National
Co-ordinating
Centre for
Public Engagement

KEF metrics – call for evidence: NCCPE response

January 2018

About the National Coordinating Centre for Public Engagement (NCCPE)
The National Co-ordinating Centre for Public Engagement (NCCPE) is internationally recognised for its work supporting and inspiring universities to engage with the public. The Centre works to promote innovation, and nurture and celebrate excellence. We champion meaningful engagement that makes a real and valued difference to people's lives. The NCCPE is supported by the UK Higher Education Councils, Research Councils UK and Wellcome, and has been hosted by the University of Bristol and the University of the West of England since it was established in 2008.
Introduction
Before commenting in detail on the consultation questions, four quick 'framing' comments about the scope of the KEF. **1. What should the KEF encompass?** The government's announcement of the KEF gave the impression that Knowledge Exchange (KE) is limited to technology transfer and commercialisation. We would argue that this is far too narrow a framing of the rich variety of ways in which universities contribute to a knowledge-rich society. The current framing of HEIF and HEBCIs, developed over a number of years, presents a much more holistic view of what counts as KE. HEIF / HEBCI frame KE activity as: • Facilitating the research exploitation process (non-technology transfer) • Commercialisation (technology transfer, including spin-outs and licensing) • Skills and human capital development • Knowledge sharing and diffusion • Supporting the community and public engagement • Enterprise education and entrepreneurship • Exploiting the HEI's physical assets The recent HEFCE report, 'The State of the English KE landscape', offers a helpful typology of benefits arising from KE which extend far beyond IP and commercialisation: • Business, public and third sector benefits • Social and community group benefits • Wider economic and social benefits • Institutional benefits We believe it is essential that this broad spectrum of activity is encompassed in the KEF – a point picked up by Jo Johnson in his speech at the 2017 HEFCE conference: '*Public attention often focuses on technology transfer, intellectual property (IP) licensing and high-tech spin-outs, but these are far from the only way universities contribute to innovation and growth*'.

2. How might the KEF align with other frameworks?

The government's letter to HEFCE implies that KE is distinctive in its focus on the **exploitation** of knowledge, distinct from research (which **generates** knowledge) and teaching (which **transmits** knowledge).

If this framing is accepted, then both the REF and the TEF monitor knowledge exchange, as they don't just assess the quality of research or teaching, but also seek to assess the wider social outcomes arising from research and teaching (by assessing research impact in the REF; and student employability and transferable skills in the TEF).

Therefore assessing the exploitation of knowledge isn't the sole preserve of the KEF. It needs to be framed in a way that aligns intelligently with what the TEF and REF are already set up to assess.

To clarify how these frameworks might be understood to work together we think that it is useful to draw on the Treasury Magenta Book guidance on evaluation, which encourages the use of 'logic modelling' to break down assumptions about how impact is realised from 'inputs' which translate into activities which realise 'outcomes' and 'impacts'.

In approaching this consultation, we have used this logical framework to try to map how the KEF might be framed to deliver a distinctive and meaningful assessment that is complementary to the other frameworks.

Figure one represents what the REF and TEF currently assess; and the focus of HEIF strategies and HEBCI survey, the current mechanisms for monitoring KE. What this comparison reveals is that there are currently 'gaps' in the intelligence which is being generated which the KEF could address. In particular, the KEF can provide illumination about:

- The 'inputs' that different HEIs utilise to underpin their knowledge building activities
- How these different activities integrate and align to provide a coherent programme of activity to apply knowledge for public benefit
- The local, regional, national and international contribution of the HEI

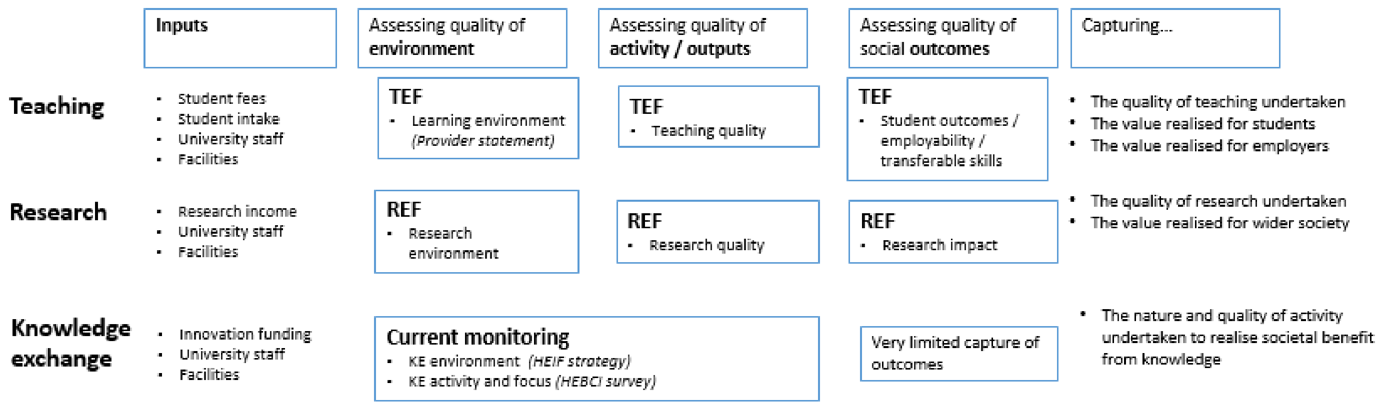

FIGURE 1: Mapping the REF, TEF, HEIF and HEBCIs

As well as helping us to identify **gaps** in the current data we collect, the KEF can also help us to address questions about how these various knowledge building activities **work together** to contribute to society.

The questions it can help answer include:

- What is the HE Provider (HEP) doing to ensure the collective 'knowledge building' activities are greater than the sum of their parts?
- How are they 'adding value' – what are they doing in addition to research and teaching to maximise the value they generate for society from the knowledge that they help to generate?
- What distinctive contribution are they making to their city / region and beyond?
- How does their activity compare with similar institutions?

While HEIF (and the strategy setting process) and the HEBCI survey generate some rich data that can help address these questions, the development of the KEF provides a useful opportunity to address more holistically the intelligence needed to better understand the effectiveness of current investments and activity.

3. What is the purpose of the KEF?
There is a risk that the KEF is expected to do too many different things. The government's announcement implies that the KEF could serve several functions:

- As a self-improvement tool for the sector, allowing individual HEP's to identify areas where they can improve their performance
- As a culture change tool, to encourage more productive interactions between HE providers and civil society
- As a mechanism to allocate funding
- As a gateway to provide non HE partners and publics with useful intelligence about the sector to inform their understanding of it and interactions with it

We suggest that these are potentially in conflict with each other and will need careful consideration as the KEF is further developed.

4. Metrics or data?
If the KEF is framed as an intervention to better harvest and interpret metrics about HE performance, it risks becoming a blunt instrument.

If it is framed as a response to the potential of data to transform strategy, decision-making and practice in the sector, then it opens up a very different development pathway. The HE sector currently lags far behind how other sectors – like Health, commerce and charities – are using data to transform their responsiveness and success. The KEF provides the opportunity to step back and consider much more creatively how we could be utilising data, visualising it and sharing it to improve our work and its impact.

We recommend that the KEF be approached as the development of a digital service, rather an as a policy instrument. The government's digital service standard provides a robust methodology to help inform how such a service should be developed. Core to this standard is the expectation that the developers of any such project can:

- show that they have a deep knowledge of who their users are
- explain how they've designed the service to reflect their users' needs
- be able to provide evidence to support their understanding of users and their needs

Given the aspirations for the KEF, we would argue that the development process should be articulated differently, with an emphasis placed much more firmly on the needs of users of the KEF than is currently the case. We strongly recommend this way forward.

1. What approaches and data need to be used to ensure a fair and meaningful comparison between different universities, taking into account factors that might impact individual institution's knowledge exchange performance (such as research income, size or local economic conditions), whilst allowing identification of relative performance? How should benchmarking be used?

We argue that the KEF can provide a really useful focus on the 'inputs' and 'context' for HEP's knowledge exchange activities. These are not currently considered holistically through other reporting or benchmarking processes.

A number of indicators could be used to provide a robust set of variables to draw meaningful comparisons between HEPs and their different contexts. These include:

Income

- Research income
- Innovation funding
- Business and community services
- IP income / spin off activity
- Widening participation income
- Regeneration income
- Teaching income
- Other investment

Staff and students

- Size / make up of staff body
- Size / make up of student body
- Disciplinary focus

Location

- Local economic conditions
- Local indices of deprivation

We consider later the value of 'process' indicators, which capture the investment HEPs are making in support activities for KE, including for instance investment in brokerage roles.

Careful modelling of a selection of such indicators could be piloted to develop a robust approach which earns the confidence of the sector and our stakeholders. It would allow meaningful comparisons between HEPs, on different axes, with weighting of variables in the user's control. HEPs need to be empowered to choose the metrics and weightings that best represent their own KE mission, and that take account of the individual contexts in which they operate (e.g. size, local economic conditions and research income). We would point to the use of such benchmarking by the NHS Right Care initiative, which has developed 12 indicators to allow different commissioning groups to be intelligently compared against a range of Health Pathways. This programme could provide a very useful model for the KEF. It is firmly focused on quality improvement.

It is important to return to the question of what the KEF is for (and who is it for)? What are the questions it is seeking to answer, for whom? This will radically affect considerations of which indicators are meaningful and useful. Some of the choices include:

- to inform funders / government about the allocation of funding, in which case the KEF needs to illuminate the effective deployment of resources to deliver results
- to gather intelligence about the distinctive focus of institutional activity to allow useful comparisons to be drawn
- to provide useful intelligence about the relative efficacy of different methods and approaches
- to inform potential partners about the distinctive strengths and areas of expertise of different HEPs

We would argue that there is considerable work to be done to clarify the purposes and audiences for the KEF, and their distinctive needs and expectations, before specific indicators are settled upon. Without this work we risk putting the cart before the horse.

2. Other than HE-BCI survey data, what other existing sources of data could be used to inform a framework, and how should it be used?

As we mentioned in our introductory comments, the REF and TEF both measure aspects of KE. The REF is focused on measuring research impact; the TEF on student employability. It is also worth mentioning the Student Opportunities Outcomes Framework, which also provides data about widening participation and social mobility.

We suggest that both the REF and the TEF (and the SOOF) could be intelligently mined to release useful data to inform the KEF.

Other sources of data include:

- HEIF funding allocations
- HEBCI survey data
- RCUK Quality Assurance
- ResearchFish
- ONS data
- Census data
- Research funding: CORDIS (EU funding), Gateway to Research, Innovate UK
- Contextual data from HESA on size and shape of HEIs
- Impact Acceleration Account reporting

Income for regeneration purposes might also provide a useful proxy measure of the local importance of a HEP in the delivery of an area's local productivity and resilience. Such funds (e.g. ESF, ERDF, Growth Deal and related regeneration funds) are targeted by local enterprise partnerships at investment to drive sustainable economic growth, and entail significant due processes in the allocation of funds. Income measures of this type would also signal a clear commitment of partners to the HEP in underpinning the prosperity of a locality and in supporting growth and renewal in areas most 'left behind' – a key priority for the Industrial Strategy.

HEFCE, 2015 "Universities as anchor institutions"
This relevant blog post identifies the 4 key ways that universities typically 'contribute to local economic growth' and as such it could be helpful that these dimensions be considered within the KEF metrics: engagement with local schools; local skills agenda; social innovation and social enterprise [e.g. bringing together universities and local partners: businesses, community groups, local government and health authorities to test out different solutions].

We note, also, the cautions issued against the misuse of quantitative metrics outlined in the Stern report on REF, the Metric Tide report, the McMillan Group report 'Good practice in technology transfer commercialisation'.

We think that it would be impossible for metrics alone to provide a sufficiently nuanced and intelligent representation of the complex processes involved in KE, and the vital role played by context, values and purposes. Some form of more qualitative interpretation will be needed (e.g. case studies and narrative overviews with peer review), as has been clearly evidenced through both the TEF and REF. Indeed, content from the revised REF Environment statement and TEF provider submissions might usefully be carried through to the KEF.

In particular, we would recommend the use of self-assessment frameworks like the NCCPE's EDGE tool, which was developed to allow institutions to benchmark their support for public engagement. Such 'maturity matrices' identify the critical determinants of effective strategy and delivery and invite institutions to map their own activity against them. The NCCPE's EDGE tool could provide the basis for a KE self-assessment matrix which invites HEPs to describe how they organise and support KE in the context of their mission for serving the public good (e.g. senior management responsibilities; mechanisms for connecting teaching and research in support of KE; reward and recognition for academic and professional staff for KE; investment in facilities such as business incubators and community helpdesks; procedure for monitoring and evaluating KE outcomes, including feedback from users and beneficiaries; collaborations with other actors and agencies, including other HEIs and FE, in meeting local challenges and opportunities).

3. What new (or not currently collected) data might be useful to such a framework?

Given that narrative will always be necessary to contextualise KE, a close analysis of the current data collected by HEBCIs and HEIF strategies reveals a number of gaps and opportunities to identify new, meaningful metrics which better illuminate the knowledge exploitation process.

In particular for public engagement, the current indicators collected by HEBCIs are very narrow and limited in value (e.g. attendance at events). Two NCCPE publications have addressed the challenges of identifying feasible indicators:

- Auditing, benchmarking and evaluating public engagement (NCCPE, 2009)
- Through a glass darkly: measuring the social value of universities (NCCPE, 2011)

It is helpful to return to figure 1 from the introduction at this point. The 'logic model' framework provides a helpful device for isolating critical building blocks of effective knowledge exchange, and the evidence that could be used to critically assess the process:

Inputs: How can we best characterise the context within which the HEP works and understand the resources and assets at their disposal?	We have suggested possible indicators in our response to question 1.
Activities and associated outputs: How is the HEP investing in activity to support effective knowledge exchange?	There is an extensive body of literature outlining 'what works' in KE, which could be mined to draw up a list of process indicators. We suggest above that these would need contextualising with narrative accounts, perhaps scaffolded by a self-assessment matrix. Building on the process indicators already captured in HEBCIs we would suggest the following could be usefully developed as indicators: • Make up of governing bodies (community representation) • Staff acting as trustees or in other governance capacities in external civil society organisations • Number of community / voluntary sector organisations supported by student volunteers / placements • Investment in brokerage • Opening up university assets to community • Community interaction – attendance at events; exhibitions • Public involvement in research – advisory groups; other investment • Community take up of skills and capacity building Critical indicators of a HEP's own internal processes for supporting KE include: • Clarity of purpose, expressed in strategic plans and embodied in effective leadership • Reward and recognition for staff and students • Investment in professional development to enhance quality practice • Effective governance
Outcomes: What difference is the HEP making through its KE activity?	Close alignment with the ongoing development of the REF and TEF will be essential in addressing this question. The NCCPE has provided a detailed review of how outcomes arising from public engagement were captured by REF 2014, and we are developing a framework to inform REF 2021, which identifies three key categories of impact:

	• Conceptual impacts • Capacity building impacts • Instrumental impacts For each of these we have described distinctive 'impact pathways' which detail the typical steps involved in knowledge exchange. Annex 1 includes a diagram representing these pathways. We suggest that this approach could be usefully adapted to inform the development of the KEF. The intense activity to develop REF 2021 panel guidance over the next 6 months will provide further helpful clarification of meaningful outcome indicators.

4. How should KEF metrics be visualised to ensure they are simple, transparent and useful to a non-specialist audience?

This question requires us to be clear on what the questions potential users of the KEF will have – those of government, businesses, community organisations, researchers and university managers (for instance) are all likely to be different. Without this it will be impossible to proceed with a robust design (see the reference to the government's digital service standard above, which emphasises the essential part played by user involvement in such endeavours)

Typically, such a creative challenge would be solved through iteration and investigation, bringing community partners and knowledge 'users', data experts and creative programmers and designers together in 'hackathon' style events to explore possibilities.

What questions might non specialists have? We offer some suggestions below, but would urge that some careful consultation is undertaken to develop more evidenced insight into user needs.

- Employers might be interested in universities with an excellent reputation of delivering consultancy; or high quality undergraduates in their chosen field
- Charities might be keen to locate a particular area of expertise, and a predisposition to partnership and collaboration
- Policy makers outside BEIS / DfE might be keen to assess (for instance) areas of performance against their key outcome areas (health, culture, regeneration etc)
- Journalists might want insight into value for money; good news stories
- Local authorities might want to better understand the potential resources of their local HEIs; or to benchmark the performance of their local HEIs against those in other cities

Clearly the KEF could also provide a profoundly useful tool for people working within HEIs, and in policy making, to make better decisions about policy and practice. We need to develop a much better understanding of what these potential uses might be as well.

A very good way to stimulate the capture of such insight would be to look systematically at how other sectors are using data to improve their performance; to consider what works in these settings; and what might be transferable to HE. What this would be likely to reveal is that the ability to use data well requires very significant investment in capacity building and culture change. In considering the long term potential of the KEF, considerations of this nature will be vital. The role of organisations like Jisc, NCUB and the NCCPE could all be significant in supporting this.

Annex: Draft impact pathways developed by the NCCPE

A schematic modelling three typical pathways by which knowledge is 'exchanged' and impact realised from research

Need
Who has a stake in the research, 'beyond academia'?

What need is the research able to address?

Policy makers **Civil society** **Practitioners and professionals** **Businesses and SMEs**
Publics: ***citizens*** ***communities of place and interest*** ***service users*** ***customers*** ***employees***

PATHWAY ONE	PATHWAY TWO	PATHWAY THREE
PATHWAY ONE **Understanding** Exploring meaning and values	*PATHWAY TWO* **Capability** Enhancing skills, behaviour & networks	*PATHWAY THREE* **Innovation** Improving policies and practice and the way the world works

Research input & mediation
What is the research and how is it being mediated to make it accessible to potential users?

RESEARCH / EXPERTISE	*RESEARCH / EXPERTISE*	*RESEARCH / EXPERTISE*
• Expression • Critique • Re-framing debate	• Tools and training • Resources • Networks	• Evidence • Inquiry • Deliberation

Research uptake
What happens as a result?
What is influenced as a result of this interaction?

• Conversation • Debate • Representation • Interpretation	• Professional practices • Social practices • Connectivity • Ethics	• Policy making • Planning • Decision making • Measurement routines

Outcomes and impacts
What has changed as a result, to which aspects of public life?

CONCEPTUAL & ATTITUDINAL OUTCOMES *Building awareness, reflexivity & understanding*	CAPACITY BUILDING OUTCOMES *Building skills, networks and community*	INSTRUMENTAL OUTCOMES *Stimulating innovation and practical change*

Evidenced changes to

• Discourse • Knowledge & awareness • Attitudes & values • Meaning / sense making • Enjoyment	• Capabilities • Performance • Access & involvement • Behaviour • Cooperation	• Strategies and plans • Practices • Policies / regulations • Products and services • Budgeting & investment

Impacts
What contribution have these changes made to the world 'beyond academia'? What public benefit has been realised?

Social capital	Human capital	Quality of life	Health	Prosperity	Environment
• Civic involvement • Volunteering • Trust in others • Social cohesion	• Education & skills • Social mobility • Participation in learning, sport and culture	• Personal well being (happiness, life satisfaction) • Access to services • Relationships	• Effectiveness of services • Experience of services • Safety	• Wealth creation • Income equality • Efficiency • Personal finances	Enhanced • Natural • Built • Heritage • Lived environments

Who has benefited?

Policy makers **Civil society** **Practitioners and professionals** **Businesses and SMEs**
Publics: ***citizens*** ***communities of place and interest*** ***service users*** ***customers*** ***employees***