



Knowledge Exchange Framework

Decisions for the second iteration

Report detailing the decisions taken by
Research England for the implementation of
the second iteration of the Knowledge
Exchange Framework

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Knowledge Exchange Framework

To	Heads of Research England-funded higher education providers
Of interest to those responsible for	Knowledge Exchange, including directors of knowledge exchange and PVC Research and Enterprise/Innovation
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Introduction

1. In February 2022 we published the outcomes of the review of the first iteration of the Knowledge Exchange Framework (KEF).
2. The review indicated that the KEF demonstrates the very significant contribution made by English HEPs to the economy and society, and further that the publication of these results has driven the creation of further tangible benefits. Additionally, the review illustrated that the first iteration of the KEF was considered to have had a clear positive impact within providers, including by improving the status of knowledge exchange (KE) and improving the quality of internal KE data collection.
3. While the positive impact of the KEF was evident, the review also demonstrated that there are improvements that could and should be made for future iterations of the KEF in the short, medium and long term. In the shorter term the review identified potential minor changes which could be implemented without the need for extensive further development and yet could enhance the representation of the underlying activity and data in final KEF results.
4. We then issued the KEF Options Survey to present and invite feedback on a number of specific options relating to the underpinning methodology, amendments to metrics and perspective titles. The survey also included considerations for future visualisations and timescales for narrative statements.
5. This document now sets out the final decisions that we have made for the second iteration of the KEF, known as KEF2. It explains our decisions on its design, including the metrics and methodology, timescales for narrative statements and how and when we expect to publish the results.
6. As noted in our full [KEF review report](#), long-term ambitions for the KEF involve the inclusion of new metrics and a key mechanism for this is additional data becoming available through the review of the Higher Education Business and Community Interactions (HE-BCI) survey. However, this will take some years to result in sufficiently robust data to be available for use in the KEF. We also note that there are other activities taking place which will need to be considered as we evolve the KEF in the future, such as the Research England review of KE funding and evaluation of HEIF. We are therefore making changes for KEF2 that we consider appropriate and possible in order to improve the current KEF as a performance framework based on the data that is currently available.

Eligibility and timescales

7. The second iteration of the KEF (KEF2) will be published in September 2022, following publication of the 2020-21 HE-BCI data. Eligibility of Higher Education Providers (HEPs) for KEF2 will remain linked to eligibility for HEIF as was the case for the first iteration.
8. All HEPs that were eligible to receive Research England Higher Education Innovation Fund (HEIF) funding in 2021-22 will be eligible to participate in KEF2. A list of such providers may be found in Annex B. Research England will be in contact directly with providers whose dashboards were not published in the first iteration of the KEF, as discussed in more detail in the 'Narrative Statements' section of this report.
9. The KEF takes a metrics-led approach, although it will continue to include a narrative component. All KEF metrics will continue to use existing data sources that are already collected via existing statutory returns or directly from data providers. This reflects the minimal burden of this exercise as there is no need for any provider to gather or submit new metrics for this iteration of the KEF.

Clustering

10. The clustering of providers will not change in KEF2 from the first iteration of the KEF. Providers will remain in one of the seven KE clusters identified to enable meaningful and fair comparison. These seven comprise the five general clusters, plus the 'STEM specialists' and 'Arts specialists' clusters.
11. Our approach to the re-clustering of providers remains consistent to that [expressed for the first iteration](#). Our view is that the cluster variables represent a 'capability base' which can be thought of as quasi-fixed in the medium-term, but can change over the longer-term through investments in research, teaching and related physical capital. We will therefore periodically re-cluster all English HEPs as appropriate, such as when new data becomes available (particularly REF data). It is therefore expected that the approach to clustering will be revisited for KEF3, using new REF2021 data and ensuring there is sufficient time to consider the methodology and engage with providers.
12. In exceptional circumstances we may reallocate providers on an ad-hoc basis outside of the formal re-clustering process. Such exceptional circumstances may include (but are not limited to) mergers, demergers or other significant events which we believe will have a material effect on the provider's capability base. Any provider that wishes us to consider this should make a written request to KEF@re.ukri.org.

Narrative statements

13. As discussed in the [KEF review report](#), the inclusion of narrative statements in the provides a valued opportunity to capture KE activities not currently represented in robust and available metrics, and provide a unique source of evidence of such activities. In addition, the approach to the collection and use of narrative statements was well-received.
14. The stated purposes of the narrative statements remain to:
- a. Act as a 'marker' to support limited metrics that do not fully describe the activity in the perspectives of 'Public and Community Engagement' and 'Local Growth and Regeneration'.
 - b. Be useful statements, contributing focused descriptions of contextual factors that shape the activity with clearly evidenced examples of outputs and outcomes.
 - c. Allow a degree of comparison between providers by presenting narratives in a structured form.
 - d. Offer the potential to identify future metrics that may be incorporated into future iterations of the KEF.
15. We have taken the decision that narrative statements for 'Public and community engagement' 'Local growth and regeneration', and the 'Institutional context' narrative may not be updated for KEF2. It will not be possible for providers who have not previously submitted a narrative statement to submit a new statement for KEF2. We have taken this decision in response to feedback about reducing burden and a preference for narrative statements to be updated on a two or three year cycle. It will also enable us to develop the narrative templates and guidance in light of the detailed feedback and NCCPE recommendations provided though the [KEF review](#).
16. Therefore, second iteration of the KEF will continue to display the narrative statements that were submitted for the first iteration and therefore their content remains focussed on activities undertaken in the previous three academic years up to the publication of KEF1, i.e. 2016-17, 2017-18 and 2018-19. In addition, the self-assessment scores that provide the metric for public and community engagement will therefore also not be updated for KEF2.

17. The narrative statements will continue to be integrated into the KEF dashboards, and we will ensure that their purpose is clearly described and the information is accessible to a range of users.
18. In the first iteration of the KEF, providers who were eligible for Research England HEIF allocations in the academic year 2019-20, but who did not receive any funding, were included in the sector wide cluster average calculations but their individual metrics were not published unless they chose to submit narrative statements. While providers will not be able to submit new narrative statements, providers who were eligible to receive HEIF funding in 2021-22 but who did not meet the threshold for a HEIF allocation will be able to opt in to have their dashboard displayed in KEF2. Display of KEF data will continue to be dependent on submission of narrative statements in future iterations of the KEF where substantive revisions or new narrative statements are invited, as is intended for KEF3. Research England will contact providers in this position directly to provide full information.

Perspectives and Metrics

19. The seven perspectives used in the first iteration of the KEF will continue to be used in KEF2, which ensure that a broad range of KE activities are represented.
20. A summary of the initial metric selection process was provided in the [decisions report](#) published for the first iteration of the KEF in January 2020. Through the [KEF options survey](#), we invited feedback on a small number of specific changes to the existing metrics. The full KEF options survey results and explanations behind the decisions that we have made for KEF2 are provided in full at Annex A.
21. In table 1 below, we have summarised the metrics that have been selected for inclusion in each perspective for KEF2, with changes to those used in KEF1 shaded in blue. A detailed description of the source data (including HE-BCI table references) for each metric are available as a separate excel download alongside this report on the Research England [publications page](#).
22. All metrics integrated into the KEF will be subject to ongoing review as we work to develop future iterations in line with the medium and long term goals set out in the 2022 [KEF review report](#). Metrics that have been removed or amended for this iteration may be subject to future development work and subsequently re-introduced to future iterations of the KEF.

Table 1: Summary of the perspectives and metrics that will be used KEF2. Metrics that have been modified since KEF1 are highlighted by a blue background

KEF2 Perspective title	Metrics to be used in KEF2, to be published in September 2022
Research partnerships	Contribution to collaborative research (cash) as proportion of public funding
	Co-authorship with non-academic partners as a proportion of total outputs (data provided by Elsevier) – amended to include trade journals
Working with business	Innovate UK income (KTP and grant) as proportion of research income
	HE-BCI Contract research income with non-SME business normalised for institution size by HEI Income
	HE-BCI Contract research income with SME business normalised for institution size by HEI Income
	HE-BCI Consultancy and facilities & equipment income with non-SME business normalised for institution size by HEI Income
	HE-BCI Consultancy and facilities & equipment income with SME business normalised for institution size by HEI Income
Working with the public and third sector	HE-BCI Contract research income with the public and third sector normalised for institution size by HEI Income
	HE-BCI Consultancy and facilities & equipment income with the public and third sector normalised for institution size by HEI Income
Continuing professional development (CPD) and graduate start ups [Formerly Skills, enterprise and entrepreneurship]	HE-BCI CPD/CE income normalised for institution size by HEI Income
	CPD/CE learner days metric removed
	HE-BCI Graduate start-ups rate by student FTE
Local growth and regeneration	Regeneration and development income from all sources normalised for institution size by Income
	Existing narrative statements retained from KEF1
IP and Commercialisation	Estimated current turnover of all active firms per spin-outs surviving 3 years
	Average external investment per spin-outs surviving 3 years
	Licensing and other IP income as proportion of research income
Public and community engagement	Existing self-assessment score retained from KEF1
	Existing narrative statements retained from KEF1

Further information on changes

23. The following paragraphs provide further details on the rationale for the changes summarised in table 1 above.

KEF options survey outcomes

24. Responses to the KEF options survey could be submitted in both an individual capacity or as a formal institutional response. Respondents were also able to provide more detailed comments in response to some questions. The detailed survey responses, including summaries of the comments submitted are provided at Annex A.

Research Partnerships

25. The KEF options survey asked respondents if the output types in the non-academic co-authorship metric should be evolved to include trade journals. Survey responses, supported by the comments, demonstrated a strong preference (70% of formal responses) for trade journals to be included. We will therefore be implementing the addition of trade journals to broaden the scope of the co-authorship data, which will be provided by Elsevier. Notably, additional comments in the survey reflected that while the inclusion of trade journals was supported, these tended to represent STEM subjects and it would be important in the future to also consider output types that also represent broader disciplines, particularly in the arts and culture. We will continue to explore opportunities to identify additional output types that can be included where the data is sufficiently robust.

26. Elsevier will continue to provide the required data for the non-academic co-authorship metric for KEF2, noting sector support for their ability to provide robust and extensive data on the best value for public money offering.

Working with business

27. We also asked for feedback on a change in the title of the 'Working with business' perspective, however the results did not demonstrate a strong preference for change. In the absence of clear support, our ambitions to further develop the KEF and noting the comments provided, we will not change the title of the Working with business perspective for KEF2.

Working with public and third sector.

28. We also asked whether the title of the 'Working with the public and third sector' perspective should be changed, and similarly the results did not demonstrate a

strong preference for change. We consider that it is important that the titles of working with the public and third sector and working with business remain aligned. In the absence of a strong preference, and noting the comments provided, as summarised in Annex A, we will not change the title of the Working with public & third sector perspective for KEF2.

Skills, enterprise and entrepreneurship (CPD and graduate start ups)

CPD/CE learner days metric

29. In the skills, enterprise and entrepreneurship perspective we sought feedback on whether the CPD/CE learner days should be removed from the 'Skills, enterprise and entrepreneurship' perspective. This was posed due to concerns raised in the KEF review focus groups that this metric was not sufficiently robust (due to lack of clarity in the reporting definitions) and that it also placed undue emphasis on the two CPD/CE metrics against a single graduate start-up metric.
30. As detailed in Annex A, we saw a strong level of support for the removal of this metric from both the survey responses and accompanying comments, particularly demonstrated by 64% of formal institutional responses supporting the change. We will remove CPD/CE learner days from the Skills, enterprise & entrepreneurship perspective.

Perspective title

31. We also asked whether we should change the title of 'Skills, enterprise and entrepreneurship' perspective. However, unlike the other perspectives the responses to this question, supported by comments provided, did demonstrate a clear preference for a change in title with only 16% of formal institutional responses wishing to retain the current title. We note that there are broader concerns relating to the combination of metrics that make up this perspective. In the long term we will continue to explore the further development of metrics, however in the meantime we consider that the title referencing the constituent metrics will provide greater clarity to this perspective.
32. We will therefore change the title of the perspective to 'Continuing professional development (CPD) and graduate start-ups'. We have slightly altered the title from the words proposed in the survey to improve readability and may develop this further in the final technical development of the KEF2 dashboard.

IP & commercialisation

33. We presented the following three potential changes for this perspective and full information about the responses received are provided in Annex A:

- Turnover of spin-outs – change to denominator
- External investment in spin-outs – change to denominator
- Perspective title change

34. **Turnover of spin-outs** – In KEF1 the denominator for this metric was the ‘number of active spin-outs which have survived at least three years’. When the options survey presented alternative denominators for this metric, responses showed a strong preference, 60% of formal responses, to retain the current denominator. We will not amend the denominator for the ‘turnover of spin-outs’ metric.

35. **External investment in spin-outs** – In KEF1 the denominator used for this metric was the ‘number of active firms’. We proposed to change this denominator to the ‘number of active spin-outs which have survived at least three years’. Survey responses demonstrated strong support for this change, particularly amongst formal institutional responses. We will amend the denominator used in this metric to ‘number of active spin-outs which have survived at least three years’, which will also align with the other spin-out metric.

36. **Perspective title change** - We received feedback through the KEF review that the perspective title implied a broader exploitation of IP than was represented by the metrics incorporated in the perspective. The KEF options survey asked whether we should amend the title. The responses to the survey did not demonstrate a strong preference for changing the title and in light of our ambitions to further develop the KEF and noting the comments provided, we will not change the title of the IP & commercialisation perspective for KEF2.

Local growth and regeneration

37. For this perspective, the questions in the survey related to the frequency and alignment of substantive revisions for the narrative statement. Responses did not express a strong preference between updates every two or three years, particularly in the formal responses from providers. However, there was strong expression that they should not be annual and that they should be aligned to the submission of the public and community engagement and institutional context. Further details are given in the detailed survey results provided in Annex A.

38. We will therefore work on the principle that all three narratives are substantively updated together, on a three-year cycle.

Public and community engagement

39. For this perspective, survey questions related to the frequency and alignment of substantive revisions for the public and community engagement narrative statement.
40. The survey did not demonstrate a strong preference between submitting narratives every two or three years. Therefore, in order to minimise burden, we plan for future public and community engagement self-assessment scores and all three narrative statements to be substantively updated every three years at the same time. Further details are provided in the detailed survey results provided in Annex A.
41. It should be noted that we may amend KEF narrative cycles to take account of other activities such as research assessment exercises, KE concordat activities, HEIF accountability requirements or government spending review cycles as appropriate.

Presentation of results

42. The primary objective of the KEF is to provide more easily accessible and comparable information on performance in knowledge exchange for multiple audiences. Data will be presented to avoid misinterpretation of results (e.g. as a sector-level ranking or league table).
43. Results will continue to be presented through an online visualisation platform displaying perspectives and underlying metrics, as well as narrative statements and contextual information, similar to those used in the first iteration of the KEF (see [Research England: Knowledge Exchange Framework \(kef.ac.uk\)](https://kef.ac.uk)).
44. The KEF options survey proposed using quintiles to present results rather than deciles, and using alternative labelling to the “top/bottom X%” nomenclature used in the first iteration of the KEF. There was strong support for these changes with 67% of formal responses supporting the change. Therefore results will be presented in quintiles in KEF2, and table 2 below shows the labels to be used in KEF2.

Table 2: Quintile labels to be used in KEF2 to present results

KEF2 quintile	KEF2 results label	Equivalent KEF1 deciles
Quintile 5	Very high engagement	Top 10% and 20%
Quintile 4	High engagement	Top 30% and 40%
Quintile 3	Medium engagement	Top and bottom 50%
Quintile 2	Low engagement	Bottom 30% and 40%
Quintile 1	Very low engagement	Bottom 10% and 20%

45. Perspective results will be presented as a quintile rank – i.e. as falling into one of five values, each representing 20% of English HEPs. For example, the top 20% of providers would be assigned a quintile rank of 5 – very high engagement, the bottom 20% of providers would be assigned a quintile rank of 1 – very low engagement.
46. The data underpinning the perspectives for each HEP will be presented in a polar area chart with a scale in quintiles and relative to the average quintile placement of the cluster group. Each of the seven perspectives will be given equal weighting and visual prominence, and differences in the number of metrics under each perspective will not affect the visual prominence.
47. Where narratives were provided in KEF1 for the perspectives of ‘Public and Community Engagement’ and ‘Local Growth and Regeneration’, these will be presented alongside the quintile position with note that metrics should be read in conjunction with the narrative¹ and not considered in isolation.

Methodology

48. This section provides detail on how the above metric values will be calculated in KEF2. An alternative methodology to that used in the first iteration of the KEF was proposed in the KEF options survey. There was strong support for this change in methodology, notably with 95% of formal responses in favour, and allows metrics to be equally represented in the final perspective result by the removal of a scaling step. The KEF2 methodology will be as detailed below.
49. Firstly, data from the three most recent years will be used to calculate the mean average for each metric using one of the two methods given in the example below, where ‘a’ is the numerator and ‘b’ is the denominator of the metric, for each of the three years of data. This stage is unchanged from KEF1.
50. For example, for the metric “HE-BCI Contract research income with non-SME business normalised for institution size by HEI Income”, the three years of ‘Contract research income’ (the numerators) are represented by a_1 , a_2 and a_3 , whilst the total ‘Incomes’ for each of the three years (the denominators as described in para. 24) are represented by b_1 , b_2 and b_3 below:

¹ The narrative statements displayed in KEF2 will be those provided for KEF1 in 2020 and as such relate to the years 2016-17, 2017-18, 2018-19. Substantive updates to narratives will be made through KEF3 in 2023.

a ₁	b ₁	a ₂	b ₂	a ₃	b ₃
Year 1 Numerator	Year 1 Denominator	Year 2 Numerator	Year 2 Denominator	Year 3 Numerator	Year 3 Denominator

Average Method 1:

$$\frac{(a_1 + a_2 + a_3)}{(b_1 + b_2 + b_3)}$$

Average Method 2:

$$\frac{\left(\frac{a_1}{b_1}\right) + \left(\frac{a_2}{b_2}\right) + \left(\frac{a_3}{b_3}\right)}{3}$$

51. The averaging method selected for each metric will depend on which is most appropriate for the underlying data set. For example:

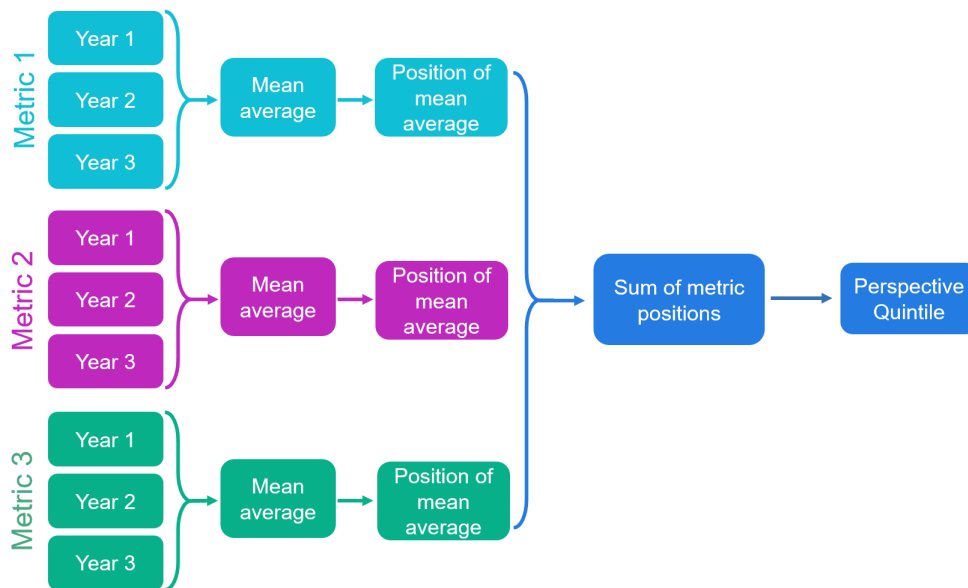
- a. Method 1 will be used where the dataset has zero values in the denominator of one or more of the three years being averaged (which would otherwise result in a 'divide by zero' error when using method 2). An example of this is shown in table 3, below.
- b. For all other metrics, method 2 will be used. For each metric, the averaging method used will be clearly indicated.

Table 3: Comparison of the results of applying averaging method 1 and 2 to an example data set

	a ₁	b ₁	a ₂	b ₂	a ₃	b ₃		
	Year 1 Numerator	Year 1 Denominator	Year 2 Numerator	Year 2 Denominator	Year 3 Numerator	Year 3 Denominator	Method 1	Method 2
HEI 1	0	3	0	5	0	5	0.00	0.00
HEI 2	2	3	2	5	2	5	0.46	0.49
HEI 3	0	0	2	5	2	5	0.40	#DIV/0!

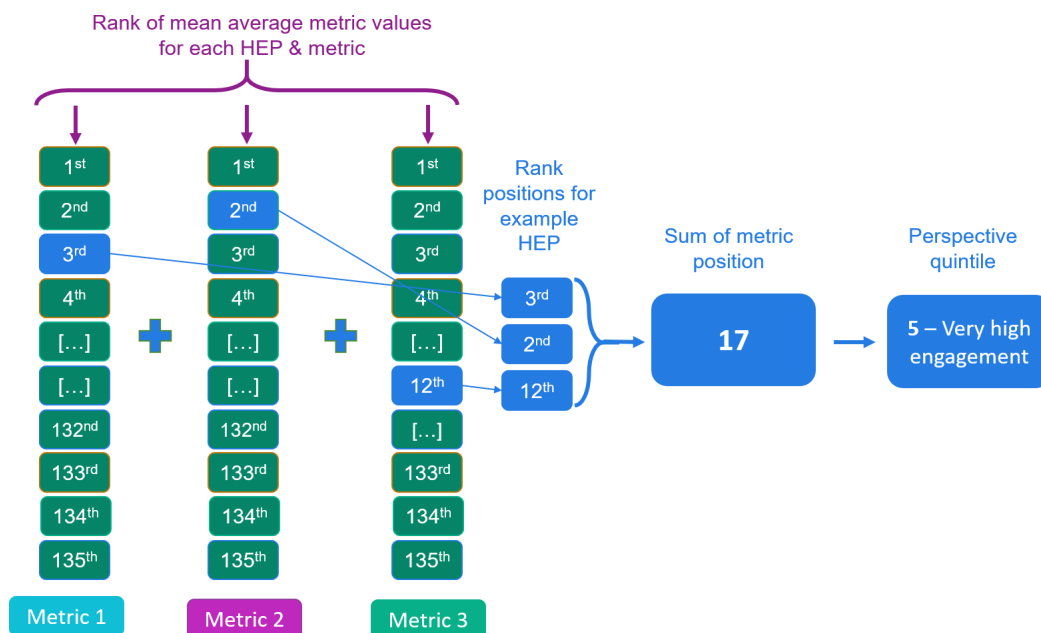
52. Once the three-year average for each metric has been calculated, all providers in the sector are then ordered by their three-year averages to give a metric position (1st -135th). Note that ties are unlikely in the metric values. All providers reporting a zero value would be given an equal lowest position (135th). For each provider the total perspective value is calculated by summing the positions of each contributing metric. Providers are then ordered across the sector by their total perspective values to give a perspective position (1-135th). The sector is divided into quintiles based on their perspective positions. An example of this process for a perspective with three metrics is shown in figure 1.

Figure 1: Example process for calculating a perspective quintile for an individual HEP



53. In figure 2 below, we have provided a further illustration, with example numerical values, of how an individual provider’s metric rank positions are translated into a single perspective quintile outcome. In this instance the sum metric position of 17 falls in the top 20% of providers and so it achieves the highest quintile outcome.

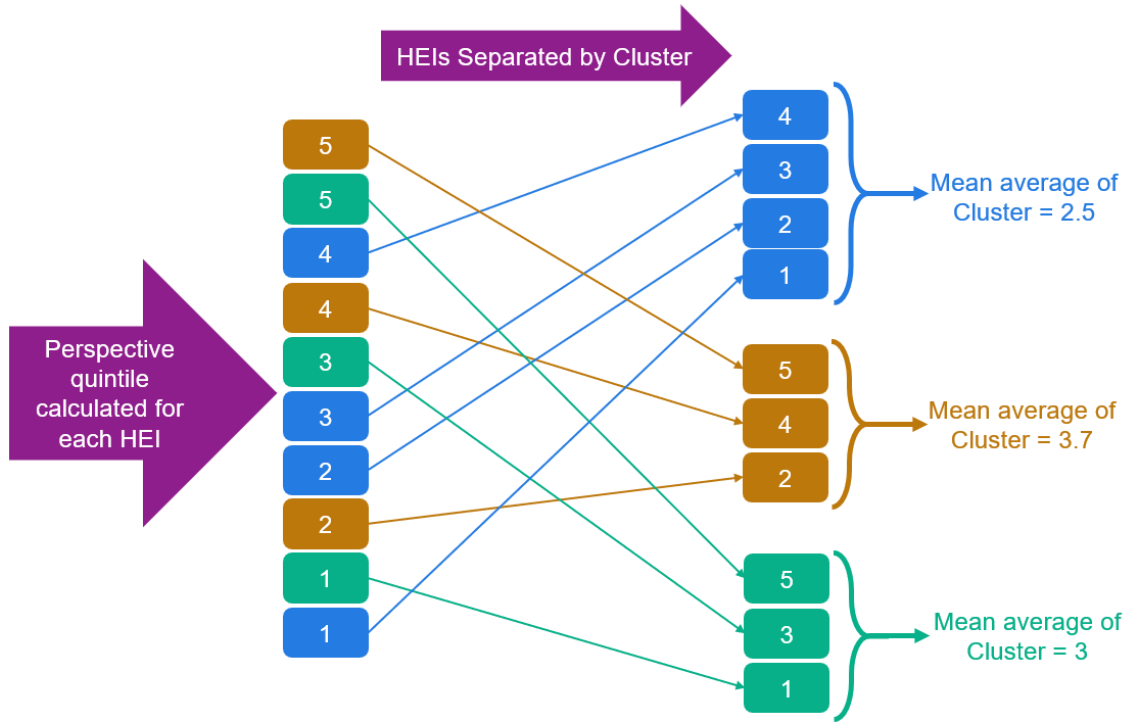
Figure 2: Example of calculating perspective quintile from individual metric outcomes



54. Cluster average engagement levels are calculated by taking the mean average of the perspective positions of providers belonging to that cluster, and reporting the

engagement level of the quintile of the cluster average position as shown in figure 3, below.

Figure 3: Calculation of cluster averages



Annex A - KEF Options Survey Results

KEF Options Survey 2022

The KEF options survey invited feedback on a small number of proposals for change that we would implement in the second iteration of the KEF. In this annex we have set out the detailed responses received for each question accompanied by a brief summary of associated comments which informed our decision-making process.

Please note that while many questions asked for ranked responses, we have only displayed the top ranked responses in this document.

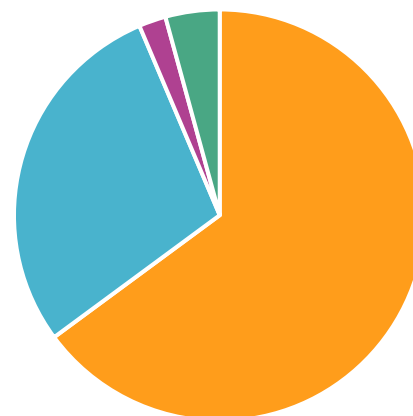
A copy of the full survey questions and associated supporting information are available for download from the Research England [website](#).

Respondent details

We received a total of 94 responses to the KEF Options Survey, 65% of which were formal responses on behalf of providers. This represents approximately half of all providers currently participating in the KEF.

Table 1 and Figure 1 - Nr of responses by respondent type

Respondent type	Nr	%
Formal HEP response	61	65%
Individual at HEP	27	29%
Representative body	2	2%
Other	4	4%
Total	94	100%



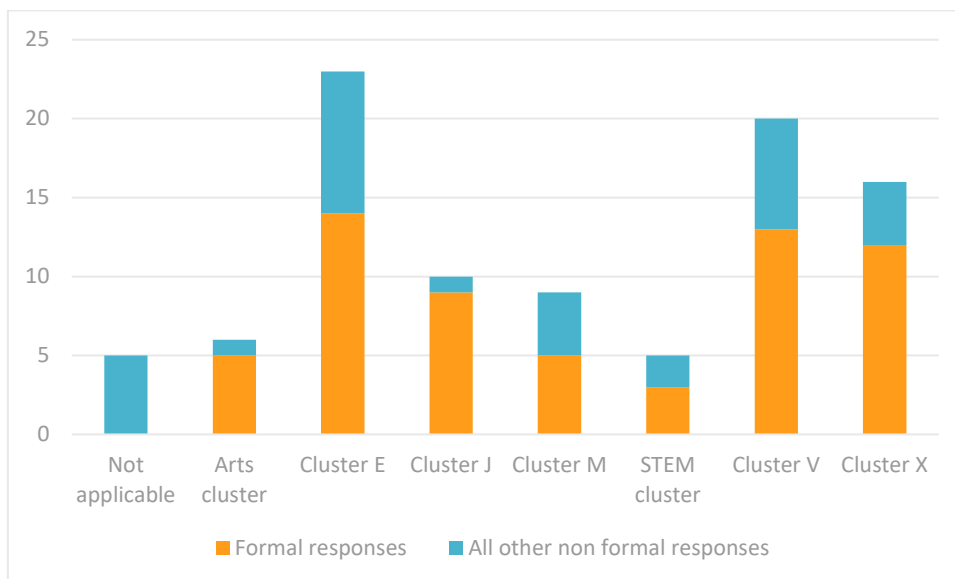
■ Formal HEP response
 ■ Individual at HEP
■ Representative body
 ■ Other

Table 2 and Figure 2 further present the response rates broken down by both respondent type and KEF cluster.

Table 2 – Responses by respondent type and cluster

Cluster	Formal responses (nr / %)		All other responses (nr / %)		Total – all responses (nr / %)	
Arts cluster	5	8%	1	3%	6	6%
Cluster E	14	23%	9	27%	23	24%
Cluster J	9	15%	1	3%	10	11%
Cluster M	5	8%	4	12%	9	10%
STEM cluster	3	5%	2	6%	5	5%
Cluster V	13	21%	7	21%	20	21%
Cluster X	12	20%	4	12%	16	17%
N/A	0	0%	5	15%	5	15%
Total	61	100%	33	100%	94	100%

Figure 2 – Responses by respondent type and cluster



Detailed survey question responses

Q4 – Perspective level calculation methodology

Are you in agreement with RE making the proposed methodology change for KEF2?

Response	Formal responses (nr / %)		All other responses (nr / %)		All responses (nr / %)	
	nr	%	nr	%	nr	%
No change – continue with KEF1 method	3	5%	5	19%	8	9%
Change to new method	56	95%	22	81%	78	91%
Total nr of responses to this question	59	100%	27	100%	86	100%

Q4 outcome – change accepted

Responses demonstrated extremely strong support across the board, particularly from formal institutional responses for the adoption of the new methodology. We will therefore move to change to the new methodology for calculating perspective level results, by removing the scaling stage.

Q5 – Proposal to move to five quintile levels

Are you in agreement with RE moving away from deciles to quintiles?

Response	Formal responses (nr / %)		All other responses (nr / %)		All responses (nr / %)	
	nr	%	nr	%	nr	%
No change – retain 10 deciles	10	17%	8	31%	18	21%
Proposed change - use five 'quintile' levels of involvement	40	67%	16	62%	56	65%
Alternative option for change - use four 'quartile' levels	10	17%	2	8%	12	14%
Total nr of responses to this question	60	100%	26	100%	86	100%

Q5 outcome – change accepted

Responses demonstrated strong support across the board with over two thirds of all responses supporting the change. We will therefore move to use five quintile levels of involvement.

Methodology comments

Comments expressed were a balanced between supporting the proposed changes, concerns about making significant changes after one year, and suggesting an alternative methodology. A few respondents queried making the changes when we anticipate alternative metrics becoming available through the review of the HE-BCI survey. While we anticipate that this will be the case in the long term, it will be a number of years before usable data may be available for inclusion in the KEF and in the meantime, we consider that we should make improvements that are available to us based on currently available data.

Q6 – Perspective level labelling options

Would you prefer the use of words or numerical labelling?

Response	Formal responses (nr / %)		All other responses (nr / %)		All responses (nr / %)	
	nr	%	nr	%	nr	%
Words (RE preferred)	51	85%	25	81%	76	84%
Numbers	9	15%	6	19%	15	16%
Total nr of responses to this question	60	100%	31	100%	91	100%

Comments expressed broad support for the removal of labelling referring to ‘top’ or ‘bottom’ performance levels. However, there were various views expressed about whether ‘involvement’ level was the best alternative and whether alternatives such as ‘engagement’ would be more appropriate, paired with preferences for ‘very high’, ‘high’, ‘medium’, ‘low’, ‘very low’ engagement. I.e. we will use the term ‘high’ rather than the initially proposed relative term ‘higher’ in the labelling..

Q6 outcome

Responses demonstrated strong support across the board, with 85% of formal responses advocating words in the dashboard labelling. We will therefore use words to describe the labels and we will remove reference to ‘top’ or ‘bottom’, but we will continue to refine the actual labelling through the technical development of the final KEF2 dashboard.

Q9 – IP & commercialisation – turnover of spin-outs

Which is your preferred denominator for the turnover of spin-outs metric?

Response	Formal responses (nr / %)		All other responses (nr / %)		All responses (nr / %)	
	nr	%	nr	%	nr	%
No change – ‘number of active spin-outs which have survived at least three years’	34	60%	9	45%	43	56%
‘Number of active firms’	11	19%	6	30%	17	22%
‘HEI research income (total research grants and contracts)’	12	21%	5	25%	17	22%
Total nr of responses to this question	57	100%	20	100%	77	100%

There were very few comments in relation to the IP & commercialisation metrics beyond support for the principle that the denominators for the two similar metrics being aligned.

Q9 outcome – no change

While support varied between formal responses and all other (individual, representative bodies and other), there was still a clear preference across the response types with half of all responses supporting no change and 59% of formal responses being in favour. We will therefore retain the current denominator.

Q10 – IP & commercialisation – investment in spinouts

Which is your preferred denominator for the investment of spin-outs metric?

Response	Formal responses (nr / %)		All other responses (nr / %)		All responses (nr / %)	
	nr	%	nr	%	nr	%
No change – ‘Number of newly registered companies’	6	11%	4	20%	10	13%
‘number of active spin-outs which have survived at least three years’	29	52%	8	40%	37	49%
‘Number of active firms’	12	21%	3	15%	15	20%
‘HEI research income (total research grants and contracts)’	9	16%	5	25%	14	18%
Total nr of responses to this question	56	100%	20	100%	76	100%

Q10 outcome – change accepted

While support varied between formal responses and all other (individual, representative bodies and other), there was still a clear preference across the response types with over half of the formal responses being in favour. We will move to use a new denominator ‘number of active spin-outs which have survived at least three years’. This will mean the denominators for the two spin-out metrics are now aligned.

Q12 – Skills, enterprise & entrepreneurship – CPD learner days

Should we remove CPD/CE learner days from the perspective?

Response	Formal responses (nr / %)		All other responses (nr / %)		All responses (nr / %)	
	nr	%	nr	%	nr	%
No change – continue with all three metrics in the perspective	14	24%	6	25%	20	24%
Remove CPD/CE learner days	37	64%	14	58%	51	62%
Other	7	12%	4	17%	11	13%
Total nr of responses to this question	58	100%	24	100%	82	100%

There were a large number of comments from respondents in relation to the Skills, enterprise & entrepreneurship perspective. The majority of these related to the placement of the graduate start-up metric being placed in a perspective with CPD/CE and a preference for the development of improved metrics. Research England are in agreement that we would wish to see improved metrics for this perspective, and as discussed in the [KEF review report](#) (p41+) this is a long-term goal for the development of the KEF. In the meantime, however, we consider that these are the best currently available metrics. For the comments that related to the removal of the learner days, these mostly expressed support for the proposed removal, with some respondents noting that it should be possible to capture learner days effectively and that they provided a useful recognition of non-monetised activity.

Q12 outcome – change accepted

There was strong support across the board, with the removal of this metric being the clear majority response for all response types and a particularly strong response from formal institutional responses with 64% of providers supporting the change. We will

therefore remove CPD/CE learner days from the Skills, enterprise & entrepreneurship perspective.²

Q14 – Research partnerships – Co-authorship metric

Should we look to include trade journals in the co-authorship with non-academic partners metric?

Response	Formal responses (nr / %)		All other responses (nr / %)		All responses (nr / %)	
	nr	%	nr	%	nr	%
No change – retain the outputs used in KEF1	14	25%	10	40%	24	30%
Include trade journals	39	70%	14	56%	53	65%
Other	3	5%	1	4%	4	5%
Total nr of responses to this question	56	100%	25	100%	81	100%

Comments expressed broad support for the inclusion of trade journals within the co-authorship metric. However, a number of respondents expressed caution against such journals being more likely to relate to STEM subjects and that publications relating to arts and cultural performance should also be included.

Research England are in agreement with the principle that we should include as many forms of co-authorship outputs as possible; where we have both data available, and that we consider that data to be sufficiently robust. We will continue to work with our data provider to expand the output types included to as many formats as possible, including those representing arts and culture. However, at this time we consider that trade journals are the only output type that currently meets the above requirements.

It should be noted that from our analysis of the KEF data, it is not anticipated that the inclusion of trade journals will result in a notable change to overall metric results, rather it presents the opportunity to expand output types in this metric where possible.

Q14 outcome – change accepted

There was strong support across the board, with the inclusion of trade journals being the clear majority response for all response types and a particularly strong response from formal institutional responses with 70% of providers supporting the change. We

² Note: Formal institutional responses were checked against performance in this metric and there was no correlation between institutional performance in the metric and preference for removal.

will therefore work with our supplier of co-authorship data to include trade journals in future iterations of the KEF.

Perspective title changes

While a number of alternative suggestions were made in regard to individual title changes, in general the majority of general comments expressed a preference for expanding the metrics used within perspectives rather than narrowing the title of the perspectives. It was noted that the titles have become understood within the HE sector and changes such as introducing ‘research’ into multiple perspective titles could cause confusion going forward. Comments also noted that the new titles would not resolve concerns about the dashboard being accessible and understood by external users and perhaps improved labelling dashboard design could address this more effectively.

The exception to this view was the title of Skills, enterprise and entrepreneurship which showed significantly stronger appetite for change and the comments, in addition to the previous KE review activities, highlighted more significant issues with the title.

Where we have chosen not to make amendments to most of the perspective titles at this time, we will seek to develop the final KEF dashboard to address some of the issues through improved labelling and display.

Q16– Title change – IP & commercialisation

Should we change the title of the IP & commercialisation perspective?

Response	Formal responses (nr / %)		All other responses (nr / %)		All responses (nr / %)	
No change – IP & commercialisation	24	41%	9	35%	33	39%
New title – Research commercialisation	27	47%	16	62%	43	51%
Other	7	12%	1	4%	8	10%
Total nr of responses to this question	58	100%	26	100%	84	100%

Q16 outcome – no change

The responses for the suggested title changes were less distinct than other areas of the KEF survey, although there was stronger support shown from the individual and other responses. Particularly in the formal institutional responses, it was little difference between support for the new title and retaining the current title.

In light of our ambitions to further develop the KEF and noting the comments provided, we will **not change** the title of the IP & commercialisation perspective for KEF2.

Q17– Title change – Working with business

Should we change the title of the working with business perspective?

Response	Formal responses (nr / %)		All other responses (nr / %)		All responses (nr / %)	
No change – Working with business	21	36%	6	25%	27	33%
Change to ‘Research and development for business’	30	52%	16	67%	46	56%
Change to ‘Business services’	7	12%	2	8%	9	11%
Total nr of responses to this question	58	100%	24	100%	82	100%

While this perspective showed a stronger preference for one of the alternative options, there were more options available, and the support was most strongly pronounced in the ‘all other responses’ category. It is also important that any title change is also supported by that for the Working with the public & third sector since the metrics for these two perspectives align so closely. As shown below, across the two perspectives the support for the suggested changes and retaining the currently title was relatively close.

Q17 outcome – no change

In light of the absence of a strong preference, our ambitions to further develop the KEF and noting the comments provided, we will **not change** the title of the Working with business perspective for KEF2.

Q18– Title change – Working with the public & third sector

Should we change the title of the working with the public & third sector perspective?

Response	Formal responses (nr / %)		All other responses (nr / %)		All responses (nr / %)	
No change – Working with public & third sector	24	41%	9	35%	33	39%
Change to ‘Research and development for the public & third sector’	28	48%	15	58%	43	51%

Other	6	10%	2	8%	8	10%
Total nr of responses to this question	58	100%	26	100%	84	100%

The responses for the suggested title in this perspective was did not express a strong preference, with the strongest support shown from the individual and other responses. Responses from the formal institutional responses, were very close between supporting the new title and retaining the current title.

Q18 outcome – no change

In light of the absence of a strong preference, our ambitions to further develop the KEF and noting the comments provided, we will **not change** the title of the Working with public & third sector perspective for KEF2.

Q19– Title change – Skills, enterprise and entrepreneurship

Should we change the title of the skills, enterprise and entrepreneurship perspective?

Response	Formal responses (nr / %)		All other responses (nr / %)		All responses (nr / %)	
No change – Skills, enterprise and entrepreneurship	9	16%	6	25%	15	18%
Change to ‘Provision of CPD and graduate start-ups’	37	64%	13	54%	50	61%
Change to ‘Skills, enterprise and entrepreneurship education	12	21%	5	21%	17	21%
Total nr of responses to this question	58	100%	24	100%	82	100%

The responses to this question, supported by comments provided, elicited a clear preference for a change in title, particularly from form institutional responses. We note that this perspective has broader concerns relating to the combination metrics that make up the perspective. In the long term we anticipate the further development of metrics within this perspective, however in the meantime we consider that it will provide more clarity to the perspective for the title to reference the constituent metrics.

Q19 outcome – change accepted

We will change the title of the perspective to ‘Continuing professional development (CPD) and graduate start-ups’. We have slightly altered the title from the words proposed to improve readability and may develop this further in the final technical development of the KEF2 dashboard.

Dashboard design

The comments provided in regard to the dashboard design were almost unanimous in expressing a preference for future dashboard design to incorporate both the existing polar area chart format **and** the proposed tiled approach. Respondents noted that each format had advantages and disadvantages depending on the preference of the user and their purpose in visiting the KEF dashboards.

Q21 – Dashboard design – polar area chart

Should the KEF dashboard continue to present the provider outcomes through the polar area chart of an individual provider's results, or should we explore moving to a simpler non-graphical (e.g. 'tiled') representation?

Response	Formal responses (nr / %)		All other responses (nr / %)		All responses (nr / %)	
	nr	%	nr	%	nr	%
No change – continue with provider level polar area chart	6	10%	6	23%	12	14%
Change – explore moving to a simpler non-graphical method such as 'tiled view'	44	76%	16	62%	60	71%
Other	8	14%	4	15%	12	14%
Total nr of responses to this question	58	100%	26	100%	84	100%

Q21 outcome

We will continue to explore developing the KEF to display data via a simpler non-graphical method such as a 'tiled view'. This will not be in place for KEF2 in September 2022, but we will continue to explore how this could be incorporated into future design developments, a possibility being in conjunction with the existing polar area chart design.

Q22 – Use of perspective level score

Should the KEF continue to present a single high level perspective level result, or should it be the ‘lens’ through which we present a range of metrics?

Response	Formal responses (nr / %)		All other responses (nr / %)		All responses (nr / %)	
	nr	%	nr	%	nr	%
No change - continue with a single high level perspective level result (that enables users to also view the constituent metrics)	29	51%	9	41%	38	48%
Change option 1 - Remove the single perspective result, however continue to present the constituent metrics in the ‘perspective’ groups.	9	16%	5	23%	14	18%
Change option 2 - Remove the single perspective result, and allow users to freely group metrics in any way they wish.	4	7%	2	9%	6	8%
Change option 3 - Remove the single perspective result, and allow users to choose between seeing metrics presented in the perspective groups or displays in their own group selections.	15	26%	6	27%	21	27%
Total nr of responses to this question	57	100%	22	100%	79	100%

Q22 outcome

We will continue to develop the KEF to display data that incorporates a single high level perspective level result. However, we note the strong support for allowing users to choose how results are presented, so we will investigate incorporating this as an additional option for providers as a lens to filter results. This will not be in place for KEF2 in summer 2022, however we will look to incorporate this into future developments.

Q24 – Frequency of P&CE narrative statements

How often should the self-assessment scores and associated narrative statements be substantively updated?

Response	Formal response nr (nr / %)		All other responses nr (nr / %)		All responses nr (nr / %)	
	Annual - alongside the annual updates of the quantitative data	3	5%	4	15%	7
Every two years - every other time that the quantitative data is updated	23	40%	3	12%	26	31%
Every three years - every third year that the quantitative data is updated	24	42%	14	54%	38	46%
Other	7	12%	5	19%	12	14%
Total nr of responses to this question	57	100%	26	100%	83	100%

Comments made in response to this question were predominately in support of a three-year cycle. However, while there was not a strong preference between two and three years, respondents also noted that account should be made for significant activities such as future research assessment exercises.

While there was a clear view expressed that mandatory updates should not be required every year, many respondents requested that they have the option to update their narrative in any given year should there be substantive change to report.

Q24 outcome

In the absence of a strong option between two and three years, in order to minimise associated burden we will plan future KEF iterations on the principle that public & community engagement self-assessment scores and all three narrative statements will be substantively updated every three years, with all statements updated at the same time.

While we note the request for optional annual updates, given the role of the public and community engagement narrative to provide evidential support for the self-assessment scores, we do not consider that it would be appropriate to allow updates to scores or supporting narratives outside of the requirement for substantive updates. We are also concerned that this would lead to an adverse consequence of unnecessary burden

should providers feel 'obliged' to make updates on an annual basis, even where this is not required.

Note that we may amend individual KEF narrative cycles in order to take account of other activities such as research assessment exercises, KE concordat activities, HEIF accountability requirements or government spend review cycle.

Q25 – Frequency of LG&R narrative statements

How often should the narrative statements be substantively updated?

Response	Formal response nr (nr / %)		All other responses nr (nr / %)		All responses nr (nr / %)	
	nr	%	nr	%	nr	%
Annual - alongside the annual updates of the quantitative data	4	7%	4	15%	8	10%
Every two years - every other time that the quantitative data is updated	24	42%	4	15%	28	34%
Every three years - every third year that the quantitative data is updated	21	37%	13	50%	34	41%
Other	8	14%	5	19%	13	16%
Total nr of responses to this question	57	100%	26	100%	83	100%

Responses did not express a strong preference between updates every two or three years, particularly in the formal responses from providers. However, there was strong expression of the view that they should not be annual.

Q25 outcome

As shown under Q26 below, there was very strong support for all narrative statement updates to be aligned. Therefore, for the reasons expressed under Q24 for the public and engagement narrative statement we will plan future KEF iterations on the basis that public & community engagement self-assessment scores and all three narrative statements will be substantively updated every three years, with all statements updated at the same time.

Note that we may amend individual KEF narrative cycles in order to take account of other activities such as research assessment exercises, KE concordat activities, HEIF accountability requirements or government spend review cycle.

Q26 – Alignment of narrative statement updates

Should the updates for all three narrative statements (institutional context, P&CE and LG&R) be aligned so they are all updated on the same frequency and in the same year? Alternatively, should they alternate and/or should the institutional context be updated more frequently?

Response	Formal response nr (nr / %)		All other responses nr (nr / %)		All responses nr (nr / %)	
	Together - all three statements on the same frequency and timetable.	39	68%	15	58%	54
Mostly together - P&CE and LG&R aligned but institutional context may be updated every year.	12	21%	4	15%	16	19%
Alternating - P&CE and LG&R narratives updated in alternating years, with institutional context updated alongside either.	4	7%	5	19%	9	11%
Other	2	4%	2	8%	4	5%
Total nr of responses to this question	57	100%	26	100%	83	100%

Q26 outcome

Responses and comments show a very strong preference for all narrative statement updates to be aligned. Therefore, for the reasons outlined above under Q24, will plan future KEF iterations on the principle that public & community engagement self-assessment scores and all three narrative statements will be substantively updated every three years, with all statements updated at the same time.

Note that we may amend individual KEF narrative cycles in order to take account of other activities such as research assessment exercises, KE concordat activities, HEIF accountability requirements or government spend review cycle.



Annex B – Providers eligible for participation in KEF2 with cluster placement

Providers without shading in the table below were in receipt of HEIF in 2021-22 and therefore their metrics will be published in KEF2 regardless of whether narrative statements were submitted in KEF1.

Providers shaded in orange were eligible for HEIF funding in 2021-22 but did not receive an allocation as they did not meet the allocation threshold for funding. These providers will be given the option for their metrics to be published in KEF2.

The list of eligible providers overleaf is also available to download as an excel spreadsheet alongside this report from the Research England [publication page](#).

UKPRN	Cluster	HE Provider	KEF2 Dashboard publication	NUTS 1 region of HE provider
10000163	STEM	AECC University College	Optional	South West
10000291	E	Anglia Ruskin University	Mandatory	East of England
10000385	ARTS	The Arts University Bournemouth	Optional	South West
10000571	M	Bath Spa University	Optional	South West
10000712	M	University College Birmingham	Optional	West Midlands
10000824	E	Bournemouth University	Mandatory	South West
10000886	E	The University of Brighton	Mandatory	South East
10000936	STEM	University College of Osteopathy	Optional	London
10000961	X	Brunel University London	Mandatory	London
10000975	M	Buckinghamshire New University	Mandatory	South East
10001143	J	Canterbury Christ Church University	Mandatory	South East
10001282	E	University of Northumbria at Newcastle	Mandatory	North East
10001478	E	City, University of London	Mandatory	London
10001653	ARTS	Conservatoire for Dance and Drama	Mandatory	London
10001726	E	Coventry University	Mandatory	West Midlands
10001883	E	De Montfort University	Mandatory	East Midlands
10002718	E	Goldsmiths College	Mandatory	London
10003270	V	Imperial College of Science, Technology and Medicine	Mandatory	London
10003324	STEM	The Institute of Cancer Research	Mandatory	London
10003614	M	The University of Winchester	Mandatory	South East
10003645	V	King's College London	Mandatory	London
10003678	E	Kingston University	Mandatory	London
10003758	ARTS	Lamda Limited	Mandatory	London
10003854	ARTS	Leeds Arts University	Optional	Yorkshire and The Humber
10003861	J	Leeds Beckett University	Mandatory	Yorkshire and The Humber
10003863	M	Leeds Trinity University	Optional	Yorkshire and The Humber
10003945	ARTS	The Liverpool Institute for Performing Arts	Optional	North West
10003956	M	Liverpool Hope University	Mandatory	North West
10003957	E	Liverpool John Moores University	Mandatory	North West
10003958	STEM	Liverpool School of Tropical Medicine	Mandatory	North West
10004048	J	London Metropolitan University	Mandatory	London
10004063	X	London School of Economics and Political Science	Mandatory	London
10004078	J	London South Bank University	Mandatory	London
10004113	X	Loughborough University	Mandatory	East Midlands
10004180	E	The Manchester Metropolitan University	Mandatory	North West
10004351	E	Middlesex University	Mandatory	London
10004511	ARTS	The National Film and Television School	Optional	South East
10004775	ARTS	Norwich University of the Arts	Optional	East of England
10004797	E	The Nottingham Trent University	Mandatory	East Midlands
10004930	E	Oxford Brookes University	Mandatory	South East
10005127	ARTS	Plymouth College of Art	Optional	South West
10005389	ARTS	Ravensbourne University London	Optional	London
10005523	ARTS	Rose Bruford College of Theatre and Performance	Optional	London
10005545	STEM	Royal Agricultural University	Optional	South West
10005553	X	Royal Holloway and Bedford New College	Mandatory	South East
10005790	E	Sheffield Hallam University	Mandatory	Yorkshire and The Humber
10006022	M	Solent University	Mandatory	South East
10006299	J	Staffordshire University	Mandatory	West Midlands
10006427	ARTS	University for the Creative Arts	Optional	South East
10006566	M	The University of West London	Mandatory	London
10006840	V	The University of Birmingham	Mandatory	West Midlands
10006841	J	The University of Bolton	Optional	North West
10006842	V	The University of Liverpool	Mandatory	North West
10007137	M	The University of Chichester	Mandatory	South East
10007138	J	The University of Northampton	Mandatory	East Midlands
10007139	J	University of Worcester	Mandatory	West Midlands
10007140	J	Birmingham City University	Mandatory	West Midlands
10007141	E	The University of Central Lancashire	Mandatory	North West
10007143	X	University of Durham	Mandatory	North East
10007144	J	The University of East London	Mandatory	London
10007145	J	University of Gloucestershire	Mandatory	South West
10007146	E	The University of Greenwich	Mandatory	London
10007147	E	University of Hertfordshire	Mandatory	East of England
10007148	E	The University of Huddersfield	Mandatory	Yorkshire and The Humber
10007149	X	The University of Hull	Mandatory	Yorkshire and The Humber
10007150	X	The University of Kent	Mandatory	South East
10007151	E	The University of Lincoln	Mandatory	East Midlands
10007152	E	University of Bedfordshire	Mandatory	East of England
10007154	V	University of Nottingham	Mandatory	East Midlands
10007155	E	The University of Portsmouth	Mandatory	South East

UKPRN	Cluster	HE Provider	KEF2 Dashboard publication	NUTS 1 region of HE provider
10007156	E	The University of Salford	Mandatory	North West
10007157	V	The University of Sheffield	Mandatory	Yorkshire and The Humber
10007158	V	The University of Southampton	Mandatory	South East
10007159	J	The University of Sunderland	Mandatory	North East
10007160	X	The University of Surrey	Mandatory	South East
10007161	J	Teesside University	Mandatory	North East
10007162	ARTS	University of the Arts, London	Mandatory	London
10007163	V	The University of Warwick	Mandatory	West Midlands
10007164	E	University of the West of England, Bristol	Mandatory	South West
10007165	E	The University of Westminster	Mandatory	London
10007166	J	The University of Wolverhampton	Mandatory	West Midlands
10007167	X	The University of York	Mandatory	Yorkshire and The Humber
10007657	STEM	Writtle University College	Optional	East of England
10007713	M	York St John University	Optional	Yorkshire and The Humber
10007759	E	Aston University	Mandatory	West Midlands
10007760	X	Birkbeck College	Optional	London
10007761	ARTS	Courtauld Institute of Art	Optional	London
10007767	X	Keele University	Mandatory	West Midlands
10007768	X	The University of Lancaster	Mandatory	North West
10007769	V	London Business School	Mandatory	London
10007771	STEM	London School of Hygiene and Tropical Medicine	Mandatory	London
10007773	E	The Open University	Mandatory	South East
10007774	V	The University of Oxford	Mandatory	South East
10007775	V	Queen Mary University of London	Mandatory	London
10007776	J	Roehampton University	Mandatory	London
10007777	ARTS	Royal College of Art	Mandatory	London
10007778	ARTS	Royal College of Music	Mandatory	London
10007779	STEM	The Royal Veterinary College	Mandatory	London
10007780	X	SOAS University of London	Mandatory	London
10007782	STEM	St George's, University of London	Mandatory	London
10007784	V	University College London	Mandatory	London
10007785	E	The University of Bradford	Mandatory	Yorkshire and The Humber
10007786	V	The University of Bristol	Mandatory	South West
10007788	V	The University of Cambridge	Mandatory	East of England
10007789	X	The University of East Anglia	Mandatory	East of England
10007791	X	The University of Essex	Mandatory	East of England
10007792	X	The University of Exeter	Mandatory	South West
10007795	V	The University of Leeds	Mandatory	Yorkshire and The Humber
10007796	X	The University of Leicester	Mandatory	East Midlands
10007798	V	The University of Manchester	Mandatory	North West
10007799	V	Newcastle University	Mandatory	North East
10007801	E	University of Plymouth	Mandatory	South West
10007802	X	The University of Reading	Mandatory	South East
10007806	X	The University of Sussex	Mandatory	South East
10007811	M	Bishop Grosseteste University	Optional	East Midlands
10007816	ARTS	The Royal Central School of Speech and Drama	Optional	London
10007822	STEM	Cranfield University	Mandatory	East of England
10007823	M	Edge Hill University	Optional	North West
10007825	ARTS	Guildhall School of Music and Drama	Mandatory	London
10007832	M	Newman University	Optional	West Midlands
10007835	ARTS	Royal Academy of Music	Optional	London
10007837	ARTS	Royal Northern College of Music	Mandatory	North West
10007842	M	University of Cumbria	Optional	North West
10007843	M	St Mary's University, Twickenham	Mandatory	London
10007848	J	University of Chester	Mandatory	North West
10007850	X	The University of Bath	Mandatory	South West
10007851	J	University of Derby	Mandatory	East Midlands
10008017	ARTS	Trinity Laban Conservatoire of Music and Dance	Mandatory	London
10008640	M	Falmouth University	Mandatory	South West
10009292	ARTS	Royal Academy of Dramatic Art	Mandatory	London
10014001	M	University of Suffolk	Optional	East of England
10034449	ARTS	Leeds Conservatoire	Optional	Yorkshire and The Humber
10037449	M	Plymouth Marjon University	Optional	South West
10040812	STEM	Harper Adams University	Mandatory	West Midlands
10080811	STEM	Hartpury University	Mandatory	South West

Annex C – KEF2 Metrics and sources

The metric source information provided overleaf is also available to download as an excel spreadsheet alongside this report from the Research England [publication page](#). This provides the full input and output reference information for all metrics to be used in KEF2.

The spreadsheet also provides a direct comparison between the metrics used in KEF1 and KEF2.

KEF2 Perspective title	KEF2 Metric Description	KEF2 Detailed source input reference (note HE-BCI table references refer to collection table and sub-head references. 'HEI Income' is the combined total of: tuition fees and contracts, funding body grants and research grants and contracts taken from the HESA finance record)	KEF2 Output reference (Section and table references refer to output tables published as open data through HESA. Unless otherwise stated, 'HESA Finance Record - Table 1' is the combined total of: tuition fees and contracts, funding body grants and research grants and contracts)	Change from KEF1
Research Partnerships	Contribution to collaborative research (Cash) as proportion of public funding	HE-BCI Table 1 Ratio of Row 1e: Public Funding : Collaborative contribution (Cash)	HE-BCI -Collaborative research involving public funding (Table 1)	No change
	Co-authorship with non-academic partners as a proportion of total outputs - amended to include trade journals. Data provided by Elsevier	Data provided by Elsevier direct to Research England	N/A	Trade journals included in the outputs used to determine co-authorship data
Working with business	Innovate UK income (KTP and grant) as proportion of research income (Innovate UK)	Innovate UK income (KTP & grant) - not currently published Research Income - HESA Finance Record (Table 1 - Research Grants and Contracts)	HESA Finance Record (Table 1 - Research Grants and Contracts)	No change
	HE-BCI contract research income with non-SME business normalised by HEI income	HE-BCI Table 1: $\frac{\text{Row 2d}}{\text{HEI Income}}$	HE-BCI -Business and community services (Table 2a) HESA Finance record - Table 1	No change
	HE-BCI contract research income with SME business normalised by HEI income	HE-BCI Table 1: $\frac{\text{Row 2b}}{\text{HEI Income}}$	HE-BCI -Business and community services (Table 2a) HESA Finance record - Table 1	No change
	HE-BCI Consultancy and facilities income with non -SME business normalised by HEI income	HE-BCI Table 2: $\frac{\text{Row 1d} + \text{2d}}{\text{HEI Income}}$	HE-BCI -Business and community services (Table 2a) HESA Finance record - Table 1	No change
	HE-BCI Consultancy and facilities income with SME business normalised by HEI income	HE-BCI Table 2: $\frac{\text{Row 1b} + \text{2b}}{\text{HEI Income}}$	HE-BCI -Business and community services (Table 2a) HESA Finance record - Table 1	No change
Working with the public and third sector	HE-BCI contract research income with the public and third sector normalised by HEI income	HE-BCI Table 1: $\frac{\text{Row 2f}}{\text{HEI Income}}$	HE-BCI -Business and community services (Table 2a) HESA Finance record - Table 1	No change
	HE-BCI Consultancy and facilities income with the public and third sector normalised by HEI income	HE-BCI Table 2: $\frac{\text{Row 1f} + \text{Row 2f}}{\text{HEI Income}}$	HE-BCI -Business and community services (Table 2a) HESA Finance record - Table 1	No change
Continuing professional development (CPD) and graduate start ups (Formerly Skills, enterprise and entrepreneurship)	HE-BCI CPD/CE income normalised by HEI income	HE-BCI Table 2: $\frac{\text{Row 3e}}{\text{HEI Income}}$	HE-BCI -Continuing Professional Development and Continuing Education (Table 2b) HESA Finance record - Table 1	No change
	N/A metric removed	Metric removed	Metric removed	Metric removed
	HE-BCI Graduate start-ups rate by student FTE	HE-BCI Table 4: $\frac{\text{Row 4a iv (column 1)}}{\text{Student FTE}}$	HE-BCI -Intellectual property: Spin-off activities by HE provider (Table 4e) Higher Education Student Data - Full-time equivalent (Table 2)	No change
Local growth and regeneration	Regeneration and development income from all sources normalised by HEI income	HE-BCI Table 3: $\frac{\text{Row 1f}}{\text{HEI Income}}$	HE-BCI -Regeneration and development (Table 3) HESA Finance record - Table 1	No change
	Additional narrative/contextual information - as provided to KEF1 in 2020	Existing narrative statements retained from KEF1	N/A	Existing narrative statements retained
IP and Commercialisation	Estimated current turnover of all active firms per spin-out surviving 3 years	HE-BCI Table 4: $\frac{4a i + ii (\text{turnover} - \text{column 5})}{4a i + ii (\text{number} - \text{column 2})}$	Intellectual property: Spin-off activities by HE provider (Table 4e): Estimated current turnover of all active firms (£ thousands) Number of still active spin-outs which have survived at least 3 years	No change (denominator reference corrected)
	Average external investment per spin-out surviving 3 years	HE-BCI Table 4: $\frac{4a i + ii (\text{investment} - \text{column 6})}{4a i + ii (\text{number} - \text{column 2})}$	Intellectual property: Spin-off activities by HE provider (Table 4e): Estimated external investment received (£ thousands) Number of still active spin-outs which have survived at least 3 years	Denominator changed from 'number of newly registered companies' to 'number of active spin-outs which have survived at least three years'
	Licensing and other IP income as proportion of research income	HE-BCI Table 4 (Row 3f - total IP revenue) HESA Finance Record (Table 1 - Research Grants and Contracts)	Total intellectual property income (Table 4d) - Total IP revenues HESA Finance Record - (Table 1 - Research Grants and Contracts)	No change
Public and community engagement	Self assessment based metric - score retained from KEF1 in 2020 (this was optional in KEF1)	Existing self-assessment score retained from KEF1	N/A	No change
	Additional narrative/contextual information - as provided to KEF1 in 2020	Existing narrative statements retained from KEF1	N/A	No change