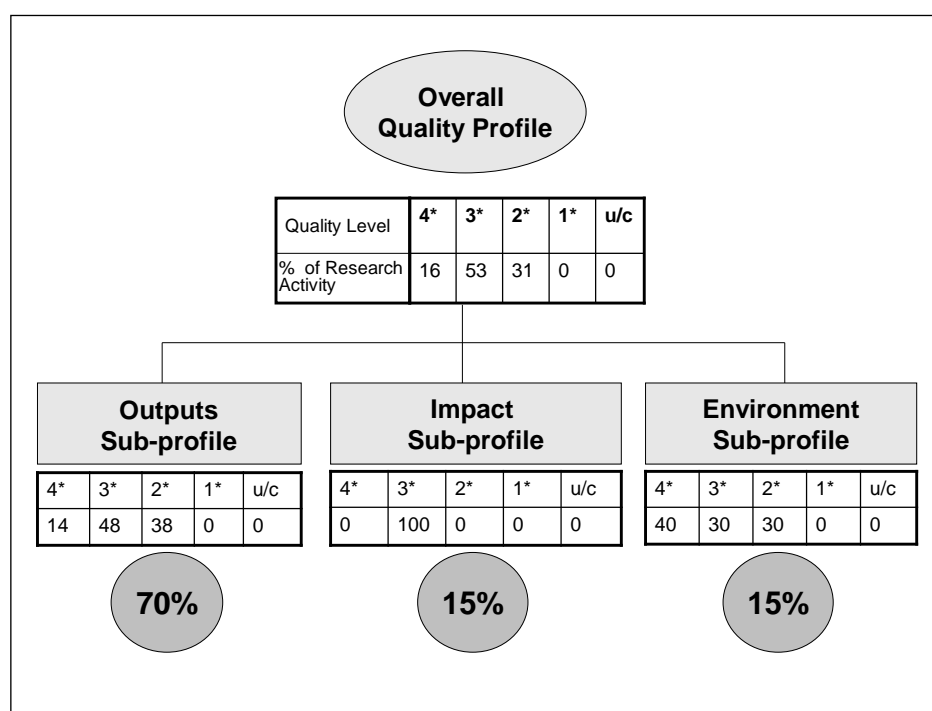
1. The overall quality profile will show the proportion of research activity judged to meet the definitions at each starred level by unit of assessment (UoA). The overall quality profile will be published in steps of 1 per cent (%). The following table shows the overall quality profiles of two universities under the same UoA.

UoA	Number of eligible staff	Percentage (%) of research activity judged to meet the standard of :				
		4 star	3 star	2 star	1 star	unclassified
University X	40	18	41	25	16	0
University Y	60	12	32	45	10	1

2. An RAE Panel will produce an overall quality profile by assessing three elements of a university’s submission to a UoA – research outputs, impact and environment – to produce a sub-profile for each element. The three sub-profiles will be aggregated to form the overall quality profile for the university, with each element weighted as follows –

- Outputs: 70%
- Impact: 15%
- Environment: 15%.

Figure 1: Building a quality profile: a worked example



Weighting applied to sub-profiles and cumulative rounding

3. The sub-profiles will be combined using the weights in paragraph 2 of this appendix. A cumulative rounding process will then be applied to the combined profile, to produce an overall quality profile. This methodology will ensure that the overall quality profile for any submission will always sum to 100%.

4. Using the example in Figure 1, first calculate the initial overall profile, that is, the sum of the weighted sub-profiles for outputs, impact and environment.

	Starred levels				
	4*	3*	2*	1*	u/c
Outputs	14	48	38	0	0
Impact	0	100	0	0	0
Environment	40	30	30	0	0
Weighted					
Outputs (70%)	9.8	33.6	26.6	0	0
Impact (15%)	0	15.0	0	0	0
Environment (15%)	6.0	4.5	4.5	0	0
Initial profile	15.8	53.1	31.1	0	0

5. Cumulative rounding works in three stages –

(a) The initial profile is –

4*	3*	2*	1*	u/c
15.8	53.1	31.1	0	0

(b) Stage 1: Calculate the cumulative totals (for example the cumulative total at 3* or better is $53.1 + 15.8 = 68.9$).

4*	3* or better	2* or better	1* or better	u/c or better
15.8	68.9	100	100	100

- (c) Stage 2: Round these to the nearest 1 per cent (rounding up if the percentage ends in exactly 0.5).

4*	3* or better	2* or better	1* or better	u/c or better
16	69	100	100	100

- (d) Stage 3: Find the differences between successive cells to give the rounded profile. So, for example, the percentage allocated to 2* is the difference between the cumulative total at 2* or better, minus the cumulative total at 3* or better.

4*	3*	2*	1*	u/c
16	53	31	0	0

**University Grants Committee
Research Assessment Exercise 2020**

Feedback Report of _____ Panel*

(a) Approach and Methodology

- a general description on how submissions were assigned to panel members (without naming individual panel members) and relevant considerations
- any sub-group(s)/sub-panel(s) formed within the panel
- any guidelines formulated within the panel for the grading of research outputs, impact and environment submissions
- any special guidelines on making reference to metrics/citation data, impact factor

(b) Composition and Meetings of the Panel

- a list of panel membership
- a schedule of formal panel meetings and the sub-group/sub-panel meetings held
- comments on the responsibilities, workload and composition of the panel

(c) Overview of the Research Quality in Areas under the Panel's Purview

- number of universities, number of eligible staff by head count and number of submissions assessed by unit of assessment (UoA), and the relative strength and areas for improvement identified for the various research areas in the UoA, where appropriate
- general overview of the quality of submissions in areas under the panel's ambit and other observation

(d) Feedback on Individual Universities' Submissions in Each Unit of Assessment

- general comments on the performance of individual universities in each UoA having regard to the Research Strategy Statements submitted by universities

(e) Impressionistic International Comparison by Non-Local Panel Members

- performance of the eight UGC-funded universities as a whole in comparison with similar institutions outside Hong Kong, e.g. those in panel members' home countries
- performance of the eight UGC-funded universities by UoA/discipline in comparison with those of individual panel members' affiliated institution(s) and similar institutions outside Hong Kong

[in all cases without naming particular Hong Kong universities]

(f) Difficulties Encountered and Recommendations for Future RAE

- a brief account of the panel working process
- any problems encountered in considering double-weighting requests, grading of co-authored items, inter-disciplinary items across panels (matters of principle only, no need to report on every case)
- any specific suggestion for revision of the assessment guidelines and other aspects of the exercise

(g) Other Comments or Suggestions

- any cases on which the panel has encountered serious disagreement about the quality of the items assessed (please give examples without naming individuals)

Panel Convenor : _____

Date : _____

* While Panel Convenors are free to adjust the format of the feedback report to suit the different needs of their own panels, their feedback reports should cover basically all the issues identified in this sample layout.

**Guidelines for Non-Local RAE Panel Members
in Offering Comments for an International Comparison**

(for non-local members only)

Background

In previous RAEs, non-local members provided an impressionistic international comparison of the quality standard adopted in the exercise with that in other countries/regions. As the RAE 2020 is benchmarking against international standards, non-local members of this exercise are invited to offer comments for an international comparison of the research profile of UGC-funded universities as a whole with that in other countries/regions.

2. The information so obtained will be reflected in the panel reports but will not constitute part of the assessment results. Equally important is that these comments should not make identifiable reference to any particular university.

Comments to be offered

3. Members are invited to advise on the following aspects –
- (a) how the research performance of UGC-funded universities as a whole compares with the research profile of similar institution(s) outside Hong Kong; and
 - (b) how the research performance of UGC-funded universities by unit of assessment (UoA)/discipline compares with the research profile of similar institution(s) outside Hong Kong;
 - (c) other than comments on UGC-funded universities as a whole, any particular area of research (without naming the university/staff concerned) that is worthy of recognition from international peers' perspective.
4. In offering their comments, non-local members should have regard to the different roles and missions in research of the individual universities in Hong Kong. Also, members should avoid relating their comments to particular university in Hong Kong.

5. Non-local members are invited to forward their comments to their respective Panel Convenors as soon as possible after the formal panel meetings for incorporation into the panel feedback reports which are due by 10 November 2020.

6. It will be useful if these comments could be couched in language that could be understood by laymen.

Reference Materials

7. The following materials will be made available to members for reference through the electronic system for the RAE 2020, so that members can have a general understanding of the different universities in Hong Kong so as to facilitate them to offer comments on international comparison –

- (a) Research Strategy Statement of each UGC-funded university, including the university's role statement and quality profiles by cost centre (or UoA) in the RAE 2014;
- (b) Tabular breakdown of each university's eligible academic staff in each UoA by rank and years of eligible appointment at the submitting university as well as the number of new researchers;
- (c) Distribution of eligible academic staff and number of submissions in respect of research outputs, impact and environment by UoA;
- (d) Summary statistics of environment data by UoA;
- (e) Total expenditure of UGC-funded universities as a whole and respective departmental expenditure on research; and
- (f) Research outputs by broad subject area by university.