# Knowledge Exchange Framework (KEF) Consultation 2019

#### Page 1: Introduction

Q1. Introduction If you would like to view the questions included in this consultation before submitting your response, an export of the questions for reference purposes is available on the Research England website here: https://re.ukri.org/documents/2019/summary-of-kefconsultation-questions/ Please return to this online version to submit your response. Responses to this consultation are invited from any organisation, group or individual with an interest in knowledge exchange. If you would like to save a copy of your response, please choose 'print response' on the last page of the survey. We regret that we won't be able to accommodate requests to download and send individual responses submitted. The responses to this consultation will be analysed by Research England, we will consult with the Knowledge Exchange Framework Technical Advisory Group and the Knowledge Exchange Framework Steering Group. We will commit to read, record and analyse responses to this consultation in a consistent manner. For reasons of practicality, usually a fair and balanced summary of responses rather than the individual responses themselves will inform any decision made. In most cases the merit of the arguments made is likely to be given more weight than the number of times the same point is made. Responses from organisations or representative bodies with high interest in the area under consultation, or likelihood of being affected most by the proposals, are likely to carry more weight than those with little or none. We will publish an analysis of the consultation responses. We may publish individual responses to the consultation in the summary. Where we have not been able to respond to a significant material issue, we will usually explain the reasons for this. Additionally, all responses may be disclosed on request, under the terms of the relevant Freedom of Information Acts across the UK. The Acts give a public right of access to any information held by a public authority, in this case UK Research & Innovation. This includes information provided in response to a consultation. We have a responsibility to decide whether any responses, including information about your identity, should be made public or treated as confidential. We can refuse to disclose information only in exceptional circumstances. This means that responses to this consultation are unlikely to be treated as confidential except in very particular circumstances. For further information about the Acts see the Information Commissioner's Office website, www.ico.gov.uk or, in Scotland, the website of the Scottish Information Commissioner www.itspublicknowledge.info/home/ For further information relating to UK Research and Innovation's Privacy notice, please visit https://www.ukri.org/privacy-notice/ The deadline for responses to the KEF consultation is midday on Thursday 14 March 2019. Please direct any queries to Sacha Ayres, Senior Policy Adviser, Knowledge Exchange at KEPolicy@re.ukri.org or 0117 931 7385.

Tick here to agree and continue to consultation.

### Page 2: Respondent details

Q2. Please indicate who you are primarily responding on behalf of:

Representative body

## Page 3: Contact details user

Q3. Please provide the name of your organisation

Engineering Professors' Council

Q4. If you would be happy to be contacted in the event of any follow-up questions, please provide a contact name and email address.

Johnny Rich j.rich@epc.ac.uk or Professor Alan J Smith a.j.smith@shu.ac.uk

#### Page 6: KEF purpose

Q8. Do you consider that the KEF as outlined will fulfil its stated purposes? To provide universities with new tools to understand, benchmark and improve their performance. To provide business and other users with more information on universities. To provide greater public visibility and accountability.

	Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly agree	No opinion
To provide universities with new tools to understand, benchmark and improve their performance.	X						
To provide businesses and other users with more information on universities.				X			
To provide greater public visibility and accountability.	x						

#### Q9. Please provide a commentary in relation to your scores above. (400 word limit)

KEF may provide universities with additional visualisation of existing data but offers nothing particularly new and provides no new tools to understand, benchmark or improve performance. Our member universities that are committed to KE and transfer, already assess their KE performance using these proposed KEF data sources, and additional sources, and carry out their own benchmarking. Additionally, the analysis within each university will be carried out at a department level providing useful information on which to base strategic investment. The KEF institutional score approach cannot help universities improve performance because it does not provide sufficient granularity.

From the perspective of individual businesses, KEF reporting at an institutional level will be of little value. Institutional-level KEF scores lack sufficient granularity to provide useful advice, guidance and signposting to companies needing to address very specific, time-constrained problems. How will an institutional level KEF score help a given company find expertise in e.g. welding of dissimilar metals?

We fear that the KEF will be of little or no value to businesses or HEIs. It ostensibly looks like a 'new tool' but is unlikely to do anything more than provide aggregated information based on data that is already available. As a result, the most likely outcome is that it will do no more than support the status quo.

How will KEF provide greater accountability? How will individual HEIs be held accountable? If KEF outcomes are not linked to funding, then this appears to be a solution without a problem. If KEF is to be linked to funding (which is not necessarily an outcome that we are advocating), then there will need to be further consultation and the mechanism will need to be highly robust.

Has there been any market research to suggest that companies have identified a need for a comparison of individual HEIs' overall knowledge exchange performance at an institutional level?

The usage of KEF should be monitored and if companies are not engaging with it, then it will be failing in one of its two main purposes to increase visibility of potential university partners and their strengths.

If greater public visibility is achieved, it will be by presenting data in a format that is so simplified that it can have no other value than for journalist/politicians to offer trivialised assessments or, worse, rankings based on what can be counted in KE rather than based on what counts.

## Page 7: Aims and overall approach of the Knowledge Exchange Framework (KEF)

Q10. Overall approachThe KEF consultation document describes the overall approach as being an annual, institutional level, largely metrics driven exercise, although noting that narrative will have an important role. More background may be found in the report summarising the recommendations of the technical advisory group. Do you consider this overall approach to be appropriate?

Strongly disagree

#### Q11. Please provide a commentary in relation to your scores above. (400 word limit)

How does an institutional-level KEF provide information about KE strengths to help businesses with their decision-making? This fails to celebrate centres of excellence in HE; a relatively small, highly specialised, world-leading centre of excellence in engineering residing in an HEI that is otherwise teaching-intensive will be invisible in the KEF. There are numerous examples of this. The proposed approach won't provide information of genuine utility to businesses. What value is an institutional level score to a company looking for specific skills/knowledge/solutions? Companies' primary need is for information on discipline and location.

The principles of selecting metrics (useful, robust, timely, universal and focused) are welcomed. The perspectives are appropriate but the metrics seem inappropriate. An annual KEF exercise seems too frequent (given the three-year content).

Why is co-authorship with non-academic partners a metric? Is this inconsistent with the recommendation of the DORA? Universities will be held accountable using a research metric that has nothing to do with the research output quality, which may lead to 'gaming'. How is a metric on collaborative research as a proportion of public funding useful to industry? What is this a proxy for?

#### Working with Business

Why is contract research income and consultancy income measured per academic FTE? What value is this 'staff normalisation' to a business? Companies are looking for specialists to help with specific challenges, so if they are looking for experts in computational fluid dynamics, then it is of no value to them to know that the local university only has 20% of its staff engaged in working with businesses because the university has large teacher or nursing training departments which do not engage in. e.g. KTPs. Would a better measure be 'staff with significant responsibility for consultancy and KE' rather than per academic FTE?

Why does KEF makes no reference to KE quality? We don't measure the quality of teaching based on the income of an HEI normalised against FTE, so why is this being measured in KEF?

We would propose a different acronym for this exercise: 'Knowledge Exchange Income Framework' more accurately reflects the proposed process.

Given the proposed normalisation, averaging and clustering, a narrative will be essential for each perspective, not just the two noted.

We do welcome the multidimensional approach and the recognition that there is no single model for what good looks like.

### Page 8: Clustering

Q12. Please indicate your degree of support for the following aspects of our clustering approach.

	Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly agree	No opinion
The conceptual framework that underpins the cluster analysis.				X			
The variables and methods employed in undertaking the cluster analysis.				X			
The resulting make up of the clusters, i.e. the membership.		X					
That the overall approach to clustering helps Research England to meet the stated purposes of the KEF and ensures fair comparison.			X				

## Q13. Please provide commentary on any aspect of your scores above. If relevant please incorporate suggestions for alternative arrangements. (400 word limit)

We recognise the difficulties of clustering and applaud the approach used but feel that the results fall short of the original objectives set. The overall approach to clustering may help Research England, but it doesn't ensure fair comparison of HEIs from different regions placed in the same cluster.

The ULRICHSEN paper acknowledges the fact that local economic context plays an important role in shaping the KE opportunities available to HEIs. Yet, the resulting clusters place HEI whose potential for KE activity is significantly limited by local economic factors (low competitiveness) in the same cluster as HEIs in regions of strong economic growth (high competitiveness). Of the 29 HEIs in cluster E, for example, 14 are in areas of high competitiveness and 15 are in areas of low competitiveness. The Ulrichsen paper makes no attempt to address this anomaly. This significantly undermines the clustering proposed as a method for ensuring fairness.

How does 'clustering' in this way help businesses to identify the discipline strengths within an HEI and therefore contribute to their internal decision-making process?

We would recommend that instead of pre-setting the clusters, KEF provides clustering tools (according to criteria that the user can choose or which they can do entirely manually). Companies/businesses could then select individual HEIs to compare or select the tools to identify the most appropriate HEI to approach and they can compare like with like on the basis of their own criteria. This would entail dynamic KEF metrics depending on which institutions are being compared (which would remove the exercise still further from any form of absolutist ranking, which we agree is definitely desirable).

It's not clear if it is intended that individual HEIs would be able to move between clusters after each census point? Given the complexity of the clustering process this would appear to be quite challenging. What criteria would be used to establish whether or not a particular HEI should move cluster?

Q14. If you are responding on behalf of an institution that is a member of the proposed specialist social science and business (SSB) or STEM clusters as listed below and you wish to provide specific feedback on the appropriateness of these clusters, please identify your cluster membership here. SSB University College Birmingham Bishop Grosseteste University Heythrop College, University of London London Business School National Film and Television School STEM The Institute of Cancer Research Liverpool School of Tropical Med London School of Hygiene & Tropical Medicine Royal Veterinary College St George's, University of London Cranfield University Harper Adams University Royal Agricultural University Writtle University College

Not applicable

#### Page 10: Perspectives and metrics

Q16. Perspectives Research partnerships Working with business Working with the public and third sector Skills, enterprise and entrepreneurship Local growth and regeneration IP and commercialisation Public and community engagement Taking into account the overall range of perspectives and metrics outlined in the consultation document, do you agree or disagree that a sufficiently broad range of KE activities is captured.

Strongly agree

Q17. Taking into account the range of metrics outlined in the consultation document, please indicate whether you consider that they adequately represent performance in each of the proposed perspectives.

Research partnerships50% supportWorking with business50% supportWorking with the public and third sector50% supportSkills, enterprise and entrepreneurship50% supportLocal growth and regeneration50% supportIP and commercialisation50% supportPublic and community engagement50% support

Q18. Research partnerships Taking into account the range of metrics outlined in the consultation document for this perspective, please provided any comments on the balance and coverage of the proposed metrics. (400 word limit)

The main metrics proposed are income-based. If the KE performance of an institution were truly based only on income then for 1,2,3,4 and 6 (above) the metrics measure performance.

However, we believe that 'performance' should include some measure of the quantity and quality of the interaction and its impact. If KE performance measurement is dominated by income the data will be significantly skewed by contributions from specific (extremely expensive) disciplines such as, for example, medical research or drug testing.

Income is not, and should not be used as, a proxy for the quality of the performance.

As stated above, why is 'co-authorship with non-academic partners' included as a metric? Is this metric consistent with the recommendation of the San Francesco Declaration of Research Assessment (DORA). Is a consequence of this metric that universities are going to be held accountable, by a national funding body, using a research metric which has nothing to do with the research output quality? At the very least, KEF appears to be proposing a metric which may inevitably lead to 'gaming'?

In what way is a metric that measures the 'contribution to collaborative research as a proportion of public funding' useful to industry? What is this a proxy for?

If there is a strong rationale for insisting on a metric-based on per academic FTE for four of the perspectives, then it's not immediately clear why public and community engagement and research partnerships should be exempt?

A narrative text to support all the metrics seems essential.

Q19. Working with business Taking into account the range of metrics outlined in the consultation document for this perspective, please provided any comments on the balance and coverage of the proposed metrics. (400 word limit)

As already stated, the main metric proposed is income. However, we believe that 'performance' should include some measure of the quantity and quality of the interaction and its impact. If KE performance measurement is dominated by income, the data will be significantly skewed by contributions from specific (extremely expensive) disciplines such as, for example, medical research or drug testing.

There are alternative performance metrics used by Innovate UK. For example, with KTPs, performance is generally measured by comparing company performance metrics at the beginning and the end of the intervention, i.e. increase in company annual profit, increase in employee head count, new product to the company, new product to market, publishing technical papers, creation of new IP, etc. If we count only the cost of the KTP then a highly successful KTP has the same KEF 'value' as one that delivered poor value for money. Again, what use is this measure to a company looking for expertise in an HEI? Income is not, and should not be used as, a proxy for performance.

Again, why is contract research income and consultancy income measured against per academic FTE? The process completely swamps centres of real HE excellence. Would a better measure be to include only those 'staff with significant responsibility for consultancy and KE' rather than per academic FTE?

Why not include CPD, under working with business, when the CPD is specifically written for and delivered to, a company or industry?

A narrative text to support the metrics seems essential.

Q20. Working with the public and third sector Taking into account the range of metrics outlined in the consultation document for this perspective, please provided any comments on the balance and coverage of the proposed metrics. (400 word limit)

Why is this measured against per academic FTE? The process completely swamps centres of real HE excellence. Would a better measure be to include only 'staff with significant responsibility for working with the public and third sector.'

A narrative text to support the metrics seems essential.

Q21. Skills, enterprise and entrepreneurship Taking into account the range of metrics outlined in the consultation document for this perspective, please provided any comments on the balance and coverage of the proposed metrics. (400 word limit)

Why is this measured against per academic FTE? The process completely swamps centres of real HE excellence. Would a better measure be to include only those 'staff with significant responsibility for working in the area of skill, enterprise and entrepreneurship.

A narrative text to support the metrics seems essential.

Q22. Local growth and regeneration Taking into account the range of metrics outlined in the consultation document for this perspective, please provided any comments on the balance and coverage of the proposed metrics. (400 word limit) Note there is a separate question to consider the use of supplementary narrative.

Why is this measured against per academic FTE? The process completely swamps centres of real HE excellence. Would a better measure be to include only those 'staff with significant responsibility for working in local growth and regeneration'.

A narrative text to support the metrics seems essential.

Q23. IP and commercialisation Taking into account the range of metrics outlined in the consultation document for this perspective, please provided any comments on the balance and coverage of the proposed metrics. (400 word limit)

A narrative text to support the metrics seems essential.

Q24. Public and community engagement Taking into account the range of metrics outlined in the consultation document for this perspective, please provided any comments on the balance and coverage of the proposed metrics. (400 word limit) Note there is a separate question to consider the use of supplementary narrative.

If there is a strong rationale for insisting on a metric based on per academic FTE for four of the previous perspectives, then it's not immediately clear why 'Public and Community Engagement' and 'Research Partnerships' should be exempt?

## Page 11: Supplementary narrative

Q25. Do you consider it appropriate for HEIs to provide narrative text to support the metrics in perspectives that don't currently have fully developed metrics?

Strongly agree

Q26. Public and community engagement narrative Overall, is the guidance on the provision of narrative text for this perspective clear.

Strongly agree

Q27. Please comment on the proposal to include narrative from HEIs for the public and community engagement perspective, in particular: - where further clarification is required-where refinements could be made- whether there are areas where more consistency across HEIs could be achieved (400 word limit)

We'd like to see a supplementary narrative statement for all the perspectives.

Q28. Local growth and regeneration narrative Overall, is the guidance on the provision of narrative text for this perspective clear.

Strongly agree

Q30. The role of further narrative or contextual information We welcome responses on what other types of narrative or contextual information would be helpful. You may wish to consider, for example: Should the HEI or Research England provide other narrative information? How should we use other contextual information, such as information on local economic competitiveness described in section 5 of the cluster analysis report? Would other perspectives benefit significantly from further narrative information? Would the benefit of adding further narrative information be outweighed by the burden of doing so?

	Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly agree	No opinion
Overarching institutional statement - provided by the HEI						x	
Overarching institutional statement - provided by Research England	X						

#### Comments:

How will KEF provide an overarching institutional statement? Which information resources will they use?

### Page 12: Visualisation

Q31. Visualisation Please indicate your level of support for the proposed method of comparison and visualisation. (A link to a video walkthrough of the KEF visualisation is available here.)

Each of the seven perspectives is to be given equal weighting.  Metrics under each perspective are to be normalised and summed.	50% support 40% support
The performance of each HEI is to be expressed in a radar chart in deciles, relative to the mean average decile of the peer group.	75% support
Perspectives are not intended to be aggregated into a single score.	100% support
Narratives are to be presented alongside the metric score, making it clear that metrics in the two perspectives of public & community engagement and local growth & regeneration are provisional, and should be read in conjunction with the narratives.	75% support
Visualisation is to be delivered through an interactive, online dashboard which will allow exploration of the data underlying the 'headline' results in various ways.	90% support

Q32. Please comment on the presentation and visualisation proposals, for example:- where further clarification is required- where refinements could be made- whether there are areas where more consistency across HEIs could be achieved- how narratives could be incorporated?(400 word limit)

Rather than giving equal weighting, which we recognise is fair in isolation, it would be more useful to users if they could apply their own weighting to the data for each of the seven perspectives, according to what is most pertinent to them. An equal weighting would be the default.

It is not clear what is meant by 'metrics will be normalised and summed'? For example some metrics are per FTE in some of the perspectives, others are not. How will they be uniformly normalised and summed?

The radar charts and visualisations are not simple to understand. It seems unlikely that companies will invest the time and effort to unpick what these charts are trying to represent.

Narratives should be presented alongside the data for all perspectives.

The chosen visualisation method creates the illusion of a sliding scale between distinct points - clearly this is not the case. A star burst showing each perspective as distinct would be clearer.

## Page 13: Implementation

Q33. We will pilot the implementation with a group of HEIs as described in the consultation document. Please provide any comments about the implementation of the KEF. (200 word limit)

There is real concern about the burden of preparing the information for the KEF relative to its subsequent usefulness.

We would encourage some focused market research working with potential business users to inform the implementation of this initiative.

Additionally, we would like to see the findings of market research with targeted business users to establish if there is actually any need for or benefit to be derived from the proposed output from this process.

## Page 14: Any other comments

Q34. If you have any other comments, please share them here. (400 word limit)

Thank you for providing the opportunity to feedback on the proposed Knowledge Exchange Framework. In summary, it is not clear to us what the benefits will be of the KEF. It does not appear to address the stated aims of the initiative. The well considered HEI clustering process ultimately falls significantly short of its objectives because of the differences in local economic factors and subsequent KE potential for universities in the same clusters.

Overall, the proposed KEF process appears to fall in to the trap of counting what can be measured instead of trying to measure what counts.

As the representative body for engineering academics in higher education across the UK, we feel the EPC is in a good position to provide input on this consultation. Engineering is one of the most important disciplines in knowledge exchange and our members have considerable insight which we have tried here to reflect fairly following our own thorough consultation process.